New Zealand Journal of Psychology

New Zealand Journal of Psychology

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John Fitzgerald

The New Zealand Journal of Psychology is the premier psychology journal published in Aotearoa New Zealand. Following in the traditions of academic journal publishing we employ a rigorous process of manuscript review and checking, ensuring that we achieve the high standards of manuscript quality. It would not be possible to achieve this without the cooperation of the authors and reviewers who support the *Journal's* activities. I am grateful to all the reviewers who have freely donated their time to supporting our publication effort with their expertise and sage advice. I am also grateful to the National Office staff who work to produce the *Journal*, especially Ms Vicki Hume who turns the accepted manuscripts into a publishable issue.

It has always been our aim to produce a journal which publish high quality material, but more importantly provides a place for the sharing and showcasing of New Zealand psychology, with the 'homegrown' textures and flavours being blended with more traditional fare.

This issue is an excellent expression of these two themes, both the rigorous and diligent work of substantial groups, and the desire to produce something that will be a lasting expression of psychology in New Zealand. I am extremely grateful to Dr Waikaremoana Waitoki and her editorial team who conceptualised and developed a fine special section on Indigenous Psychology. Dr Waitoki has prepared a short introduction to the special section, so there is no need for me to write more, apart from express my excitement and gratitude to the authors, reviewers and editors who have contributed to this section.

The second special section in this issue was co-edited by Prof Marc Wilson, and focuses on non-suicidal self-injury (NSSI). The seven papers in this special section place the issue in an international context, but all have a primary focus on NSSI in New Zealand. The manuscripts focus on a range of ages, ethnicity/cultural groups, and report research using a range of methodologies.

With the additional general papers this issue contains 19 manuscripts which demonstrate a wide range of psychological endeavour within Aotearoa New Zealand, but also demonstrate the depth of this work, the attention to detail and concerted effort. These collections are important, not just in Aotearoa New Zealand, but internationally.

Indigenous psychologies: Research and practice from Aotearoa New Zealand and the Pacific

Guest Editors: Waikaremoana Waitoki, Julia Ioane, Bridgette Masters-Awatere, Christine Faalogo-Lilo and Juile Wharewera-Mika

Introduction

E ngā mana, e ngā karanga maha, nau mai te ao, nau mai te pō. With the successful launch of the book Te Manu Kai i te Mātauranga: Indigenous Psychologies in Aotearoa New Zealand, our attention was drawn to the unique contribution that indigenous practitioners, academics and researcher experiences bring to their everyday work. This special section of the New Zealand Journal of Psychology builds on the growing need to consider the role of indigenous psychologies in Aotearoa and to create spaces for working with Māori and Pasifika peoples in ways that reflect their worldviews. With this special section we called for papers that:

- add to the growing Indigenous psychology knowledge base from Aotearoa and the Pacific

- transform psychology

- develop an Indigenous workforce

- contribute to indigenous psychology globally

- to meet our collective vision as indigenous people

This section is premised on two key ideas: that an indigenous approach is fundamental to our work as psychologists, and that engagement with indigenous psychologies contributes to our collective aspirations for optimum well-being. We wish to address issues of disparity for Māori and Pasifika peoples and have looked to resolutions that reside with our experts, our families and our communities. The commentaries on psychological research helps to maintain a voice to some of the challenges, supports and advancements of indigenous psychologies in Aotearoa New Zealand.

Many thanks go to the authors for their contribution as published research is a significant component of getting expert knowledge of best practice out to those who work with our peoples. We also want to acknowledge the contribution of reviewers who took time out of their busy schedules to ensure that the papers reflected a high standard, not only for the Journal, but also our colleagues and communities.

Over the past decade, we like to think that psychology has become more aware of the need for Pasifika theories, concepts and models of practice to be incorporated in our curriculum, applied in our assessments and therapies, prioritised in research and published in our journals. Despite best intentions and efforts by our Pasifika sisters and brothers in the psychology community, we were unable to gain as many articles as we would have liked for this edition.

In some ways, this highlights the many hats Māori and Pasifika psychologists wear in our communities, while also working in academia, exploring epistemologies, and contributing to research and practice. With respect, we would like to strongly encourage our colleagues in psychology to come forward in the New Year to look at ways in which we can deliver the voice of Māori and Pasifika across this medium in psychology. If you are interested to be a part of this, please contact our editorial members.

O le tele o popo e fua ai le lolo'. Meaning the more coconuts one uses, the sweeter the coconut oil.

A proposed hauora Māori clinical guide for psychologists: Using the hui process and Meihana model in clinical assessment and formulation

Suzanne G. Pitama[1], **Simon T. Bennett**[2], **Waikaremoana Waitoki**[3], **Tracy N. Haitana**[1], **Hukarere Valentine**[2], **John Pahina**[2], **Joanne E. Taylor**[2], **Natasha Tassell-Matamua**[2], **Luke Rowe**[2], **Lutz Beckert**[1], **Suetonia C. Palmer**[1], **Tania M. Huria**[1], **Cameron J. Lacey**[1] **& Andre McLachlan**[4]

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New Zealand

This paper documents a joint initiative of clinical practice educators from four tertiary institutions and their engagement in the design and development of a proposed Hauora Māori Clinical Guide for Psychologists, which outlines how to apply the Hui Process and Meihana Model to applied psychology. It describes the ability for this proposed Hauora Maori Clinical Guide for Psychologists to assist clinicians, professional psychology training programmes and institutions in meeting the expectations of the Health Practitioners Act and The New Zealand Psychologists Board's (NZPB) Standards and Procedures document. It presents how this proposed guide can support the implementation of clinical and cultural competence and the Code of Ethics for Psychologists Working in New Zealand. It also provides an opportunity for the psychology profession to demonstrate responsivity to Te Tiriti o Waitangi obligations.

Keywords: Māori, clinical assessment, clinical practice, formulation

Background

Māori mental health inequities are well documented (Baxter, Kingi, Tapsell, Durie, & McGee, 2006; Baxter, Kokaua, Wells, McGee, & Oakley Browne, 2006a; Harris, Tobias, Jeffreys, Waldegrave, Karlsen, & Nazroo, 2006; Baxter, 2008; Newton-Howes, Lacey, & Banks, 2014; McLeod, King, Stanley, Lacey, & Cunningham, 2017). Despite this, universities and professional bodies have demonstrated marked variation in the way professional psychology training programmes prepare students and clinicians to work with Māori clients and whānau. Because of this it is difficult to ascertain the profession's ability to contribute to the reduction of mental health inequities (Levy & Waitoki, 2016; Masters, Nikora, Waitoki, Valentine, Macfarlane, & Gibson, 2016; Waitoki, 2016; Bennett, 2016).

The introduction of The Health Practitioners Competence Assurance Act in 2003 (HPCA, 2003) was designed to provide governance of clinical training programmes. The HPCA 2003 signaled a departure from the Psychologist's Act 1981 through increased scrutiny of professional training programmes. Public protection is the primary purpose of the HPCA, with section 118(i) of the Act mandated cultural competency through *"setting standards of clinical and cultural competence, and ethical conduct to be observed by health practitioners of the profession"* (HPCAA, 2003, p. 87). Although there is no specific mention of the Treaty of Waitangi, or Māori, in the HPCA Act, the New Zealand Psychologists Board (NZPB), the New Zealand Psychological Society, and the College of Clinical Psychologists have documented opportunities for psychologists to be responsive to Māori. The NZPB Standards

and Procedures document, written in collaboration with the Society and College, articulates guidelines for the accreditation of programmes and schemes leading to registration as a psychologist in Aotearoa/New Zealand (NZPB, 2016). The core competencies stand alongside *The Code of Ethics for Psychologists Working in Aotearoa/New Zealan*d (New Zealand Psychological Society,2002) which includes a value statement that encourages psychologists to apply the principles of Te Tiriti of Waitangi to their work and "seek advice and undertake training in the appropriate way to show respect for the dignity and needs of Māori in their practice." (New Zealand Psychological Society, 2002, p. 6)

The Standards and Procedures document requires that professional training programmes (and supervision to registration schemes) meet the needs and aspirations of both Treaty/Te Tiriti o Waitangi partners' worldviews (NZPB, 2016 p.14). This includes specific clauses related to Māori health curriuclum as follows:

"2.1.3. The teaching and learning methods include consideration of cultural frame of reference, values and world veiws, including those of Māori.

2.2.1. The curriculum is based on principles of scientific method and evidence-based practice, fosters the development of analytical and critical thinking, and includes consideration of indigenous psychologies.

6.2.5 In particular, where possible, students shall have the opportunity to undertake placements within Māori services and/or be supervised by Māori psychologists." (NZPB, 2016, pp 21-24).

However, the repercussions of not meeting these standards is not well documented, and without a clear statement supporting the recruitment of staff who are experts in Māori health curriuclum it is unclear how the above clauses will be met (NZPB, 2016, p 24). For those practising psychology, it is not mandatory that Māori health competencies are required as an ongoing competence measure as a registered psychologist (NZPB, 2011, p.2).

Despite enhanced cultural competencies as one of the central premises of the HPCA Act (HPCAA, 2003) and the Standards and Procedures document (NZPB, 2016) a recently published review of professional psychology training programmes identified that time assigned to Māori health learning outcomes had actually reduced since the HPCAA Act was implemented (Levy, 2002; Levy, 2007; Levy & Waitoki, 2016). In spite of this, clinical practice educators have developed, researched, practiced and published on the importance of curricula/training to improve psychological care for Māori clients/whānau (Palmer, 2004; Levy, 2007; Pitama et al, 2007; Levy & Waitoki, 2016; Waitoki & Rowe, 2016; Bennett & Liu, 2017). To date, there have been efforts to provide guidelines for working with Māori within psychology (Pakeha Treaty Action, 1997; Durie & Kingi, 1997;Best Practice Journal, 2008;), however a lack of clarity on how to apply these practically to clinical assessments and/or treatment has been a major limitation.

The purpose of this paper is to document recent efforts to adapt the Hui Process (Lacey, Huria, Beckert, Gillies & Pitama, 2011) and Meihana model (Pitama, Huria and Lacey, 2014) to the training and practice of psychology, in order to support psychologists to be responsive to Māori clients/whānau and contribute to the reduction of current mental health inequities.

The Hui Process and Meihana Model

The Hui Process (Lacey, Huria, Beckert, Gillies & Pitama, 2011) and the Meihana model (Pitama, Huria & Lacey, 2014) were developed as part of a Māori health medical curriculum at the University of Otago Christchurch. The goal of these teaching tools is to translate cultural competency principles into an approach that clinicians can use to augment their existing clinical practices, to improve their responsiveness to Māori clients and their whānau.

The Hui Process (figure 1) adapts the structure of the hui to clinical interaction. The Hui Process is comprised of four components, which align with engagement strategies from Te Ao Māori and documents how these apply to clinical interactions. The four components are: **mihimihi** (initial greeting engagement), **whakawhanaungatanga** (making a connection/building relationships), **kaupapa** (attending to the purpose of the encounter) and **poroaki/whakamutunga** (closing the session).

The Meihana Model (figure 2) builds on the earlier work of Durie's Te Whare Tapa Whā model (Durie, 1999). It provides definitions specific to this model as a way of providing a clear shared language for those using the model. These definitions do not encompass the full meaning of the Māori language terms being used in other settings/occasions. The Meihana Model comprises four specific elements.

Figure 1: Hui Process (Lacey et al, 2011)
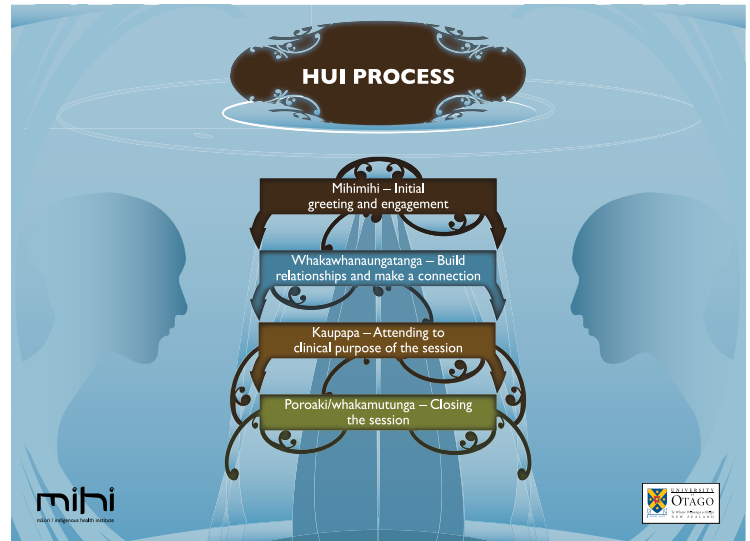
Figure 2: Meihana Model (Pitama et al, 2014)
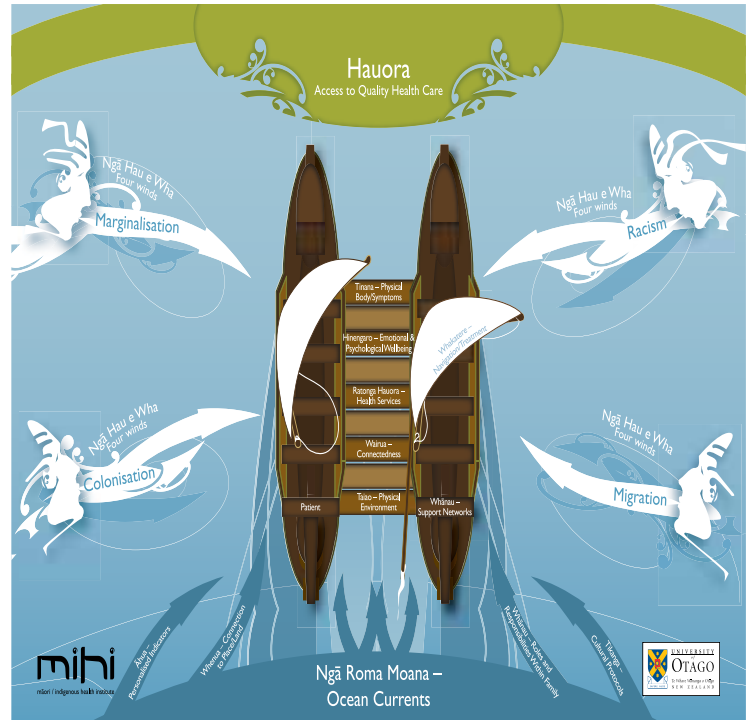
1. *The Waka Hourua* (double-hulled canoe) identifies the importance of the client/whānau relationship and its relevance to the presenting issue(s) and future treatment plans. The framework invites and reminds the clinician, to work alongside the client/whānau to explore the dimensions of **tinana** (physical body), **hinengaro** (psychological/emotional), **"ratonga hauora"** (previously iwi katoa) (access to quality health services), **wairua** (connectedness) and **taia**o (physical environments) and their relevance to clinical care and decision-making with client/whānau.

2. *Ngā Hau e Whā* (representing the four winds of Tawhirimātea) identifies components that reflect both the historical and current societal influences on Māori as the indigenous peoples of Aotearoa/New Zealand. The four influential and interrelated winds are: **colonisation, racism, migration** and **marginalisation**.

3.   *Ngā Roma Moana* (representing the four ocean currents) identifies specific components from Te Ao Māori (Māori world view) that may influence a client/whānau in different contexts. The four components of Ngā Roma Moana are **āhua** (personalised indicators), **tikanga** (Māori cultural principles), **whānau** (relationships, role and responsibilities of the patient within Te Ao Māori including whānau, hapu, iwi and other organisations) and **whenua** (specific genealogical or spiritual connection between client and/or whānau and land). The influence on these ocean currents varies greatly due to the diversity of individual client/whānau experiences in Te Ao Māori and the effects of colonisation, racism, marginalisation and migration (ngā hau e whā).

4.   *Whakatere* (navigation) draws together the relevant information from the *Waka Hourua, Ngā Hau e Whā* and *Ngā Roma Moana* and integrates this information within the formulation, diagnosis and treatment processes. Whakatere also challenges and supports clinicians to acknowledge and mitigate personal and institutional biases within assessment, formulation and treatment.

The combined Hui Process and the Meihana Model represent a significant addition to the way in which the psychology training and practice can be responsive to the diverse needs of Māori (Pitama, Robertson, Cram, Huria & Dallas-Katoa, 2007). Further details of the Meihana Model and its components can be found in Pitama et al. (2014).

At the University of Otago, the Hui Process and Meihana Model have been successfully implemented within the medical curriuulum (Jones, Pitama, Huria, Poole, McKimm, Pinnock & Reid, 2010; Pitama, Ahuriri-Driscoll, Huria, Lacey & Robertson, 2011; Pitama, 2012; Huria, 2012; Huria, Lacey & Pitama, 2013; Pitama, 2013; Pitama, Huria and Lacey, 2014; Huria, Palmer, Beckert, Lacey & Pitama, 2017; Huria, Lacey, Melbourne-Wilcox & Pitama, 2017A). The teaching of the models has moved beyond the limitations of didactic teaching, and instead the combined models use learning methods that encourage transformative practices (e.g. flipped classroom, team based learning activities, simulated patients, online learning modules and student-led clinics). Transformative learning opportunities have been measured through formative and summative learner assessments including; patient interviews presented in written and oral media, Observed Clinical Simulated Exams (OSCE) and multiple choice questions and logbooks (Pitama, 2012). This differs from current psychology training/accreditation requirements that favour the use of self-reflective methods such as reflective journals, self-rating assessments, and checklists as the 'standard' for evaluating one's competency. There is concern that self-assessment methods are both unsafe in determining clinical and community safety, and may instead only measure data for other phenomenon, such as the rater's self-awareness, self-esteem, and honesty.

Within the University of Otago Christchurch a cultural safety model is enacted to measure social accountability of the curriuulum to its community. This involves annual student evaluations, and interviews with Māori patients and Māori health workers who have engaged with medical students in clinical settings, non-Māori colleagues who teach the medical students and the wider Māori health community (including administration and clinicians). Stakeholders (clients/

whānau, Māori health workers, learners and clinicians) have reported high levels of satisfaction with clinical engagement opportunities, due to students appropriately; demonstrating their ability to use the process of whakawhānaungatanga in a clinical interview, confidently using te reo Māori as led by the client/whānau, exploration of all relevant elements of the Meihana Model (including experiences of racism and the impact of colonisation) alongside client/whānau, influencing senior colleagues behaviour and advocating for client/whānau needs within a clinical setting (Pitama, 2012).

The Hui Process and Meihana Model have encouraged students/clinicians to identify how specific elements and components inter-relate and assist a tailored approach to working alongside a Māori client/whānau. The training has provided an evidential framework that assists clinicians to articulate how to integrate and demonstrate both cultural and clinical competencies when working with Māori clients/whānau (Pitama, 2012).

The centrality of Māori cultural processes for psychologists in teaching, research and clinical assessment and treatment is well established (Bennett, 2016, Cargo, Waitoki & Feather, 2016; Valentine, 2016; Waitoki, 2012). The formal and semi-formal structure of the Hui Process (Lacey et al, 2011), that occurs in many situations across Māoridom, blends well in a clinical assessment environment with the addition of the Meihana Model (Pitama et al, 2014)

Development of the Adaptation of the Hauora Maori Clinical Guide for Psychologists: Using The Hui Process And Meihana Model In Clinical Assessment And Formulation

A joint collective of clinical practice educators from the University of Otago Christchurch, Massey University, Waikato Institute of Technology and the University of Waikato converged with the goal to design and develop a proposed clinical guide to support psychologists to apply the Hui Process and the Meihana Model within applied psychology. For the purposes of this paper applied psychology is inclusive of those scopes of practice that involve direct client/whānau contact with the intent to assess and provide treatment.

At the heart of applied psychological practice is assessment and case formulation which informs decisions regarding diagnosis and treatment. Several terms are used within the literature for formulation, including case, aetiological or causal formulation (Rainforth & Laurenson, 2014; Todd, 2010). The formulation of cases based on individualised assessment was developed in response to limitations of diagnosis driven treatments. Diagnoses alone may provide incomplete information about the person's experience of their issue(s), or the cause of the issue(s) (Macneil, Hasty, Conus & Berk, 2012). Treatment driven by diagnosis has also been argued to be unsatisfactory in accounting for severe and complex cases (Bruch & Prioglio, 2009; Todd, 2010). The purpose of a formulation is to provide a conceptualization, hypothesis and/or narrative of a person's issue(s), how the issue(s) developed, the functional relationship between these, and factors that maintain them (Evans & Fitzgerald, 2007; Nezu, Nezu, Peacock & Girdwood, 2004). Taking a longitudinal and dynamic

approach to understanding and integrating information leads to individualised and responsive treatment goals and planning. (Bruch & Prioglio, 2009; Rainforth & Laurenson, 2014; Todd, 2010). A formulation can contribute to the ability to predict certain relationships and issues in specific situations, and therefore enable clinical experiments and hypothesis testing (Bruch & Prioglio, 2009). Formulation models have dimensions that enable a focus on the cultural and socio-political experiences of clients, but there is little training in psychology on the potential depth of those experiences for Māori (Waitoki, 2012).

The joint collective of clinical practice educators commenced discussion about how the Hui Process and Meihana Model could be used to adapt the case formulation process to inform psychological practice for Māori clients/whānau. At the core of good formulation is a comprehensive assessment. In this regard, it was postulated that the Hui Process and the Meihana Model guides the clinician to consider Māori clients/whānau within systemic and societal influences, ensuring all relevant elements, otherwise unnoticed, are incorporated into case formulation. Integrating the Hui Process and the Meihana Model with elements of the clinical interviewing and hypothesis building approach articulated by Wright (2011) resulted in the development of the proposed Hauora Māori Clinical Guide for Psychologists (HMCGP) (Appendix A). To ensure that all elements of the Meihana Model were included in the HMCGP, to encourage

the gathering of non-deficit theorising information and to align language with that commonly used in New Zealand, some additions and amendments were made to the Wright model (2011). The changes are documented in Table 1.

The intention of the HMCGP is to provide a framework for both Māori and non-Māori clinician's working with Māori clients/whānau to promote appropriate responsiveness and support equitable health outcomes. The HMCGP articulates how the Hui Process and Meihana Model define 'cultural' responsiveness to clearly articulate aspects involved in the assessment, formulation and treatment process. The HMCGP establishes content to inform training, supervision and assessment, and can be used as a tool for the New Zealand Psychology Board's Continuing Competence Programme and Standards and Procedures document. The HMCGP may identify opportunities for individual or collective professional development, as well as illuminating current systemic enablers and barriers to the delivery of services that are responsive to Māori. In this process, it is acknowledged that the HMCGP may also highlight opportunities for clinician/institution engagement with Māori health and/or Māori cultural expertise, tailored educational opportunities, and further refinement of policies and procedures within organisations.

Implications for Training and Practice

This work can impact the various sectors in which psychologists' practice including the New Zealand Psychologist's Board who have the significant responsibility for the registration of psychologists and the accreditation of professional psychology training programmes in Aotearoa/ New Zealand.

The HMCGP has the potential to support universities and/ or professional training programmes with a framework for a Māori health curriculum. The HMCGP outlines the content of a proposed curriculum, and its relevance to clinical practice. Drawing on this pedagogy, the HMCGP encourages the engagement in learning methods that support the practical application of the HMCGP into clinical practice. It also provides a challenge for universities and/or training programmes to integrate Māori health learning outcomes throughout all stages of training and practice. This might include ensuring learners have an opportunity to demonstrate competencies in using the HMCGP prior to clinical placements or ongoing work with Māori clients/whānau. This would require exposure to a number of different case presentations, with a range of severity and complexity using case based and simulated client learning opportunities.

The HMCGP can provide a template by which to design and implement formative and/or summative assessments, in that it provides a clear process for offering critique and guidance on specific aspects of the HMCGP. Such a training and practice environment requires Māori leadership, Māori clinical expertise, Māori and non-Māori faculty/clinician engagement and expertise, appropriate timetabling and teaching resources (aligned to the planned learning opportunities) and opportunities for faculty/institutional professional development.

Table 1 Adaptations of the A. Jordan Wright's model (2011) for the Hauora Maori Clinical Guide for Psychologists (HMCGP)

Additional Headings	Amendments of Headings from the Wright model (2011) to the Clinical Guide	
	Wright's model's original language	Changes made in the HMCGP
MIHI/Inititing the session	Presenting Problem and Its History	Presenting Issue(s) and History
Whakawhanaungatanga /Building a Therapeutic Relationship	Presenting Problem	Presenting Issue
Kaupapa/Purpose of the Encounter	Alcohol/Substance Use History	Substance Use and Addictive Behaviours History
Under Pscyhosocial evaluation -Added Identity	Family Medical and Psychiatric History	Family Medical and Mental Health History
Under Psychosocial evaluation -Added Socio-poitical Determinants of Health	Educational/Vocational History	Educational/Employment History
Under Psychosocial evaluation -Added Interpersonal Relationships History	Mental health status evaluation	Presentation
Under Psychosocial evaluation -Added Intervention History	Prefrontal Functioning	Judgement
Under Psychosocial evaluation -Removed Multicultural Evaluation	Hypothesis Building	Whakatere: Synthesis and Formulation
Poroaki/Mihi Whakamutunga: explanation, Planning & Closing Session		

Implications for Practice and Policy

The majority of practicing psychologists in Aotearoa New Zealand are working in district health boards (hospital), corrections, education or private practice settings (Stewart, Bushnell, Hauraki & Roberts, 2014). Effective implementation of the HMCGP within these sectors would require a level of investment from service leaders and managers to ensure that psychologists receive ongoing organisational support (including supervision aligned to the HMCGP) and encouragement to use the HMCGP in their practice. The HMCGP could act as a catalyst for achieving better clinical outcomes for Māori clients/whānau through improved service provision and more effective treatment. The HMCGP could also act as a conduit for supervision allowing the supervisor to support the supervisee to develop a formulation with the foundation of a comprehensive assessment. Realisation of these sectoral outcomes will facilitate the mobilisation of a psychological workforce that is more responsive to Māori clients/whānau, through their ability to engage in clear processes and procedures in which to undertake assessment, formulation and treatment process.

The New Zealand Psychologists Board may take this opportunity to utilise the HMCGP to set specific Māori health competencies in the current cultural competence requirements of the Continuing Competence Programme. It also provides an opportunity to further align the Standards and Procedures document and its practices to Te Tiriti o Waitangi, by providing a practical approach for psychologists and sites of practice to address Māori mental health inequities.

Implementation and Evaluation of the Clinical Guide

The authors plan to further design and implement psychology curricula based on the Hui Process and Meihana Model using the proposed HMCGP in three institutions over the next two years. The curricula will be evaluated across all three sites and reported back through this journal, and the HMCGP reviewed and further redeveloped as appropriate. Releasing the HMCGP through this publication is an attempt to encourage clinicians to engage with the Hui Process and Meihana Model in their psychological practice as a tool to address current Māori mental health inequities.

Limitations

The strengths of this paper are the collaborative approach between the initial authors from the University of Otago Christchurch in developing the Hui Process and Meihana Model and their colleagues who oversee the training of psychologists within their respective institutions. In addition, the design and development of a clinical guide is a further strength. However this paper does have limitations that need to be considered. Firstly, neither the Hui Process, or the Meihana Model have been evaluated in psychology training or practice, and the HMCGP will require formal evaluation to establish its efficacy. Secondly, further consideration of the logistics to train practicing psychologists to use the HMCGP tailored to their workplace is needed. We recognise that the proposed HMCGP is an adaptation of an effective model for medical school training; however, it presents a theoretical model for the training and practice of applied psychology, that requires specific training for clinical practice educators, evaluation of the training and practice module development and consideration of its applicability to different psychology sites of practice.

Conclusions

This paper describes the design and development of the HMCGP which outlines how to apply the Hui Process and Meihana Model to applied psychology. It advocates for specific Māori health competencies through a shared language articulated in the HMCGP. It identifies the opportunity to better prepare future and current clinicians through training and practice based on the HMCGP. It identifies the need for more robust training and practice responses to Māori health inequities to be evaluated and disseminated to the wider psychology field to inform ongoing measurement and progress. Fundamentally, the proposed HMCGP offers a responsive structure to consider the multiple influences that impact on the health and wellbeing of Maori clients/whānau, and an opportunity for the profession to demonstrate responsivity to Te Tiriti o Waitangi obligations.

APPENDIX A: HAUORA MĀORI CLINICAL GUIDE FOR PSYCHOLOGISTS: USING THE HUI PROCESS AND MEIHANA MODEL IN CLINICAL ASSESSMENT AND FORMULATION

MIHI/INITIATING THE SESSION

The mihi process provides a platform to establish a safe space for clients/whānau and clinicians and captures one or multiple points of contact/engagement with the client/whānau. The points below are dynamic and the order may change depending on the context and the preferences of the client/whānau.

Waka Hourua

Client/whānau: Greet client/whānau (clarify correct name pronunciation)

Client/whānau: Introduce yourself and your role to the client/whānau

Client/whānau: Identify whānau present and their relationships/role

Hinengaro: Identify client/whanau goals and/or aspirations for the interaction/assessment

Taiao: Consider how current therapeutic/assessment environment is impacting on the client/whānau e.g. accessibility of parking, room size, timing of sessions.

Clarify the presenting issue/kaupapa of the consultation

Ngā Roma Moana

Āhua: Consider if ethnicity is recorded correctly, confirm ethnicity where appropriate.

Āhua: Use te reo Māori, as led by client/whānau

Tikanga: Use whakatau protocol as requested by client

Tikanga: Identify client/whānau preference for karakia and facilitate when required

WHAKAWHĀNAUNGATANGA/BUILDING A THERAPEUTIC RELATIONSHIP

Whakawhānaungatanga involves the enquiry and then sharing of relevant and 'client/whānau-led' information that aligns with the Meihana Model between both the client/whānau and the clinician. It draws on clinically relevant information as a tool to help develop a therapeutic relationship and is used during each time of contact/engagement with the client/whānau. Whakawhānaungatanga is an ongoing process by both parties which occurs throughout the assessment process.

Ngā Roma Moana

Ahua: Use of te reo Māori, as led by client/whānau. Clarify/explore meanings of Māori words/concepts being used

Whenua: Identify relevant whenua connections for client/whānau

Whānau: Identify relevant client roles/relationships within the whānau

Tikanga: Explore client-led discussion about te ao Māori specific activities e.g. waka ama, toi Māori, kapahaka, learning whakapapa, rongoā

Ngā Hau e Whā

Migration: Explore relevant client/whānau migration. Determine where client/whānau support networks are located

KAUPAPA/PURPOSE OF THE ENCOUNTER

Establishes the purpose for the interaction, either as an initial engagement or as a follow-up appointment. Draws on appropriate psychological assessment tools and methods to enable appropriate therapeutic care.

Although this is presented in a linear model, it is acknowledged the complexity of assessment will require a more dynamic approach to utilising the clinical guide and relevant psychometric testing. It is also acknowledged the need to establish where this specific kaupapa may sit in the client/whanau overall needs and life outcomes.

PRESENTING ISSUE(S) AND HISTORY

Presenting issue(s)

Waka Hourua

Hinengaro: Identify the presenting issue(s) and consider the possibility of impediments the client is not aware of

Hinengaro: Identify related issues that constitute the reason for the assessment, as well as the history of these issues

Hinengaro: Identify current stressors

Hinengaro: Identify cognitive issues/experiences e.g. attention, memory, language issues, hallucinations, delusions etc

Hinengaro: Identify possibility of self-harm, suicidality, aggressiveness or homicidality, exposure to violence, and suspicion of child abuse where appropriate.

Hinengaro: Explore coping strategies and self-efficacy e.g., help-seeking, self soothing, distraction, finding meaning

History of Presenting Issue(s)

Waka Hourua

Hinengaro: Identify onset of presenting issue(s), and any specific triggering event(s) acknowledged by the client/whānau

Hinengaro: Identify the course of the issue(s)

Hinengaro: Consider findings from previous assessments (e.g. client's perspective, clinical)

Ngā Roma Moana

Wairua: Identify client/whānau spiritual and cultural beliefs about illness, well-being and healing

Whānau: Identify client's perceptions and/or expectations of whānau involvement in their assessment and treatment

Whānau: Identify whānau expectations of the service and therapeutic outcomes

Tikanga: Identify what protocols and practices such as karakia may support the client/whānau within the clinical environment. Identify how these tikanga requests may be responded to

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SYMPTOMATIC EVALUATION

Developmental History
Waka Hourua

Whānau: Explore attachment history, whānau system, parenting style(s) and the impact of these on the client's relationship framework

Tinana: Explore pregnancy term (and any issues during pregnancy including prenatal environment) and developmental milestones

Hinengaro: Consider the client's early temperament, and how this developed over time and in the context of the whānau system

Hinengaro: Consider cognitive functioning/impairment e.g., Foetal alcohol syndrome, traumatic brain injury and neurodevelopmental issues

Psychiatric History
Waka Hourua

Hinengaro: Explore client's mental health history

Hinengaro: Explore and review client's history of psychiatric treatment, medication and outcomes

Ratonga Hauora: Identify experiences with access, availability and quality of health and social services

Ratonga Hauora: Explore client/whānau preferences for hospital and/or community based support services (e.g. religious, social worker, Māori health, illness specific)

Ratonga Hauora: Consider 'gaps' in current services that may have reduced the ability for the client/whānau to be supported with the presenting issue(s)

Ratonga Hauora: Identify what services are available that might further support client/whānau within your area

Ngā Hau e Whā

Racism: Consider whether any of the previous health notes allude to previous clinician bias

Racism: Consider your role in ensuring client/whānau have access to appropriate resources/services that will ensure access to best practice

Racism: If the client/whānau response(s) are minimising, or negative towards things Māori it can indicate internalised racism and reflect exposure to institutional and/or interpersonal racism. If so, care needs to be taken to navigate sensitively to avoid further 'othering' of the client/whānau

Racism: Explore client's strategies to navigate institutional, personally mediated and/or internalised racism

Substance Use and Addictive Behaviours History
Waka Hourua

Tinana: Explore current substance use and addictive behaviours e.g., substance use, gambling, pornography, and online activities

Tinana: Explore history, onset and course of substance use and/or addictive behaviours

Hinengaro: Identify relevant triggers or stressors that maintain substance use and/or addictive behaviours

Hinengaro: Explore use of substances (even if in low doses) including duration, amount used and frequency

Hinengaro: Identify the function of the substance use and/or addictive behaviours (e.g, coping, relief, to socialise etc)

Medical History
Waka Hourua

Tinana: Explore client's past and present physical well-being e.g., mobility, physical impairment chronic illness, chronic pain, and/or medication, significant injury, etc

Tinana: Explore client/whānau knowledge/ understanding and expectations of the identified medical concerns, treatments and medications (purpose/interactions)

Tinana: Explore client/whānau self care and lifestyle, e.g., sleep, personal hygiene, food security, physical activity and nutrition

Tinana: Explore engagement in physical activities/behaviours that support well-being

Hinengaro: Identify how current physical health is directly impacting on mental health status

Taiao: Identify, where appropriate (clients who are elderly or who have disabilities) any issues about mobility, walking aids, ADLs, home help, recent falls etc

Taiao: Further consider how current therapeutic/assessment environment is impacting on the client/whānau e.g. accessibility of parking, room size, timing of sessions

Ngā Roma Moana

Tikanga: Explore if the client/whānau utilises rongoā e.g. rongoa rakau, komiri to address presenting issue(s) and outcome of this when utilised

Family Medical and Mental Health History
Waka Hourua

Whānau: Explore whānau mental and physical health history and its impact on the client

Whānau: If whānau member has had previous mental health history, identify diagnosis(es), course of illness and treatment

Ngā Hau e Whā

Marginalisation: Identify whether presenting issue(s) has prevalence in the whānau, and explore client/whānau health literacy and expectations

Marginalisation: Consider what risk factors this client/whānau have been exposed to that might have led to the presenting issue(s) or influenced assessment/treatment

Ngā Roma Moana

Whenua: Explore the client's perceptions of their connection to land (or a safe place)

Whānau: Explore whānau experiences and capacity to care for the client

Whānau: Consider possible support networks that might further support client/whānau

Tikanga: Explore relevant cultural protocols/processes important to the client and their whānau and its role in their care

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PSYCHOSOCIAL EVALUATION

Identity

Waka Hourua

Hinengaro: Explore identity and self esteem in relation to self and others

Hinengaro: Consider gender identity and or sexual orientation

Hinengaro: Consider the influence of takatāpui identity

Hinengaro: Identify relevant sexual behaviour and sexual adjustment that may have an impact the client's well being including frequency, level of satisfaction and partner(s)

Tinana: Explore history of sexual development

Ngā Roma Moana

Ahua: Explore client/whānau Māori identity e.g., sense of self and belonging

Ahua: Identify client led use of Te Reo Māori and explore the concepts and beliefs it communicates during the assessment process

Ahua: Explore relevant taonga and their relationship to identity, relationships and/or connection to Te Ao Māori, including Tā Moko, pounamu etc

Ahua: If client/whānau have an ingoa Māori (Māori name), utilise this to explore relationships to whānau and/or whenua

Ahua: Consider how others socially ascribe the client/whānau's ethnicity, and the impact of this on the client/whānau

Ahua: Consider experiences of challenges to the client/whānau's indigeneity

Whenua: Identify meaningful connection to landmarks and/or other relevant awa/moana/ngāhere/roto/maunga/marae

Whenua: Explore whether the client/whānau has the privilege of access to their ancestral land/haukāinga, explore sensitively as any disconnection does not negate their identity or indigeneity

Tikanga: Explore client/whānau perceptions of breaches to Māori cultural customs/protocols they feel may have contributed to the presenting issue

Family History

Waka Hourua

Whānau: Identify current and past family structure(s), including number of siblings, primary caregiver, ages of children, marital status, romantic relationships etc

Whānau: Explore current state of relationships with support networks: whānau, friends, colleagues and health and social services

Whānau: Identify significant family events that have influenced the client/whānau

Ngā Hau e Whā

Migration: Explore relocation, dislocation and ability to maintain and/or build connections

Ngā Roma Moana

Whānau: Explore other client/whānau roles and responsibilities (including in te ao Māori); and the impact the presenting issue has on their ability to fulfill these expectations

Socio-political Determinants of Health

Waka Hourua

Ratonga Hauora: Explore client/whānau experiences within housing services

Taiao: Explore experience of and access to environmental factors e.g., living conditions, neighbourhood safety, neighbourhood cohesiveness

Taiao: Explore access to green spaces and food sources and the influence of environmental degradation

Taiao: Explore housing and living conditions that could affect client/whānau health or their recovery (e.g. stairs, rails, ramps/housing condition: cold, damp/overcrowding, neighbourhood)

Ngā Hau e Whā

Colonisation: Identify perceptions of job security eg., obtaining a living wage, shift/seasonal/casual employment conditions and their impact on the client/whānau

Colonisation: Explore whether client/whānau are living in poverty, including how they are managing debt or creating wealth

Colonisation: Identify whether client has historically been exposed to adverse housing conditions, impoverished living conditions, inequitable access to educational opportunities

Colonisation: Enquire if cost has ever been a barrier to client/whānau having their health care needs met

Colonisation: Consider current media stories or political commentary that are presenting Māori in a deficit frame increasing experiences of dehumanisation. Consider how this influences clinician bias towards client/whānau

Colonisation: Identify experiences/incidents that highlight the presence of intergenerational trauma

Marginalisation: Identify broader whānau experiences with the mental health services, or justice agencies, Oranga Tamariki, (CYFS) educational institutions, (either for themselves or in trying to advocate for the client)

Marginalisation: Identify what literature will clarify your understanding of the prevalence and risk factors that act as barriers to appropriate diagnosis and treatment

Educational/Employment History

Waka Hourua

Hinengaro: Identify any anti-social behaviors noted in the education or employment sectors

Whānau: Explore client/whānau experiences within education settings including functioning, difficulties, behavioural/emotional issues at school, learning and/or disabilities etc

Whānau: Explore client/whānau experiences within the employment sector including functioning, productivity, difficulties, disabilities etc

Whānau: Identify client work history in relation to length of time, quality of job performance, career aspirations and satisfaction with job

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Ngā Hau e Whā
Colonisation: Explore educational history, experience and outcomes
Racism: Identify/Consider how institutional racism in education and employment influences the client's experiences/reality and explore how these impact their well-being

Ngā Roma Moana
Whānau: Explore what the client does for mahi (e.g. teacher/caregiver/retired) and whether the presenting issue(s) is impacting on this mahi

Criminal/Legal History
Waka Hourua
Hinengaro: Identify any current and/or historical interaction/experiences within the justice services

Ngā Hau e Whā
Racism: Identify/Consider how institutional racism in the justice system influences the client's experiences/reality and explore how these impact their social and emotional well-being

Social History
Waka Hourua
Hinengaro: Explore historical and/or current exposure to sexual violence, abuse and neglect
Hinengaro: Explore level of social media engagement and it's impact on their health/well-being
Tinana: Identify physical injuries or impairments incurred due to historical and/or current sexual violence, abuse and neglect
Whānau: Identify changes, development or losses in relationships e.g., friends, bereavement, migration, divorce and separation; loneliness, and isolation
Wairua: Explore connections to person/place or taonga that could be of therapeutic relevance to the client/ whānau in their current clinical context
Wairua: Explore if the client/whānau have any spiritual beliefs or values that should be considered in the clinical setting
Wairua: Explore client/whānau connectedness e.g., whenua, whānau, whakapapa; tupuna, taonga, atua and esoteric experiences which could be of therapeutic relevance to the client/whānau
Wairua: Identify if client's spiritual beliefs or values align with whānau and the impact of this
Wairua: Consider if client/whānau perceptions of wairua align with broader Māori health evidence, and whether further Māori health expertise is required to provide relevant information for the assessment/treatment

Ngā Hau e Whā
Racism: Explore whether client has been exposed to personally-mediated racism, and the impacts of this on their perceptions/well-being
Migration: Explore how migration has impacted developmental trajectory, access to support networks and connection to Te Ao Māori
Migration: Explore positive outcomes of migration e.g., to access employment/education aspirations and/or to move away from ongoing risks

Migration: Explore what events and/or activities the client/whānau attend in their haukāinga, and the frequency of this interaction

Interpersonal Relationships History
Waka Hourua
Whānau: Identify positive relationships with networks that support collective whānau wellbeing
Whānau: Identify interpersonal difficulties including length and quality of relationships
Hinengaro: Explore interpersonal relationship history
Hinengaro: Explore client's historical exposure to abusive relationships (physical, sexual, psychological)
Hinengaro: Explore client's intimate relationships over time (including romantic attachment, sexual behaviours, sexual adjustment etc)

Ngā Hau e Whā
Racism: Explore whether client has been exposed to personally-mediated racism, and the impacts of this on their perceptions/well-being

Intervention History
Ngā Hau e Whā
Marginalisation: Identify health service contact that may have had a negative impact on the client/whānau
Marginalisation: Consider what assessment/treatment might further support the client/whānau to positive health outcomes
Colonisation: Consider both historical and ongoing processes that may impact on client/whānau experience, health outcomes or contribute to bias in clinical decision-making
Racism: Identify/Consider how institutional racism within the health system has influenced the client's experiences/reality and explore how these have impacted their well-being

PRESENTATION
Appearance and Behaviour
Waka Hourua
Tinana: Consider client grooming and personal hygiene
Tinana: Identify overall functionality of motor activity and coordination
Tinana: Identify any behaviours that are impacting functioning (e.g. repetitive behaviours, inappropriate physical contact or language in social settings etc)
Tinana: Consider client/whānau relatedness toward you including eye contact, guardedness
Tinana: Consider if any current health conditions are impacting appearance and behaviour

Speech and Language
Waka Hourua
Tinana: Explore client's use of language including comprehension and vocabulary
Tinana: Evaluate receptive and expressive elements of language including vocabulary level, volume and tone etc
Tinana: Consider if any current health conditions are impacting speech and language processes

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Ngā Roma Moana
Ahua: Consider role of te reo Māori in comprehension, receptive and expressive elements of language

Mood and Affect
Waka Hourua
Hinengaro: Identify current emotional state of the client/whānau

Hinengaro: Identify affect of client/whānau e.g. facial expression, body language

Hinengaro: Consider congruence between mood and affect

Tinana: Consider if any current health conditions are impacting mood and affect

Thought Process and Content
Waka Hourua
Hinengaro: Identify cognitive processing that aligns with goal-directed focus and is logical

Hinengaro: Identify cognitive processing that aligns with tangential, circumstantial, magical or concrete thinking

Hinengaro: Explore what the client thinks about identifying abnormal thought and perceptual content eg. hallucinations and delusions

Hinengaro: Consider whether natural phenomena can explain the reported sensory disturbance

Hinengaro: Consider whether reported sensory disturbance is a triggered memory

Hinengaro: Explore congruence between delusion and evidence

Hinengaro: Consider client/whānau reports of depressive, manic, aggressive, suicidal and homicidal ideation

Tinana: Consider if any current health conditions are impacting thought processes

Wairua: Identify congruence between thought content and client/whānau spiritual beliefs and/or connectedness

Taiao: Identify if any external stimulus is being interpreted as a hallucination and/or delusion

Ngā Roma Moana
Tikanga: Identify congruence between thought process and content and concepts correlated to Te Ao Māori

Cognition
Waka Hourua
Hinengaro: Consider cognitive functioning/impairment e.g., Foetal alcohol syndrome, traumatic brain injury and neurodevelopmental issues

Hinengaro: Undertake cognitive testing when required including alertness, attention, concentration and memory

Hinengaro: Identify any indication of flight of ideas, slow thinking, rapid thinking and loose associations

Hinengaro: Identify the client's ability to follow instructions

Tinana: Identify if any current physical illnesses or impairments may impact on cognition

Wairua: Identify congruence between cognition and spiritual beliefs and/or connectedness

Ngā Roma Moana
Tikanga: Identify congruence between cognition and concepts correlated to Te Ao Māori

Judgement and Insight
Waka Hourua
Hinengaro: Evaluate how appropriate the client's judgment has been in the past

Hinengaro: Identify the client's capacity to plan e.g. whether they feel in control, impulse control.

Hinengaro: Identify client's ability to demonstrate insight e.g. identify they need support, role they play in their current circumstances etc

Tinana: Identify if any current physical illnesses or impairments may impact on the prefrontal functioning e.g. traumatic brain injury

Ngā Roma Moana
Tikanga: Identify congruence between judgment and planning, and insight that is correlated to Te Ao Māori

WHAKATERE: SYNTHESIS AND FORMULATION
Whakatere is the integration of complex client/whānau information, best practice guidelines and current evidence (epidemiology) to inform a proposed client/whānau diagnosis and treatment management plan.

Critically review ALL information
- Consider any current impairments that may have greatest influence on the current presentation
- Consider any logical causes that may be the antecedent to the presenting issue(s)
- Consider whether the presenting issue is substance related
- Consider whether presenting issue is caused by general medical condition
- Consider the role of systemic and clinician bias, put in place specific strategies to mitigate or acknowledge these biases including adherence to clinical guidelines, seeking Māori health or cultural expertise when required, consideration of the impacts of Ngā Hau e Whā on the client/whānau etc.

Formulation
Use formulation models that enable:
- A conceptualisation, hypothesis and/or narrative of a client/whānau issue(s) inclusive of the context of Ngā Hau e Whā and Ngā Roma Moana
- How the issue(s) developed, the relationship between these, and maintaining features inclusive of the context of Ngā Hau e Whā and Ngā Roma Moana
- Accommodation of the depth and breadth of the information gathered including Ngā Hau e Whā, Ngā Roma Moana and all aspects of Waka Hourua.
- A consideration of whether formal diagnostic criteria are helpful in guiding treatment
- A natural progression on to treatment approaches that are responsive to the needs of the client/whānau
- Consideration of whether access to, or experience of Ratonga Hauora is perpetuating the difficulties of the client/whānau

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Clarify, navigate and negotiate the next steps of the management care plan with client/whānau.

- Consider any further relevant investigations, ensure they are justified. If there are inconsistencies in investigations or poor response to management plan revisit diagnosis/management.
- Include ALL aspects of clinical care that have been identified above are addressed, in addition to the client's/whānau presenting issue(s).
- Ensure the care plan incorporates/correlates with best practice recommendations for presentation and other issues identified.

POROAKI/MIHI WHAKAMUTUNGA: EXPLANATION, PLANNING & CLOSING SESSION

Waka Hourua

Hinengaro: Clearly explain, in a client centered manner, a reflection on the presenting issues and your formulation. Explain any concerns or issues not yet clarified. Check in with them, regarding their understanding of this information and their engagement.

Hinengaro: Clearly explain, in a client centered manner any changes to management or information e.g. regime, purpose, mechanism of action and new treatments. Check client/whānau understanding and engagement.

Hinengaro: Clarify the next steps in the treatment management plan and proposed timing and check client/whānau understanding and engagement

Iwi Katoa: Further identify and address any potential barriers to the on-going care of the client/whānau.

Iwi Katoa: Refer and orientate client/whānau to relevant community support services to promote continuity of care.

Ensure your health literacy skills support the client/whānau to allow informed decisions with regards to quality health care service.

Client/whānau: Offer opportunity for client/whānau to ask questions or seek any further clarification.

Client/whānau: Clarify when to seek help, and where to go if client/whānau have any concerns or questions at a later time, including your supervisor, relevant codes of ethics (Health Disciplinary Commission) etc.

Thank client/whānau for their time.

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Behind the label: Complexities of identifying Māori whānau in an away from home hospital transfer

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This paper highlights two methodological issues that arose for a group of Māori researchers during the first few months of a Māori CoRE funded project. The issues were in relation to defining 1) the evolving construction of Māori whānau in New Zealand, and 2) an away from home hospital transfer. Through the process of reflexive practice about our knowledge constructs the research team highlight some of the complexities that we as indigenous researchers had to navigate when working within a cultural context. We describe the details of the Hospital Transfers project and reflect on the learning experienced during the pilot interview phase of a three year project.

Keywords: Māori whānau, away from home, hospital transfers

Introduction

The most consistent and compelling inequities are reflected in health outcomes between Māori and non-Māori in New Zealand (Ajwani, Blakely, Robson, Tobias, & Bonne, 2003). As a consequence efforts to improve service delivery to Māori across a range of health settings have been employed (Ellison-Loschmann & Pearce, 2006; Cormack, Robson, Purdie, Ratima, & Brown, 2005). However, understanding the extent to which implementation is effective in a specific setting, prolongs sustainability, and promotes dissemination into other settings (Damschroder, Aron, Keith, Kirsh, Alexander, & Lowery, 2009) still remains a challenge. Both whānau, and the communities with which they identify, play a key part in the development of culturally appropriate, high quality hospital and health services for underserved populations (Stellefson, Diparine, & Stopka, 2013; Dutta, 2007; Wallerstein, Oetzel, Duran, Belone, Tafoya, & Rae, 2008).

Hospitalisation can be stressful for patients, for whānau, and for friends and support people (McBride, 2017a; Robson & Harris, 2007). When unwell whānau members are removed from the familiar context of their everyday lives, the world around them can become strange and feelings of vulnerability often arise (Masters-Awatere et. al, forthcoming; McBride, 2017b). There are also many challenges for whānau (relations) who wish to remain self-determining and included in the hospital care equation, from "big picture" structural, ethical, legal, socio-cultural challenges through to more personal challenges concerning the financial and the practical aspects of providing care (Cram, 2014; Cram, Smith & Johnstone, 2003; Dow, 1999). One of the most significant of these perhaps, is for whānau to entrust a loved one into the exclusive context of the hospital environment.

We begin this paper by presenting the context of hospital care and hospitalisation in New Zealand. We argue that very little is actually known about the process of hospital transfers in New Zealand. Even less is known about the experience of Māori and their whānau when whānau members (i.e. patients) are required to travel away from home to receive hospital care. We then introduce our study which seeks to shed light upon the hospital transfer process for Māori and their whānau. *The Hospital transfers: whānau involvement in the healing equation* Project focuses specifically on hospital admissions that involved transfers into Waikato Hospital within the last 12 months. The focus of this paper is to highlight two methodological issues that arose during the pilot phase of our study. Clarifying the nature, boundaries and extent of the two issues (what counts as a hospitalisation "away from home", and who exactly are the "Māori whānau" that we talk about in relation to "Māori whānau engagement during hospitalisation") was a crucial step prior to our entering the field to conduct the project interviews. How we have made sense of these two issues and the implications of them for the full study are explored and presented within this paper.

Background

Internationally, there has been growing concern that health research has not been able to reduce health inequities despite the strong evidence-base for improving health. For example, a systematic review that included, New Zealand, Canada, Australia and the United States of America, has identified the lack of uptake of scientific findings by clinical and community practitioners to be significant for the lack of impact on improving health and reducing health disparities (Gibson & Segal, 2015). The importance of translational research has identified issues of context and external validity as central to the problem of the utilisation of evidenced-based practices. As such, recognition of the importance of stakeholder knowledge and participation in research, translation, dissemination and implementation of research findings is essential (Barkin, Schlundt, & Smith, 2013).

Strategies that facilitate the incorporation of whānau knowledge and experience in the care equation are more likely to be successful for both Māori and the health services themselves. Both whānau, and the communities with which they identify, play a key part in the development of culturally appropriate, high quality health services for underserved populations (Stellefson, Diparine, & Stopka, 2013; Dutta, 2007; Wallerstein, Oetzel, Duran, Belone, Tafoya, & Rae, 2008). In this paper we advocate for strategies that actively support whānau and their communities to partner with health services. So we asked, what would culturally appropriate health services for Māori entail?

Holistic, whānau-centred care approaches have long been integral to Māori conceptualisations of health and wellbeing (Durie, 2001; Lange, 1999). For Māori, the care of the unwell has always been the concern of whānau and community. Established knowledge systems relating to health and wellbeing, and long-standing practices for both promoting good health and responding to illness have been recorded (Durie, 2011; Waitangi Tribunal, 2001). Māori recognise the importance of relationships between peoples and their broader environments to health and wellbeing (Durie, 2011; Mark & Lyons, 2010). Colonisation introduced an orientation towards Western notions of medical science and "care" that re-ordered the structure and provision of that care.

New Zealand hospitals

In New Zealand publicly-funded hospitals are large healthcare institutions with specialised staff and technologies where people are referred for care; or present for acute care in the case of emergencies. Twenty District Health Boards (DHBs) are situated around the country to plan, fund, and provide, health and disability services to their regional populations. Within each region there are differing levels of hospital services with specialisation between hospitals and across the DHBs (Ministry of Health, 2017a). The distribution of services can be dependent upon population size. However, the drive to centralise care has resulted in different levels of specialist services being available at different hospitals. This means that the provision of secondary and tertiary care services[1] often necessitates referral and transfer to settings beyond where patients usually live; in other words, patients are transferred to a large secondary or tertiary hospital in another town or city, where they can receive more specialist care (Butt, Singh, Farrant, Kyle, Gilkison, Fancourt, Hill & Mosquera, 2013; Freebairn, 2012).

The two figures presented here show the DHB boundaries, most of which span over one hundred kilometres (Figure 1) and likely include at least one sub-acute or secondary hospital (see Figure 2). As can be seen in Figure 2, there are only five tertiary level hospitals in the North Island. While the majority of DHB regions have at least one secondary hospital facility within their boundary, residents in Auckland, have three high level tertiary hospitals within the metropolitan area.

When these two maps are considered with regards to Māori population distribution, the impact of a hospital transfer on a whānau who live in a region that requires a two-hour drive to the nearest subacute or secondary hospital can become apparent.

Figure 1: DHB regions throughout New Zealand. Source: Report of the Controller and the Auditor-General (2003; p.33)

Figure 2: Location of levels of hospital services in the North Island Source: Ministry of Health (2017a)

Transfers between facilities

Inter-hospital transfers and intra-hospital transfers are often referred to as the relocation of patients either between units or wards, or from one hospital to another (Mascia, Vincenzo & Cicchetti, 2012; MacKenzie, Smith, &

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1. Primary level services mainly deal with internal medicines and include general practice. Secondary care services are recognised as having 5-10 clinical services, with 200-800 beds, and often referred to as provincial hospitals. Tertiary care services are highly specialised services and technical equipment. They can range from 300-1,500 beds. (Mulligan et al, 2003, cited in Henser, Price & Adomakoh 2006)

Wallace, 2007). A common reason for such transfers noted by Kulshrestha and Singh (2016) was as a result of there being "few centres [that]… provide super-speciality care, non-availability of speciality beds and funding of medical treatment" (p. 451). In New Zealand, transfers can occur between different facilities within a DHB region, as well as to facilities outside the DHB of usual residence, depending on the reason for transfer.

Due to the geographical size of some DHB regions, even hospital transfers within a DHB's geographic boundaries could constitute an 'away-from-home' hospitalisation from a whānau point of view. While some data on inter-district flows (or the flow of patients between their DHB of usual residence and another DHB to receive a health service) are available (National Health Board, 2014), there is limited routinely published information that provides detail on patterns of transfer between hospitals or receipt of hospital care outside one's usual place of residence, particularly data disaggregated for Māori. However, given the differential distribution of the Māori population by region and DHB, it is likely that these patterns of hospital transfer and care differ between Māori and other population groups.

Issues to do with hospital transfers

In England and Wales, as many as 75,000 patients a year may be affected by relocation stress that is brought on by a hospital transfer (Cullinane & Plowright, 2013). Mackie and colleagues (2014) refer to the hospital transfer process for relatives as a journey that "was disorientating as the need to travel away from home forced many into unfamiliar surroundings" (p. 179). The stress evoked from transferring to another hospital facility, or being relocated away from familiar surroundings, causing emotional distress was referred to as relocation stress by Carpento (2006) who considered relocation stress as, "a state in which a person experiences physiologic and/or psychological disturbances as a result of transfer from one environment to another" (p. 356).

In addition to psychological stress, the financial burden of an "away from home" hospital admission for both the patient and support people requires attention. Gott and colleagues (2015) conducted a qualitative study on the financial impacts faced by family and whānau carers in the palliative care context. However, aside from this sole study very little New Zealand research on the burden carried by support people during a hospital admission has been conducted. Given the rates of hospital admissions for Māori (Ministry of Health, 2017b) and indeed the inequity of health outcome experienced by those who do seek hospital care (Oetzel, Scott, Hudson, Masters-Awatere, Rarere, Foote, Beaton & Ehau, 2017) the experience of Māori during a hospital transfer represents a large gap in our knowledge.

The Hospital Transfers project

The *Hospital transfers: whānau involvement in the healing equation* Project (hereafter referred to as the Hospital Transfers project) arose from this identified gap. This three-year study is funded by the Māori Centre of Research Excellence Ngā Pae o te Māramatanga (NPM) under NPM's Mauri Ora or Human Flourishing theme. Research conducted under this theme recognises the challenges and opportunities that lie ahead for Māori whānau, hapū (larger family), iwi (extended family) and communities and, rather than taking a deficit or victim-blaming approach, seeks instead to embrace and build on practices that sustain, strengthen and liberate communities (Ngā Pae o te Māramatanga, 2017). The research question that guides the overall study is: *How can whānau maintain active engagement in the care of their whānau member when they need hospital care away from their home base?*

In the research project we intend to explore whānau decision-making processes about key supports for the patient; negotiation of the distance between home and the hospital where a whānau member has been transferred to; whānau unfamiliarity with the different town, city or region; unfamiliarity with the hospital and its staff; how whānau remain active in decisions regarding the care of their whānau member; and how whānau seek help and advice, and access the support services to which they are entitled. The overall study investigates how whānau navigate caring for their whānau during the process of a hospital transfer. This paper focuses on the pilot interviews and the team reflection upon two key methodological issues that have implications for future project work.

Methodology

Our team are committed to undertaking research that both benefits Māori communities and centres Māori aspirations for health and wellbeing. In the design and execution of the study we are guided by Kaupapa Māori theory (Pihama, Cram & Walker, 2002; Ormond, Cram, & Carter, 2006). Key to our approach is a focus on research practices that recognise and facilitate self-determination (Alves, 1999). In order to enact our commitment of transformational change (Grande, 2003; Lather, 1991; Smith, 1997), we remain mindful of how whānau (as patients and support people/relatives) are involved in the healing equation before, during and after the transfer process.

Pilot phase interviews

Our literature review revealed a dearth of literature regarding hospital transfers in the New Zealand context and a similar paucity of literature exploring indigenous patients' hospital transfers away from home. Of the published research in the area of hospital transfers, much was focused on the perceptions of the staff and patients whilst very little information was obtained from the perspectives of the relatives or support people who often travel with the patients. The lack of information gathered from relatives or other support people was highlighted by McKinney and Deeny (2002) and Odell (2000) who provided detailed descriptions of 'patients' experiences without considering the experiences of their family members. The experiences of families, or their support people appear absent from research regarding hospital transfers.

Given the paucity of research evidence looking at the experience of families in the hospital transfer care equation, guidance on the conduct of such a study was equally limited. Thus, our team took the prudent approach of conducting a series of pilot interviews to both test our processes of

recruitment into the study and the interview protocols themselves.

Four, face to face, semi-structured interviews focusing on whānau experiences of hospital transfers and hospitalisations 'away-from home' were conducted. The primary focus of these interviews was to identify ways in which whānau engaged in the hospital care process during their whānau member's transfer and hospitalisation away from home, with particular attention to the medical context. The interviews also highlighted whānau perspectives on the engagement that occurred between whānau and various medical teams.

A number of inclusion criteria were adopted for these interviews, namely hospitalisation and transfer had to have occurred in the past 12 months; the participant had to be 18 years of age or older on the day of the interview; the patient had to have been admitted to hospital for a period of at least 24hrs; all participants had to be of Māori descent, and they had to have been transferred to a hospital which was 'away from home' (out of the city/town they are associated with), and away from their usual place of residence.

Possible participants were approached through researcher personal networks and four participants were recruited who met the selection criteria. The four whānau members comprised of two patients and two support people. The four whānau members resided in different areas of the Waikato; ranged in age from 22-87 years, identified as male or female, and incorporated different whānau member relationships (partner, daughter, and grandchild). Data was collected from kanohi ki te kanohi (face-to-face) interviews, which lasted between 30 and 90 minutes. Interviews were transcribed verbatim and the process of analysis was conducted using thematic analysis. Themes were collated based on similar responses or common findings when comparing the data from both the patients and support people.

In addition to undertaking a relatively straightforward thematic analysis of the pilot data however, through a process of reflexive practice, we also realised we needed a deeper and more nuanced examination of at least two of the terms we had been using in our study. It is to the results of this reflexive practice that we now turn.

Reflexive Practice

Academics in psychology (Robson, 1993; Waldegrave, 1993), and particularly in community psychology (Nelson & Prilleltensky, 2005; Riger, 1990) have argued for the explicit positioning of research that involves working in community settings at the broader social research level (Crotty, 1998). Unfortunately, explicitly stating the researcher's values in research has yet to be accepted and is positioned on the fringes of psychological research (Marie & Haig, 2006).

Indigenous researchers similarly have long been advocating for a reflexive commentary on the epistemological tensions inherent in research across power differentials (Bevan-Brown, 1998; Cram, McCreanor, Smith, Nairn & Johnstone, 2006; Smith, 1999). The arguments posited for reflexive practice challenge researchers, and psychologists doing research work, to move beyond simply being the distanced-passive observer towards being an engaged-active participant. Such approaches produce a richer, more in-depth description of the research activity (Ashworth, 2003; Crotty, 1998; Etherington, 2004; Neuman, 2000) that allows us to learn from our experiences with participants to be more reflexive in our work.

The processes employed by our research team as we make sense of our data highlights a reflexive approach consistent with the principles of Kaupapa Māori Methodology and which recognises the two worldviews that we, as Māori researchers straddle, i.e. Mātauranga Māori and the dominant models of Western social science. We lay out the dynamics and tensions inherent in working with these two worldviews in an attempt to make visible the underlying complexities and hidden ideologies of power and control that are generally attached to research, yet are rarely voiced. We would argue that as long as health inequity persists, programmes must be examined for their cultural responsiveness and engagement.

In coming together to discuss and analyse our pilot data, our research team reflected on the myriad interpretations of what "away from home" means for Māori, and the evolving notion of what it means to be Māori whānau. What initially appeared, when we developed the research question and study design, to be seemingly innocuous labels of "away from home" and "Māori whānau", were shown through the pilot interviews to instead encompass layers of meaning. Our reflections on these two terms; how we have made sense of them, and their significance for the wider study are presented here as results from our pilot interview phase. Pseudonyms have been used in this section to protect the identity of the participants involved in our study.

Results

Through reflexive practice we identified two methodological issues that required an in-depth discussion to unravel our own individual assumptions. We then to achieved an agreed understanding that reflected our intended approach; that to defining "Māori whānau" and the criteria for "away from home".

Defining "Māori whānau"

For the purposes of this study, and to align with the broader Kaupapa Māori underpinnings, the team took a deliberately inclusive approach to the term "whānau". At the outset we determined that in order to identify whānau members who had been involved in the care of a loved one during a hospital transfer away from home for the purposes of an interview, we would rely on self-identification by the whānau member. Whānau then, for the purposes of this project, include anyone that is considered or identified as whānau by the person hospitalised and/or their whānau.

The concept of whānau, in and of itself has been problematic for politicians, policy-makers, statisticians and demographers alike; those required to count people in order to account for the needs and services those people require. For example, Massey University's longitudinal study, Te Hoe Nuku Roa, has used "household" as a proxy for whānau (Boulton and Gifford, 2011). Despite the flaws in ascribing a household with the same attributes as a Māori whānau, in the absence of reliable whānau data, Te Hoe Nuku Roa household data was,

for many years, used to inform the development of social policy for Māori (e.g. Cunningham, Durie, Fergusson, Fitzgerald, Hong, Horwood, Jensen, Rochford, & Stevenson, 2002).

A household however is not a whānau. The boundaries that shape, quantify, demarcate and a define whānau from other collectives, whether these collectives be a "nuclear" family or an "immediate family" (Statistics New Zealand, 2012), mean that what constitutes a whānau is often likely to be as unique to each whānau as one hapū is to another hapū. In our study, we sought to uphold the rangatiratanga of the whānau who participated, meaning it was up to each whānau to define for themselves the membership and composition of their own whānau. In supporting the principle of rangatiratanga it was equally important that we acknowledged that not every whānau would necessarily be whakapapa-based (Bishop & Glynn, 1999). So-called kaupapa whānau, those collectives who come together around a common aim or objective could, for the purposes of our study, be the main support network of a participant transferred away from their home.

Our intention for an inclusive approach to the concept of a Māori whānau, did not however easily translate into the documentation required for an ethical review application. With a focus on individual rights (Code of ethics review group, 2008) the ethical review application templates and forms highlight a preference for the development of information sheets and consent forms that would be signed by consenting individuals, rather than by collectives, such as a Māori whānau.

The recruitment information sheet, in contrast, sought Māori whānau who were willing to talk about their experience of hospitalisation away from home. To be included in the study potential participants (whether they were a patient or a whānau support person), had to self-identify as Māori and a hospitalisation away from their usual home had to have occurred in the previous 12 months. The inclusion criteria for the study were seemingly straight forward respecting the ethical obligations to provide potential participants with freedom of choice to participate, respect for their dignity as a person and informed consent.

As a team we had decided from the beginning that the patient's consent had to be received before we spoke with whānau support. This process would eliminate the problem of potentially interviewing a whole host of whānau support only to find that the original patient did not want their story told. Even if a patient did not wish to be interviewed themselves, we developed a consent form so that patients could let us know that they were willing for whānau to talk about the experience even if the patient themselves did not wish to participate. It was at this point that complications began to arise. When we began to approach support people to participate in the study, we found, of course, that not all support people were Māori.

Two examples, related to this methodological issue have been drawn from the results of our pilot interviews, illustrating the complexity we uncovered. Tama was transferred from his local hospital to a tertiary hospital for surgery. He is a young man in his early 20s who has just left home to attend university and has visions of asserting his independence. During the University break he returned to his hometown where he injured himself playing sports for a local team. He

put off the surgery as long as possible before being admitted and then transferred to the larger hospital. Not wanting to cause his whānau unnecessary concern, Tama drew upon his Pākehā partner Jane's support during his hospital admission and post-operative care at home.

The research team had to consider whether Tama and Jane's feelings and actions constituted that of a Māori whānau in order to determine if it was appropriate to include Jane's data in the collection of narratives we intended to gather from whānau. That type of decision was not appropriate for us to make, and would have been unethical. On the basis of our description of support, Jane filled that role for Tama. However, we did not apply for ethical approval to interview non-Māori – we had only sought approval to interview Māori. Could then we reasonably be expected to include Jane's data in our dataset?

Another example came from 83 year old Atarangi who experienced a hospital transfer from her home to the nearest tertiary hospital within her DHB region, 163kms away. Hana and her sister Hera, as mokopuna (grandchildren) to Atarangi, wanted to remain involved in supporting their grandmother. Atarangi's first language is te reo Māori, and her grandchildren are competent enough to engage in her native tongue. Hera and Hana's mother (Sophie) is Pākehā and does not speak Māori. Furthermore, Hera and Hana's father, Matiu, (Hinerangi's son), whilst Māori, does not have the same level of ability or confidence to maintain sustained conversations in te reo as his two daughters.

The centrality of whānau, however defined, to Māori wellbeing is well-recognised (Durie, 1998; Mark & Lyons, 2010). Providing for whānau to be actively engaged in the care of a loved one, in whatever way they collectively determine is appropriate for their whānau, supports whānau ora aspirations for self-determination and participation in decision-making (Boulton & Gifford, 2014). As a research team, and upon reflection of our own whānau compositions, we felt that it would have been inappropriate for us to dictate to Atarangi and Tama who could be part of their whānau for the purposes of our research. During one of our analysis discussions the research team tried to think of a way to present visually the complex nature of whanau. After different attempts to capture whānau in a simple way we determined that a portrait would

Figure 3: Depiction of a Māori whanau comprising Māori and non-Māori

be an effective way to depict a whānau.

Figure 3 below, sketched by artist Sharron Masters-Dreaver, is based on members of the first author's family and is presented as a visual example of a Māori whānau comprising different ethnicities and who still love each other.

The pilot interviews raised methodological issues that required the team to consider its approach to two key issues within the research team – defining both Māori whānau and, the criteria for away from home. While the initial desire for an inclusive approach was expressed, the practicality for both the researchers and participants required reflexivity.

Defining the criteria for "away from home"

In our initial conceptualisation of this study, we determined that a hospital transfer as being "away from home" constituted some degree of travel and particularly moving between DHB boundaries. However when "home" is the usual place of residence that provides warmth, comfort and familiarity (Brookes, 2000), then any hospital admission may be considered, in the broadest sense, to comprise an "away from home" experience.

To illustrate this point we draw on an interview with an 87 year old kuia we've named Anahera. This participant noted that for her, what was important was that life at home continued to operate smoothly. Minimal disruption to her home life was more important to Anahera than either her engagement with the health clinician or with having a whānau member present during the hospital admission.

Here we share an excerpt from Anahera's interview, which shows a desire for her whānau to continue life and work as normal, and to look after her husband and the house whilst she was in hospital.

> *Interviewer:* What helped you the most while you were in hospital?
>
> *Anahera:* ... one of my kids must of taken us there [to the hospital... and then] probably looked after the home and their father. Helping him... They would have had to have done a lot of housework for their father... They always came home. There was always someone that could drive the car.
>
> *Interviewer:* So they would drive home and then come back to you the next day?
>
> *Anahera:* No not really ...I didn't want them to come. I wanted them to stay home and do some work. Pick me up when I am ready. Actually, I told them to stay home and do some work and look after the whānau. I wouldn't let them take time off work, they had to go to work.

Our interview surfaced a number of worries that preyed on Anahera's mind preventing her from concentrating on her own recovery and recuperation. These included concerns that her husband was being fed and not being left at home alone; that her house was not left empty and therefore prone to burglary; and that her children were not having to take time off work, thus losing valuable income, to sit with her while she was in hospital. Anahera managed the stress caused by being "away from home" by focusing her attention on making sure home would be the same as it was before she was admitted to hospital.

In response to the initial results of our pilot interviews, we decided it was important to clarify what an "away from home" transfer meant in the context of our research. Was it enough for a hospital admission to be an "away from home" experience for Māori patients and their whānau - or was something else required to constitute an "away from home" experience?

Another participant Marama, had to manage 80kms travel every two days for two weeks to support her elderly mother during her hospital admission at the nearest tertiary hospital. Marama repeated this journey on four separate occasions in the 12-month period prior to the interview. At the same time Marama also had to travel 142kms in a different direction, to support another whānau member as they prepared for surgery at a sub-acute hospital. Marama's family members both lived nearby to her home, but were transferred to different hospitals, in opposite directions.

For residents in metropolitan areas, a transfer to another hospital facility may only mean travelling across the city. This would appear more manageable for whānau support who may wish to return home between visiting hours. Whereas for people such as Marama, return travel, either 80kms or 142kms, required more planning and resources, particularly if it was required many times during a lengthy hospital stay.

While 85% of Māori live in urban areas (Kukutai, 2013), those who remain near the rural homestead can be transferred long distances to receive the specialist care they need. Field and colleagues (2008) observed patients feeling at home at their local hospital but having a sense of unfamiliarity when transferred, such as from a rural hospital to a metropolitan hospital.

In reflecting on this pilot data the research team came to the view that, for the Māori whānau we interviewed, any hospitalisation can be thought of as an "away from home" experience. Whether the hospital admission was within 10 kilometres or over 100 kilometres away, people's lives were going to be disrupted. Those whānau members who travelled to be with their loved one while they were hospitalised exhibited a strong desire to remain engaged during the hospitalisation. Irrespective of how near or how far their loved one was transferred, whānau managed themselves to deal with that hospitalisation for however long it was necessary, in the best way they could. When a hospital transfer is necessary, Māori whānau negotiate the activation of their internal support system to assess the availability, resources and time commitment required to remain engaged.

The Research approach

As researchers we are supported by a Research Whānau that includes health and research experts. The Research Whānau have expertise in Kaupapa Māori research methodology, qualitative methodology and methods, quantitative methodology and methods, ethics, medicine, and clinical practice. Given that the project navigates the two landscapes of health systems and whānau systems, the Research Whānau provide expertise and experience on health

research policy, strategies and procedures, while ensuring we maintain our Māori-focused research intentions.

Discussion

In the next section of the paper we outline the learning we undertook to come to terms with these two concepts before taking the next step to then conceptualise our treatment of "Māori whānau data" in the discussion. The examples provided above highlight the complex nature of defining whānau and how we define, treat and then use "Māori data". In failing to take account that our Māori patients could potentially have non-Māori spouse/partners we had not thought through the issues of collecting non-Māori data as part of a Māori whānau dataset. Our original ethical approval did not include the collection of individual data from non-Māori, thus if we had continued to collect non-Māori data, we would have been working outside the scope of our ethical protocol.

The initial oversight, in failing to consider non-Māori spouses of Māori patients on our information and consent forms, although easily rectified, did cause us to stop and think about the wider implications for the project. Although we had taken an inclusive approach to whānau at the conceptual level, in line with the diversity of understandings of the term "whānau" among Māori (Lawson-Te Aho, 2010; Statistics New Zealand, 2012), we needed to operationalise the notion at the level of the consent process. We needed to allow for the diversity amongst all our participants if we were to remain true to our intention of implementing a Kaupapa Māori approach to the project.

Thus, as a team, we began to ask ourselves a number of important questions; "what is the make-up of a Māori whānau in 2017? Can a Māori whānau comprise non-Māori partners, spouses and significant others? Does it even matter that a participant's partner is non-Māori if the whānau, as a collective, identify as Māori? At what point, if any do we stop collecting "Māori" data and collect the data of a "Māori whānau"? At a conceptual level we were asking "what is the implication of this for identity politics?" At a pragmatic level, we asked "what are the implications for our analysis and for our presentation of our data in the future?"

Knowledge of where whānau go and why in hospital care is important to understanding the flows of support and decision-making between whānau members and the significance of engagements with hospital staff, structures and systems. We think the complexity does matter and we are seeking, if not to "solve" the issue in this study, then certainly to unpack the complexities that we have identified. However, it is an issue we need to grapple with and be explicit about how we treat non-Māori data in a "Māori whānau dataset". We are still working through the implications of what this means in terms of our data analysis and study findings. This is likely to be important in facilitating optimum wellbeing outcomes for both the patient and their wider whānau, and needs to be facilitated within the complex configuration of current public hospital services.

The whānau unit has been encouraged since Pākehā arrival to become progressively smaller to fit within the dominant worldview of what constitutes a "family". Cram and Smith (2003) condemn urbanisation and land confiscations for their devastating effects on the intergenerational transfer of cultural knowledge amongst Māori whānau to express their needs to healthcare professionals. While the current trend is towards whānau-centred care approaches that have long been integral to Māori conceptualisations of health and wellbeing, we need to keep sight of our focus on whānau ora. In describing whānau ora, He Korowai Oranga notes that: *"To achieve whānau ora, the health system will work in a way that acknowledges these aspirations and the central role that whānau play for many Māori, as a principal source of strength, support, security and identity"* (Ministry of Health, 2016). Westernised health systems are increasingly recognising family-centred practice as an important component in healthcare. Family-centred practice is characterised by a "partnership between parents and service providers, a focus on the family's role in decision-making, and recognition that parents as the experts on their child" (Law, Hanna, King, Hurley, King & Kertoy, 2003, p. 357). While the concepts of family-centred practice are firmly embedded throughout Aotearoa New Zealand's education, health and social welfare sectors (Chenery, 2004), a disconnect between what is best practice and what actually occurs has also been identified (Alliston, 2007).

Consistent across health policy (Alliston, 2007; Cheney, 2004), health research (Slater, Matheson, Davies, Goodyear, Holdaway & Ellison-Lochmann, 2016), and public discussion is the desire for family-centred care that improves patient well-being. Our study seeks to make explicit the challenges whānau and clinicians navigate to provide care and support to whānau in hospital. These challenges are significant and demonstrate a substantial commitment to healing and wellness. The anticipated outcomes of our study are; more frequent and deeper engagements between whānau and hospital staff, more successful hospital stays, greater compliance with patient rehabilitation plans, and less re-admissions, which will realise a reduction in the burden of negative health experienced by Māori. As a team of researchers, we want to understand both sides of the healing equation (Khodyakov, Stockdale, Jones, Mango, & Lizaola, 2011) and ways in which whānau can remain active in the care of their family members (Wallerstein, & Duran, 2010). To do so, we need to carry out critical partnering activities with a range of stakeholders (Barkin, Schlundt, & Smith, 2013; Cram, 2014; Glasgow, Green, & Klesges, 2006; Simmons, & Voyle, 2003) that will spawn a range of exciting context-dependent research trajectories (Greenlund & Giles, 2012; Khodyakov, Stockdale, Jones, 2011; Michener, Cook, Ahmed, Yonas, Coyne-Beasley, & Aguilar-Gaxiola, 2012).

Conclusion

Māori have consistently been active agents in their own care seeking and healing, and have a history of travelling in search of tohunga healing and resources (Te Awekotuku, 1981). In Māori society, care of the sick was the concern of family and community, with religious or spiritual persons often referred to for guidance, intercession or practice that would bring the sick person and their whānau into wellness. This sometimes meant travelling in search of experts, including Tohunga, and healing resources such as waiariki, cool springs or natural remedies, in communities beyond their own. Given the ethic of care amongst whānau, the unwell person rarely travelled alone.

With colonisation and the subsequent rise of western medical science and health institutions in the 20th century, care of the unwell in Aotearoa New Zealand has predominantly become the business of general practitioners, medical specialists and hospitals (Robson & Harris, 2007). While current philosophical and academic debate highlight a desire for an integrated care process that gives equal emphasis to Western and traditional Māori healing (Boulton & Gifford, 2014; Slater, Matheson, Davies, Goodyer, Holdaway & Ellison-Loshmann, 2016), the ability of Māori to determine their own health pathways has been shaped by government policies and the increasing centralisation of intensive specialist healthcare. Such processes have made hospital transfers a growing reality, especially for Māori whānau who live outside the main centres (Durie, 1998). The geographical configuration of health services often necessitates referral and transfer to settings beyond where Māori usually live, including for example, for cardiovascular and cancer-related treatment, two leading causes of death for Māori (Ministry of Health, 2015a; 2015b). Inter-facility transfers can be related to both acute situations and elective admissions, for example where post-operative complications mean additional levels of care are required (Ministry of Health, 2016).

Engaging Māori and their whānau is critical as these whānau are likely to have differential exposure to health-damaging environments, different experiences of healthcare, and a higher risk of inter-generational transfer of social inequities. Health service improvement, leading to better health and wellbeing, requires researchers who are involved and trusted in communities and are able to work in trans-disciplinary environments. Our team has found that, by employing a reflexive approach we have already raised important questions requiring further exploration as we progress the study; questions regarding the changing nature of Māori self-identity, the constituent parts of a Māori whānau in a contemporary context, the meaning of "home" for Māori and consequently where and how Māori whānau prefer to receive care. We have approached the study with a willingness to question so-called "known truths" and with the key goal of improving the experience of hospital transfers for whānau in the future. To achieve such a significant outcome, our engagement in meaningful, mutually beneficial and transformative research with multiple stakeholders is essential. With those concluding thoughts in mind, we remain ever cognisant of the whakatauki (a proverbial saying used as daily guide):

He aha te mea nui o te ao? He tangata, he tangata, he tangata!

What is the most important thing in the world? It is people, people, people!

Glossary

Aotearoa	New Zealand
hapū	subtribe
iwi	tribal group
kaupapa	purpose, philosophy, orientation
Kaupapa Māori	Māori philosophy
Kaupapa whānau	collective who come together for a common aim/purpose
mana	respect or authority
mana whenua	the authority of those from the land
marae	communal buildings and adjacent grounds
Māori	indigenous people of New Zealand
Pākehā	white people, people of predominantly European ancestry
Rangatiratanga	chieftainship, right to exercise authority, chiefly autonomy, chiefly authority, ownership, leadership of a social group
tāngata whenua	people of the land
te reo	the Māori language
Treaty of Waitangi	document signed recognising relationship between Māori and the British Crown in 1840
Tohunga	person with skills and/or specialist knowledge
waiariki	hot spring, thermal pool (suitable for bathing)
Waikato	collective name of the tribes living in the Waikato Basin. Also the name of the river from which they take their name.
whakatauki	proverb, significant saying, formulaic saying, cryptic saying, aphorism.
whānau	family and loved ones, including extended family

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Māori child rearing and infant sleep practices

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Sleep is important to a healthy lifestyle for parents and children, and having effective ways of putting a child to sleep contributes significantly to mental and physical wellbeing. Cultural groups around the world have developed a variety of approaches to this task, for example, rocking, co-sleeping, bed-sharing, breastfeeding to sleep, and encouraging infants to self soothe through various methods of infant sleep training. In New Zealand the continuation of traditional Māori approaches to infant sleep, e.g. co-sleeping, bed-sharing, responsivity to infant cues have been over-shadowed by its negative association with sudden infant death syndrome (SIDS) and dependence on parent interaction when initiating infant sleep. In this study, we were interested in the approaches Māori parents used to put their pēpi (child, 2 months-2 years of age) to sleep and the various factors that have influenced these approaches. Data were collected through online surveys (*n* =58) and face-to-face interviews (*n* =10) with Māori parents. Survey results indicated that being held and breast or bottle fed to sleep were the most practiced techniques by Māori parents. Parent assisted approaches, e.g., rocking, feeding, lying with baby until they go to sleep, were the most practiced. Many parents planned for their babies to sleep separately but very few actually persisted with self-soothing approaches due to a number of factors, such as discomfort with listening to their babies cry, culture, whānau (extended families) influences safety, and convenience. The majority of participants expressed a desire for separate sleep; however, few within the interview group actually successfully practiced separate sleep regularly.

Keywords: Infant sleep, Māori, SIDS, indigenous psychologies

Broader perspectives of infant sleep

Due to the diversity amongst Māori perspectives on infant sleep in New Zealand today, there is growing demand for research that explores infant sleep practices amongst Māori whanau (extended families) (Abel, Park, Tipene-Leach, Finau, & Lennan, 2001). Very little is known about how Māori parents care for their infants in the context of conflicting advice, and how they decide which approaches to try. Research exploring sleep location and approaches to infant sleep may provide insight into how Māori whānau negotiate this important parenting choice.

Sleep patterns in adults and infants are the result of both biological and environmental processes (Jenni & O'Connor, 2005). Biological processes (circadian and homeostatic) determine the duration of sleep needed, which matures during early infancy and varies from person to person (Jenni & O'Connor, 2005; Mindell, Sadeh, Kwon, & Goh, 2013). Sleep patterns develop further as a child is socialized to their environment and the cultured patterns of the context they are in (Owens, 2005). Across cultures, there is broad variation in parents' approaches to infant nighttime care. These variations are driven by cultural expectations and health messages, as well as parents' socialization goals, their physical environment, the nature of support received.

In Japan, for example, cultural values centered around interdependence and collectivity are associated with more parent-assisted approaches to infant sleep and bed-sharing (Jenni & O'Connor, 2005; Mindell, Sadeh, Kwon, & Goh, 2013). Conversely, in the United States, the values of independence and individualism shape sleep practices for infants, with these practices often focused on establishing separate sleep spaces and encouraging infants' self-soothing (Jenni & O'Connor, 2005). Japan, the United States, and New Zealand are industrialized and technologically advanced societies; however, cultural differences in values and expectations have shaped infant sleep practices in each location, with variations in approaches to soothing infants, bedtime, length of sleep, sleep consolidation, and sleep location (Jenni & O'Connor, 2005; Commons, Miller, & Lamport, 2010; Mindell, Sadeh, Kwon, & Goh, 2013).

Due to the variety of different cultures and traditions around sleep and parenting styles, infant sleep has been a topic of debate in New Zealand for many years (Herbert, 2001; Mindell, Sadeh, Kwon, & Goh, 2013). Western perspectives on infant sleep, which promote separate sleep locations, have been found to be more practiced and promoted in New Zealand, even though these approaches contrast with indigenous cultural values and traditions regarding infant sleep (Abel, Park, Tipene-Leach, Finau, & Lennan, 2001). The continued focus on promotion of separate sleep (Plunket, 2017; Ministry of Health, 2016) may be related to perceptions of an association between bed-sharing and dependence on parent intervention during the initiation of sleep, perceived heightened risk of SIDS, and the need for parents to get sufficient sleep. Further, pressures on parents, such as work and study requirements, have increased the need to establish consolidated sleep (sleeping through the night) from a young age (Sadeh, Tikotzky, & Scher, 2010).

Infant sleep in New Zealand

Abel, Park, Tipene-Leach, Finau, and Lennan (2001) described infant care practices of 150 families who identified as being of Tongan, Samoan, Māori, Cook Islands, Niuean, and Pākehā descent. Māori parents who had strong ties with their Māori whānau and cultural background were more inclined to bed-share and also were more likely to seek advice from

whānau around best practice infant care. Conversely, nuclear Māori families without strong ties to their whānau and cultural background were found to be more likely to place babies in a separate bed/room, as they believed it helped to increase autonomy, make the baby less reliant on their mother, and reduce night time waking (Abel et.al, 2001).

Māori child rearing and infant sleep practices

Traditional Māori parenting practices, such as bed-sharing, responsivity to infant cues such as crying, and increased physical contact with parents/caregivers within the hapu (sub-tribe) were documented through intergenerational messages in whānau and tribal practices and narratives, proverbs, oriori (lullabies) and waiata (songs) (Jenkins, Harte, & Ririki., 2011). For example, "He tangi to te tamariki, he whakama to te pakeke" (when the child cries, the elder blushes). This whakatauki (proverb) emphasizes the traditional Māori perspectives toward infant crying. This whakatauki accurately describes traditional Māori perspectives of responsivity to infant signaling and cues, i.e. crying. The whānau contribution plays an important role in overall well-being for Māori and is often described through the use of the Harakeke (Flax) metaphor. Te Rito is the center shoot of the harakeke plant; this new shoot is protected by the outer, wider, more matured leaves which protect the center from the elements and potential damage (Tibble & Ussher, 2012, Cargo, 2016). This metaphor speaks to the importance of whānau support in the overall development of each individual raised in the whānau unit. The acknowledgement of the importance of whānau is vital to economic and social well-being for Māori (Tibble & Ussher, 2012; Ritchie & Ritchie, 1978; Ritchie & Ritchie, 1979; Cargo, 2017).

The raising of pēpi was the collective responsibility of the whānau and hapū. With many parents, grandparents, and older siblings and cousins, a child's sense of community and social connectedness was deepened and many hands made light work of caring for pēpi, including in their preparation for sleep (Herbert, 2001; Matu, 2015; Ritchie, Ritchie, 1978). Amongst peoples of non-Western cultures, the practice of co-sleeping (separate sleep surface but close proximity); bed-sharing; and parent-assisted sleep practices, such as feeding, lying with baby, and rocking baby to sleep are common. These sleep practices have been associated with positive outcomes including promotion of breastfeeding, the development of independence in children, and higher self-esteem (McKenna & McDade, 2005; Hauck, Thompson, Tanabe, Moon, & Vennemann, 2011). In Western cultures, self-soothing methods are often promoted as key strategies to support healthy sleep habits in children (McKenna & McDade, 2005).

In addition to these outcomes, bed-sharing, breastfeeding, and increased contact between infant and mother have been associated with reduced infant mortality rates, in the absence of drugs and alcohol (McKenna, Middlemiss, & Tarsha, 2016). Although there is growing evidence for the benefits of bed-sharing, health care providers in New Zealand, as well as most Western locations, advise parents to place their babies in their own separate sleep space to prevent the risk of Sudden Infant Death Syndrome (SIDS) (Tipene-Leach, et al., 2014; Tipene-Leach, et al., 2010; Plunket, 2017)

Traditional Māori childrearing practices promoted co-sleeping, bed-sharing and collectivity amongst the whānau; this increased social cohesion and connectedness, and was believed to produce children who were independent, brave and confident (Jenkins & Harte, 2011). The present study sought to describe what contemporary Māori parents do, think, and feel about their infants' nighttime sleep. The aim of the study was to describe what approaches Māori parents use to get their babies to sleep, and what factors they identify as influencing their decision-making process when selecting approaches.

Method

Kaupapa Māori methodology has guided the processes of conducting this research. These methodologies reflect Māori Tikanga (customs, practices) and offer guidelines which are acknowledged throughout all phases of research (Bishop, 2005; Smith, 1999). This research has been framed in a way that highlights the natural strength, diversity, and mana associated with the Māori whānau that participated in the survey and interviews within this study. Whanaungātanga or positive relationship building (Bishop, 2005; Durie, 1998) has been central to the collection of data within this study. Whanaungātanga acknowledges both the individual and collective members of the community as being pivotal to the development of Māori research as a whole (Mane, 2009). Within this research, whanaungātanga has been evident throughout the process of determining their sample, recruitment of participants, and interview styles.

This study used a mixed-methods approach, with an online survey to collect descriptive information about parenting practices, then interviews with ten Māori parents—enabling parents to tell their stories about how they put their infants to sleep, and why they made those choices.

Participants

Overall, 562 parents/primary caregivers with an infant aged between 2 months and 2 years completed the online survey as part of the larger international study. With 11% of the overall sample (*n*=58) identifying as Māori, it was judged as worthwhile reporting specifically and separately on this group. Ten participants (eight mothers, two fathers) who had completed the online survey were invited and participated in a face-to-face interview. Participants that were approached for interviews were members within my personal community networks such as friends, acquaintances, and colleagues. With ethics approval as part of the research protocol, each participant was approached via Facebook or in person, and the research aims and objectives were outlined. After completion of their online survey, a time was arranged with those who expressed desire to participate further within the interviews.

Table 1

	# completed	# Māori	%
Online surveys	562	58	11%
Interviews	10	10	

Procedures

This research was reviewed, approved, and overseen by the University of Waikato School of Psychology Research Ethics Committee. In the online survey, information for participants was presented before entering the survey, and completion of the anonymous survey was taken as consent. Participants had the option, at the end of the survey, of linking to a separate survey where they could volunteer to be interviewed. Interview volunteers were contacted by the first author; the interview process was explained, and if they were interested in proceeding, a time and place (generally in the participant's home) was set. Before the interview took place, participants read an information sheet about the study, discussed any questions, and signed a written consent form.

Online Survey

The online survey component of this study was part of the international collaboration and was predetermined. It was not designed specifically for Māori parents but 58 Māori did chose to participate making separate analysis and reporting worthwhile. The survey included demographic information about the caregiver and infant and sleep location and usual night time practices. The survey then presented descriptions of four sleep care routines focused on infants' settling or transition to sleep (Figure 1). Participants were asked to respond to questions about whether they had considered or tried each routine, and if they had, their comfort with it and their rating of its effectiveness. While the survey also included four measures of parenting beliefs, social support, and distress, these were not analysed for report in this paper. The final section asked participants to rate the extent to which various factors such as cultural traditions, religious teaching, written materials, and advice contributed to their decisions about parenting using a visual analog scale ranging from 0 (did not contribute) and 100 (did contribute).

Figure 1: Descriptions of sleep routines

Sleep Training	Sleep training (also called "controlled crying") is when you put the baby down while awake and let them settle to sleep without attending to fussing or crying unless the baby is in physical danger.
Controlled Comforting	Controlled Comforting is where you put baby down to sleep and provide comfort without picking them up, by patting or soothing words, moving to less and less attention and more time between attending
Feeding/Holding	Feeding/holding is where you feed or hold baby until they have fallen asleep and then put down in crib or bassinette
Lying down/Co-sleeping	Lying down/co-sleeping is where you lie down with the baby until the baby falls asleep

Semi-structured interviews

Interviews were an opportunity to explore in more depth the experiences of parents and the strategies they used to get their child to sleep. Kanohi-kitea (Face to face) engagement allowed for a more nuanced account of experiences to emerge (McCaig & Dahlberg, 2010). Topics included: a) bedtime routine; b) approaches used to initiate infant sleep; c) sleep location; d) experiences with alternative approaches used to get their babies to sleep; e) positives and negatives associated with their chosen approach; f) where they receive information and advice on infant sleep; and g) to what extent parents thought culture played a role in their approaches to infant sleep. Interviews were audio recorded and participants were provided with a full transcript of their interview to change, confirm, or withdraw responses as they determined.

Data analysis

Data were downloaded from the online survey platform into IBM- SPSS statistics software. Descriptive statistics, including frequencies, mean, standard deviation and range, were generated. With the aid of the NVIVO qualitative data analysis software, transcripts were analyzed using thematic analysis. This process requires the researcher to analyze reoccurring themes and experiences throughout the data (Braun & Clarke, 2006). After the interviews were transcribed, each one was reread and tentative themes were established. These themes were then discussed with the second author. The interview transcripts were then coded for data which related to the tentative themes. The coded examples from transcripts were then reviewed by the second author and the final themes were confirmed.

Findings

This section will present and discuss the findings from both the survey and interviews. Survey findings around infant sleep location, sleep initiation techniques, and sleep care routines will be presented and discussed first. The findings from the interviews will follow and are organized into the various themes identified through the thematic analysis. These are: safety, the need for separate sleep, and discomfort with crying, convenience, whānau influence, and culture.

Survey Results

The following three themes emerged from the survey data, infant sleep locations, sleep initiation techniques, and sleep care routines. These will now be expanded on individually below.

Sleep location

Close to half of participants in this sample planned (43.1%) and preferred (48.3%) for their pēpi to sleep separately from parents. However, fewer participants (32.8%) actually slept separately from their baby. Table 2 shows parents' reported plans, preferences, and actual locations of infant sleep.

Table 2

Sleep location Māori parents planned, preferred and in practice sleep their babies

Location	Planned N	Planned %	Preferred N	Preferred %	Practice N	Practice %
Own room	25	43.1	28	48.3	19	32.8
Parents Bed	7	12.1	8	13.8	19	32.8
Pepipod/ Wahakura	1	1.7	0	0	0	0
Shared room with sibling	2	3.4	2	3.4	3	5.2
In cot or bassinette (Close proximity)	14	24.2	12	20.7	7	12.1
In cot or bassinette (Across the room)	7	12.1	6	10.4	7	12.1
In a couch in parent's arms	0	0	0	0	1	1.7
Other	2	3.4	2	3.4	2	3.4
Total	58	100.0	58	100.0	58	100.0

Notes: * % refers to valid percentage of participants who responded yes to each sleep location

Sleep initiation techniques

Participants were asked "How does your baby usually fall asleep at night?" and given the option to select any and all approaches they felt were applicable. Table 3 shows parental responses to this question. A majority of participants typically used parent assisted approaches to initiate infant sleep, including being held and breast/bottle fed to sleep, and rocked or held to sleep.

Table 3

Usual sleep initiation technique reported by Māori parents

	N	%
Held and breastfed/bottle	32	55.2
Rocked or held	13	22.4
Put in the crib while still awake	22	37.9
Other	2	3.4
Total	69	

Notes: Percentages do not add to 100 because the question allowed for multiple responses

Sleep care routines

Table 4 shows parents' responses regarding whether they had tried or considered each of the four sleep routines, and, for those who had used each method, how many times they had used it. Similar to parent reports on their usual practices, the most commonly tried routines were parent-assisted, but about 53% had tried controlled comforting, and 38% had tried infant sleep training. Table 5 shows parent ratings of their comfort with and their perceptions of the effectiveness of each sleep routine; these items were only rated by those who had tried each sleep routine at least once.

Table 4: Parent use of four sleep routines

	Tried	Considered	Never considered	1 Night	2-3 nights	4 or more nights
Sleep Training	38.3%(23)	20%(12)	35%(21)	13.6%(3)	53.5(12)	31.8%(7)
Controlled Comforting	52.8%(28)	24.5%(13)	22.6%(12)	12%(3)	32%(8)	56%(14)
Feeding/Holding	96.0%(48)		4%(2)	4.4%(2)		91%(40)
Lying down/Co-sleeping	87.8%(43)	8.2%(4)	4.1%(2)	4.7%(2)	25.6%(11	69.8%(30)

Length of time used spans the columns: Never considered, 1 Night, 2-3 nights, 4 or more nights.

Table 5: Parent-rated comfort and effectiveness

	mean/sd comfort	mean/sd effectiveness
Sleep Training (*n*=23)	42.60/31.44	65.00/28.31
Controlled Comforting (*n*=28)	66.59/26.88	48.4/31.05
Feeding/Holding (*n*=48)	75.58/31.77	83.51/23.96
Lying down/Co-sleeping (*n*=43)	76.83/28.95	78.35/25.40

Interview findings

Interviews with eight mothers and two fathers shed light on the experiences, thoughts, and reflections of these Māori parents about what they did and why they chose their sleep care practice. The following six themes emerged from the interview findings including, physical safety and emotional security of babies; parents' discomfort with babies' crying; the role of convenience and practical considerations; their concerns and questions about their babies' need for separate sleep at some point in development; the influence of whānau;

and awareness and reflection on the role of culture in making these decisions. These themes are elaborated below.

Safety

Safety was a concern that was mentioned by a number of parents. Many bed-shared, but were aware of guidelines for safe sleep, and commented on how they arranged for what they felt was a safe and appropriate sleeping space for their baby.

> So I kind of get up and make the bottle, still wrap him properly make sure that he's somewhere safe as such, so the blankets are down and he's on his back with no pillows around him, whatever (Moana) [note pseudonyms are used in place of actual names].

Some parents referred to the safety issues associated with bed-sharing, such as rolling on baby, blankets overhead, and over-heating.

> Yea they think it's unsafe, something might happen to the baby, if you're not there, which I think is the opposite to what I feel, I feel like it's more danger if they're in the bed with her, you could roll over onto them or they could fall off the bed without you knowing, and if they're 18 months old like my son, they could be running around the house all night while I'm sleeping (laughs), so I feel a little opposite to that. (Tiana)

Parents who were bed-sharing were aware of the associated safety concerns. However, they reported implementing precautions to ensure their babies were safe to sleep alongside them, such as placing baby higher up in the bed, in their own blankets, and away from anything they could roll into. Some parents referred to safety concerns associated with sleeping separately to their baby, as they felt that they would not be able to hear or respond if anything were to happen during the night.

> Yeah to make sure that she's fine, because I don't want to walk in there one day and see something has happened, or she's stopped breathing or something and I thought she was just sleeping, so it's kind of a knowing she's ok kind of thing. (Nadia)

> I think just because it was in bed, he's in a bed now, I thought he could just get up and get out, where if I'm there and he tries to get out then I can put him back, so that's why I decided to lie down with him, and I don't mind it, I think it's nice to have a little cuddles and stuff before he nods off and then that way I think they feel safe, you feel safe knowing that they're all good, it's just a more natural approach you know. (Tania)

The need for separate sleep

All parents interviewed expressed a desire to promote separate sleep; however, most parents struggled to actually implement separate sleep. Parents who using parent-assisted approaches to infant sleep found the struggle of having to get up frequently throughout the night to be tiresome and, therefore, would often relocate their babies into their own bed later in the night.

I didn't have the energy to put her back into her bed, because then she would wake up not long after, so I would just put her with me, and that's how it started out, too lazy to even try doing anything else. (Bianca)

Although many parents felt they slept better through the night when their babies slept alongside them, they also expressed need for separate sleep due to fear of continued bed-sharing and co-sleeping. All parents that were interviewed talked about the need to establish separate sleep within their children at a young age and self-soothing approaches were seen as being pivotal to this process. The perceived need for separate sleep led to some parents using self-soothing methods; these parents explained that this aided in developing their babies' abilities to settle themselves throughout the night.

Yeah I just don't want them sleeping with us forever, one of auntie's kids slept with my nan until she was 12, and I do not want that. (Nadia)

I think it's more like giving them the confidence to do it by themselves, so that they don't have to have mum, its ok to go and do something on your own kind of thing, well I think that was my push. (Jackie)

My only downfall to co-sleeping apart from the safety, is I wouldn't want him to get used to it. (Moana)

Participants also reported the benefits of having their own bed without the presence of their baby as being influential in their attempts to promote self-soothing methods.

Discomfort with crying

Many parents preferred parent-assisted approaches to settle their babies to sleep because of their discomfort in hearing their pēpi cry.

I just don't have the strength to leave her, I'm just like no, especially when they start crying hard out. But nah I can't do it. (Nadia)

I just can't handle hearing them cry for that long and plus it gets them to sleep faster. I mean sometimes its long, sometimes it short. You know its ok to be there for your kids when you're trying to get them to sleep, I think just trust your instincts in the way that you want to get your baby to sleep. (Waiora)

These parents felt that parent-assisted approaches such as rocking, lying down, and feeding their babies to sleep were easier and more convenient as they didn't have to listen to their pēpi cry for extended periods of time.

Yea pretty much, and it was easier to put her to sleep that way than just to lie her in her bed and let her cry. Everyone told me to leave her in her bed and let her cry, but I just couldn't do it. (Bianca)

Convenience

The overall convenience of an infant sleep approach was reported by parents as being influential in their decision as to what to use. Most participants described using parent assisted soothing techniques to get their babies to sleep, and three used self-soothing approaches with their babies. Convenience was a consistent theme across all interviews regardless of the approach used to get their babies to sleep.

Those who were bed-sharing and breastfeeding reported that sleeping with their baby was convenient for feeding

My kids always fell asleep on the breast pretty much, I still breastfeed him every now and then now, sometimes he'll fall asleep like that if he's really exhausted. (Waiora)

Nah not until they're older, sort of just get lazy, and watch a movie in bed or something, it's easier with the kids in there with you, instead of putting them to sleep, come back, pause the movie then carry on. (Andre)

Those who used self-soothing approaches to infant sleep also referred to the convenience of their approach. Parents using self-soothing approaches could simply place infants in the bed, leave the room, and their babies would soothe themselves to sleep. These parents also had more structured routines and could count on consistent bedtimes. Parents who used self-soothing approaches reported longer hours of sleep consolidation, meaning their babies slept through the night. The uniformity, speed, and convenience associated with self-soothing practices strongly influenced parents who chose to use this approach.

So night times, I've just started getting him into a routine, like a putting himself to sleep routine, so he goes down at about half past 8 – 9, after dinner and a bottle. That takes maybe 5-10 minutes then he's out, then he's out for the whole night. (Jackie)

The definition of convenience was different for each participant, but overall each family did what suited their needs as parents, and described what they did as the best fit for their whānau.

Whānau influence

Some participants spoke about how their previous experience has influenced their decisions. Previous experience includes observations of nieces/nephews, watching family care for pēpi in a certain way, or advice they have been offered by whānau members. Some parents described seeing their siblings use particular methods with their kids, and used their observations to inform their own infant sleep practices.

I think it's just because that's what my sister does with her daughter, she lies in bed with her. (Tina)

Parents who were using either parent assisted approaches or self-soothing approaches to initiate infant sleep reported observing family and friends around them, then using these observations to inform their approaches.

I think it was my older sister, we went out for the morning then got back home and she had put her son down the exact same way, but he's at the stage where he goes into bed and crashes out because he knows it's bed time,

there's no tears or anything. Then she just mentioned maybe you should try put him in his cot, because at that time I was rocking him and he wasn't going to sleep, then she just mentioned the putting him down in the room with no distractions, it's just him and his bed. So I did it that night and it just worked. (Jackie)

I think that was my family's influence, they were all like whatever just do what you want to do, Mum's real like that, it's your kid, at the end of the day you're the one that has to put up with him. And I think through seeing my sister with her kid, and she's doing it on her own, calling the shots, I'm like aw I can do that too, I used to do it with my nieces, but I think because we were in Oz in the early days I didn't feel in control, then moving back here it was like nah, I can. (Tina)

Most parents reported that their families had influenced their approaches to infant sleep in positive ways. Conversely, a few perceived advice from family as being more unproductive and sometimes conflicted with their approaches to infant sleep. Some participants using both parent assisted methods of infant sleep and self-soothing methods mentioned feeling unsupported by their extended families whose experiences and approaches at times differed.

They would say stuff like, why do you put him to bed all the time, why do you put him to bed in his room alone, you should have him with you, you should have him sleeping with you in your bed, why isn't he sleeping with you? But I don't agree. (Tiana)

Nah, even because her nana says stop making her fall asleep on you, because I let her do that during the day, then I put her down here (on couch) so I'm always by her, her nan says go put her in the room, but I'm like nah. (Nadia)

A few participants did talk about how their approaches, particularly bed-sharing, and connection with family were reflective of Māori culture.

Think for me a lot like I know with being Māori it's a lot about the kids and making sure that they're loved, giving them everything, for me I've got Pakeha friends and stuff, the way that she does it, she's more to the book, you feed them, you put them down if their bum's changed, they're fed, and they're still crying then just let them cry, whereas I can't do that it's just didn't feel right to me kind of thing, but it's a big thing, especially coming from a big family as well, I can't really just do something that doesn't feel right. (Tina)

Whānau connection and support was a consistent theme mentioned by parents when asked about how their approaches to infant sleep are influenced by cultural factors.

I think Māori are whānau orientated, I think a midwife told me it takes a village to raise a child, so that to me is so true, in that respect with the whole yes, let your family help you because in Oz it was not so much family but I had friends and it wasn't the same, you could tell the difference, I wouldn't reach out to my friends, whereas

here, I don't reach out they just turn up! I have no say in it. But that's what I think you need as a mother, just someone to show up and be like I've got this. (Tina)

Most participants were hesitant initially to relate their infant sleep practices as being related to their culture. However, when prompted to think about the relationship between their approaches to infant sleep and Māori culture, most offered some examples of how their culture did influence their parenting decisions.

Discussion

Our findings are consistent with previous research exploring infant sleep in New Zealand (Abel, Park, Tipene-Leach, Finau, & Lennan, 2001) in that Māori parents were more likely to use parent-assisted soothing styles than self-soothing training, and frequently shared a bed with their infants (Tipene-Leach, et al., 2010). Participants who used parent-assisted techniques, such as rocking, feeding, or lying with their baby until they go to sleep, perceived their approach to be convenient, effective, comfortable, and commented that it promoted ease of feeding. Participants felt that parent-assisted approaches helped both parent and baby to sleep for longer with less time spent awake re-soothing. Some research supports differences in infants sleep when infants co-sleep and breastfeed—in that these sleep practices are associated with more time in lighter sleep states due to frequency of feeding, but that total sleep time for infants is similar across infants co-sleeping and infants who settle themselves to sleep (Middlemiss, Yaure, & Huey, 2014). In regards to sleep consolidation, parents who used self-soothing approaches reported that their babies often slept through the night with little to no parent interaction, resulting in extended periods of sleep consolidation, consistent with previous research (Mindell, Sadeh, Kohyama and How, 2010).

Misconceptions around infant sleep

Recent research has found that certain parenting styles, including the use of parent-assisted soothing styles (rocking, feeding, lying with baby until baby goes to sleep), responsivity, bed-sharing, and co-sleeping may foster secure attachment (Commons, Miller, & Lamport, 2010; Hauck, Thompson, Tanabe, Moon, & Vennemann, 2011). Parents in our study expressed hesitation continuing the use of parent-assisted approaches because they feared their babies might develop dependency on parent interaction. Longitudinal evidence has found that bed-sharing in the early years of life is not associated with adverse outcomes as an adult (Jenni & O'Connor, 2005) and may be associated with positive outcomes (Middlemiss, Yaure, & Huey, 2014). Research has also shown that the use of parent-assisted approaches and co-sleeping are associated with the development of independence (Mindell, Sadeh, Kohyama, & How, 2010; Sadeh, Tikotzky, & Scher, 2010). However, these parents seem to still be absorbing the message—it is not clear where from—that there is a developmental imperative that children should sleep separately in order to develop appropriate autonomy, as well as accepting the Western value that autonomy is the goal of appropriate parenting (Mitchell, Cowan, & Tipene-Leach, 2016).

Culture and the intergenerational transmission of knowledge

Literature that explores traditional Māori approaches to infant sleep has found that Māori parents were traditionally very responsive to infant crying and typically used parent-assisted techniques to initiate infant sleep (Ritchie & Ritchie, 1978; Jenkins, Harte, & Ririki, 2011; Tipene-Leach, Able, Haretuku, & Everard, 2000; McCreanor, Tipene-Leach, & Abel, 2004; Mitchell, Cowan, & Tipene-Leach, 2016). Māori traditionally "wore their babies" on their backs with the need for their pēpi to be held and remain close at the forefront of successful child rearing (Cargo, 2016). Breastfeeding was seen as an extension of this need for closeness, fostering the bond between both mother and pēpi (Cargo, 2016). The tendency for parents in this study to implement similar approaches to that of their ancestors can be seen as a product of culture and the intergenerational transmission of this knowledge (Jenni & O'Connor, 2005; Tipene-Leach, Able, Haretuku, Everard, 2000; Mc Creanor, Tipene-Leach, Abel, 2004). Most parents did not recognize or conceptualize their approaches to infant sleep as culturally influenced; they just did what felt right to them. This should not be seen as surprising and it would be a significant error to view participants as being without culture. In fact, much of what participants communicated was heavily culturally laden. However, talking about culture as an insider is a very difficult undertaking because such practices are taken-for-granted and rarely called into conversation (Metge & Kinloch, 2014). To talk about culture in the abstract fashion demanded by research is a significant (and perhaps unnatural) skill. Promoting Māori families to identify and practice their need to remain close to their pēpi as a kaupapa Māori approach to infant sleep should be viewed as form of transformative practice (Herbert, 2001, Tipene-Leach, 2016, Cargo, 2017). Through the reclamation of the traditions that have been lost through the process of colonization and acculturation.

One size does not fit all

Interview and survey findings indicate that there was not one way that is consistently seen as right in regards to infant sleep soothing styles. There are benefits for both separate sleep and co-sleeping; however, within the mainstream Western health care system, the only method that is strongly promoted is separate sleep (Plunket, 2017; SIDS and Kids New Zealand , 2014; Ministry of Health, 2016). Development of culturally based education programs which inform parents/whānau/health care professionals about sleep ecology, cultural variations and the down-falls of a one size fits all approach to infant sleep would be extremely beneficial. The research exploring safety around bed-sharing has found that in the absence of smoking, substance use or abuse, and unsafe sleep spaces, there are major benefits to bed-sharing (Tipene-Leach, et.al., 2014; McKenna, Middlemiss, & Tarsha, 2016). More open discussion between Māori whānau and health care professionals, and increased attendance in antenatal and postnatal classes during which time families are in their early phases of establishing a sleep routine might facilitate promotion of safe sleep habits and materials, e.g. wahakura, pēpipod, etc.

Promotion of pepi-pods and wahakura

Very few parents who responded to the survey and no parents in the interview sample were using wahakura or pēpi-pods, although many were bed-sharing with their pēpi. These findings highlight the importance of promoting and providing safe sleeping materials for Māori parents (Tipene-Leach et.al, 2014). The reasons why parents did not use wahakura were not explored within this study. It would also be beneficial to do more research into Māori perspectives on infant sleep approaches and the factors which influence these approaches from a strengths based perspective. One possible outcome of academic literature focused on the negatives of parent assisted approaches is that it is probable that the current issues Māori whānau face in regards to infant sleep will only further perpetuate the lack of engagement in infant related services in New Zealand.

Some parents in both the survey and interview sample did sleep separately, but many did not. Recommendations of a one size fits all approach to infant sleep is ill-informed and fails to encompass the complexities of sleep, especially for Māori. Recommendations for infant sleep should be based on each individual whānau as opposed to recommendations that are consistently the same for all. The findings from this research promote the importance of cultural competency and the inclusion of culturally informed infant sleep recommendations when working with Māori parents.

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Talanoa with Pasifika youth and their families

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The Pasifika community in Aotearoa and abroad pride themselves on their relationships to their family, village and community. One's ability to engage genuinely with Pasifika people will provide a pathway for meaningful relationships to be established and positive outcomes achieved. When meeting with Pasifika youth and their families for an assessment/interview, there is more to the clinical and practical implementation of this process. From a Samoan perspective, this article will discuss the cultural elements crucial to engagement for Pasifika youth by providing an understanding of the Pasifika worldview, and drawing on the Seitapu framework of cultural and clinical competency. A clinical interviewing model is presented and adapted for Pasifika youth and their families and will conclude with practical examples to guide engagement with this population. The purpose of this article is likely to provide professionals and agencies with an understanding of Pasifika youth and their families and how to engage with them clinically, yet more genuinely within a cultural framework of practice.

Introduction

The Pasifika population currently account for 7.4% of the population in Aotearoa with the highest proportion of children (35.7%) compared to other ethnic groups (Statistics New Zealand, 2014). They are a heterogenous population that have generally migrated from the sea of islands in the Pasifika Ocean. The Samoan community in Aotearoa has the largest Pasifika population representing almost 50% of this heterogenous group (Statistics New Zealand, 2014). Samoa is typically founded on principles relating to (though not limited to) God and Christianity; and the fa'asamoa (known as the Samoan way or the Samoan worldview). The fa'asamoa has been defined by researchers previously (Tamasese, Peteru, Waldegrave & Bush, 2005) though the consistent theme that runs across that of the fa'asamoa is the importance of the relationship and the concept of va. Literally, va is translated as space, however when referred to in a relationship, it can be defined as "not empty or separate, but space that relates" (Wendt, 1999). The va highlights the importance of relationship building and engagement among Pasifika people. Regardless of the purpose for engagement with Pasifika youth and their families, the va is a determinant for a successful outcome as it effectively governs the relationship between people, land and environment (Mo'a, 2015).

This article purports to explore and understand the talanoa[1] that is needed when meeting with Pasifika youth and families for an assessment or interview that is beyond westernised clinical assessment and engagement skills. It is well known that the Pasifika population are a heterogenous group despite its collective label, and that caution is advised when the view of one pacific island is generalised to all islands in the Pacific. However, while Psychology research of the Pasifika worldview and population is arguably increasing, ethnic specific research remains limited (Ioane & Lambie, 2016). Despite the current dearth in the literature, there are more similarities than differences in the worldview and practices among the Pasifika nations that has been illustrated in the development of the Fonofale model (Pulotu-Endemann, 2001) and the Seitapu Pacific Mental Health and Addiction

Cultural and Clinical Competencies Framework (Pulotu-Endemann, Suaali'i-Sauni, Lui, McNicholas, Milne & Gibbs, 2007) which will be explored further in this article. Based on this premise, the talanoa with Pasifika youth is drawn from a Samoan perspective that may be generalised (with some caution) to other Pasifika youth groups. The article draws on the author's experiences as a first generation New Zealand born Samoan with strong connections to the island of Samoa; and professional experience as a clinical psychologist working among non-Pasifika colleagues with our Pasifika youth and their families. It is important to note that the view of Pasifika youth and their families is sourced from the author's work primarily with Pasifika children and youth in the offending population and is not intended to represent all Pasifika youth in Aotearoa. The terms youth and young person are used interchangeably throughout this article.

From a Samoan perspective, this article will discuss the cultural elements crucial to engagement for Pasifika youth by providing an understanding of the Pasifika worldview followed by a brief discussion regarding Pasifika youth in Aotearoa. Cultural competence will be explored drawing on the Seitapu framework of cultural and clinical competency for working with Pasifika populations. As the focus of this article is on talanoa with Pasifika youth and families, a review and critique of Shea's (1998) model of clinical interviewing will be undertaken and adapted for working with Pasifika youth and their families. Finally, practical tips are suggested that can be implemented when meeting with Pasifika youth and their families for the first time.

A Samoan worldview

> *"I am not an individual; I am an integral part of the cosmos. I share divinity with my ancestors, the land, the seas and the skies. I am not an individual, because I share my tofi (an inheritance) with my family, my village and my nation. I belong to my family and my family belongs to me. I belong to my village and my village belongs to me. I belong to my nation and my nation belongs to me. This is the essence of my belonging".*
> *(Tui Atua Tamasese Efi, 2009)*

Efi (2009) highlights the collective worldview of Samoan

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[1] Loosely translated as conversation. For this article, talanoa is defined as the conversation or dialogue that takes place during an assessment or interview.

people where individuality lies within a system of family and community. He eloquently explains that as Samoans, each person comes with their tofi (inheritance), their own gifts and talents bestowed upon them from God. These gifts are developed and fostered within their families; and shared within their communities. Given the essence of spirituality among Samoans, it is seen as all people having a divine designation or role to play in society that can benefit and enhance the community they live in. These roles are premised on a number of principles by which they live by that includes, but is not limited to alofa (love), fa'aaloalo (respect) and loto maualalo (humility) (Agnew et al., 2004).

Within the Samoan collective worldview, is the concept of va. The va is a relational space that includes physical, mental, spiritual, genealogy and historical elements. It is how Samoan people generally understand and define the social, spiritual, cultural, economic and religious system to which they belong (Mo'a, 2015). It is noted that Pasifika models of health include and recognise relational values, spirituality and the social and economic environment that exist among Pasifika people and families (Samu & Suaali'i-Sauni, 2009), and it is the va that connects people with each other including all other living things, the cosmos and the higher being of Gods (Samu et al., 2011). Therefore, it is important to accept and acknowledge that Pasifika people in Aotearoa and across the globe originate themselves from a collective world view and as such, western methods of teaching, learning and engagement need to be adapted accordingly.

Pasifika Youth

Pasifika youth are a dynamic and ever-changing population group in Aotearoa so it is important to constantly review the way in which one engages and build relationships with them (Suaalii-Sauni et al., 2009). They are generally taught to respect their elders and those in authority, with an expectation to prioritise the needs of the community over their own individual need. An initial reluctance by Pasifika youth to engage can be interpreted incorrectly as non-compliance. However culturally, Pasifika youth can be reluctant to genuinely engage unless appropriate processes that include acknowledgement of their families and elders is prioritised. This is generally due to Pasifika youth showing their respect and maintaining the va towards their parent or elder. Expectedly, this can be a challenge for many non-Pasifika practitioners/clinicians as this can place constraints on resource and timing. However, once a genuine relationship is established, participation and maintaining engagement will be less challenging. At this point, it is important to comprehensively explore the role of the young person within their family, among friends and in social settings that may include the church.

In general, the needs of youth among any ethnic group is complex given what we know about adolescent development that includes, but is not limited to a lack of maturity and consequential thinking, impulsivity, sensation seeking behaviour and challenging behaviour (Steinberg et al., 2008). Firstly, the issue of identity for Pasifika youth is an area that has been explored by Pasifika researchers in Aotearoa and continues to impact on the psychosocial outcomes of young Pasifika communities (Macpherson, 1984; Mailei, 1999;

Macpherson, 1999). The increasing number of New Zealand born Pasifika people has led to a growing disconnection between New Zealand born Pasifika communities; and island communities (Bedford, 1994). For young Pasifika people born in Aotearoa, the development of their identity in Aotearoa can be challenging (Tiatia, 1998). Many are living in diasporic communities where traditional Pasifika thoughts, values and behaviours can often be in conflict with that of the dominant Pālagi[2] culture in Aotearoa. In traditional Pasifika circles, they may be seen as having a desire to be Pālagi as their views may often reflect the dominant culture they live in. As a result they may remain ambivalent and confused in defining their identity as Pasifika youth born and/or raised in Aotearoa.

Therefore when working with Pasifika youth, it is important to take note of the different categories of Pasifika people in New Zealand (Gray, 2001). It can be those who are born in the islands though raised in Aotearoa, and those born and raised in Aotearoa. For example, Macpherson (1984) showed three different categories that included those raised traditionally within Samoan values; those raised bi-culturally with the Samoan and non-Samoan culture where the child will move between the two worldviews; and thirdly those raised by non-Samoan values. The age of migration can also have an impact as from a developmental perspective, a child migrating from the islands to Aotearoa will have different physical, psychological and psychosocial needs in comparison to a young person migrating from the islands. Secondly, given the increase of Pasifika and non-Pasifika marriages, identity becomes even more complex for Pasifika youth as they try to fit within their own Pasifika community in Aotearoa, alongside their other non-Pasifika ethnic identity. Current statistics show that over 60% of the Pasifika population are now born in New Zealand (Pasifika Futures, 2017). Despite the identity challenges faced by our Pasifika communities in Aotearoa, the Youth 2000 survey series undertaken in 2012 showed very high percentages of Pasifika students reported being proud of their Pasifika heritage and the importance of being recognised by their ethnic specific Pasifika group (Clark et al., 2013). However, there were much lower percentages of these Pasifika students who reported satisfaction with their knowledge of their ethnic specific Pasifika group. Hence, potentially adding further to the growing disconnection between traditional Pasifika communities and New Zealand born Pasifika communities.

Due to the evolving nature of our Pasifika people in Aotearoa there is a modern Pasifika group, born and/or raised in Aotearoa that is continuing to emerge and influence our Pasifika culture. Traditional values, protocols, beliefs and attitudes need to acknowledge and accommodate this increasing population group. For example, while family is often assumed as being supportive amongst Pasifika people, it must be considered in context to the current environment and time (Pulotu-Endemann, 2001). Arguably for many of our young Pasifika people in Aotearoa, family continues to play an integral part in one's development; however, it may be more nuclear than extended, and therefore requires further exploration (Samu & Suaali'i-Sauni, 2009).

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2 Also known as a person of European descent, or Pākehā in Māori.

For the survival of Pasifika youth and their identity, it is proposed that they still need to understand fundamental traditional values and culture that are historically and theologically bound. Pasifika youth are proud of their ethnic identity, however a more comprehensive understanding is needed that will still allow them to advance and progress positively in a Pālagi and western dominated society. If this is the challenge being faced by our Pasifika youth in Aotearoa, how do we as practitioners, clinicians and researchers work for, and undertake research with such an evolving and diverse population group?

Cultural Competence

Tiatia (2008) provides us with a comprehensive literature review of Pasifika cultural competencies. She defined cultural competency as the role and capacity of a health system to improve the physical and mental health and wellbeing of its communities by weaving cultural practices, values and beliefs in its service delivery. Tiatia has moved beyond the initial definition of cultural competency as a behaviour. Rather, and perhaps more appropriately, she acknowledged that behaviour change can only be made by changes in attitude. Herein lies the challenge. Whilst cultural competence may arguably be seen as being practiced in the workforce, Tiatia makes the stance that Pasifika cultural competence should be imbedded in our quality of care. That is, it should be included in our accreditation, regulating bodies and surveys and, more importantly, evaluated to ensure that outcomes achieved are improving the wellbeing of communities.

The New Zealand Psychologists Board expect registered psychologists to meet the standards of cultural competence defined as "having the awareness, knowledge and skill necessary to perform a myriad of psychological tasks that recognises the diverse worldviews and practices of oneself and of clients from different ethnic/cultural backgrounds" (New Zealand Psychologists Board, 2011). These standards are part of the requirement for registered psychologists under the Health Practitioners Competence Assurance Act 2003. Therefore as practitioners, clinicians and researchers in psychology, one must ensure that practice is culturally and clinically competent, and safety is prioritised when caring for our communities that include Pasifika young people and their families (Kingi-'Ulu'ave, Faleafa, Brown & Daniela-Wong; 2016).

To expand further from Tiatia's work, it is proposed that a similar stance should be undertaken with one's own individual competence. There needs to be a conscious shift among non-Pasifika colleagues that cultural competence should not only apply to one's professional practice. If you draw on your personal and social experiences or seek opportunities to engage with Pasifika communities outside of your professional experience, your work with Pasifika communities is likely to be more effective and genuine. If there is ongoing exposure to Pasifika youth, families and communities in your non-professional environments, this is more likely to assist you in your engagement and interaction in a professional capacity. In the next section, an exploration of how you may undertake this task to submerse yourself within Pasifika communities is discussed.

Seitapu

The Seitapu is a framework of Pasifika cultural and clinical competencies that was developed to support Pasifika and non-Pasifika staff working with Pasifika clients in mental health and addiction (see Figure 1.). It has woven into its framework key themes that are crucial to the Pasifika worldview. This includes (but is not limited to) family, language, tapu such as culture, spirituality, and relationships; and the knowledge and responsibility of an organisation to work effectively with Pasifika clients, their family and community.
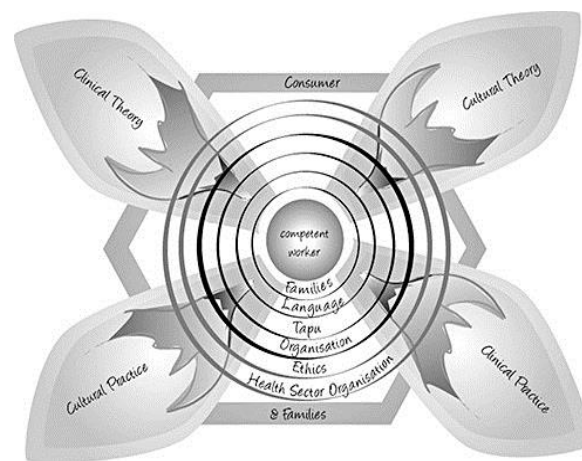
Figure 1. Seitapu framework of clinical and cultural competency

(Pulotu-Endemann et al., 2007)

Briefly, these themes highlight the need to work with the client and their *families* to assist in a successful recovery; access to working among staff with *language* competency to assist with translation and effective community; a genuine and in-depth understanding of how *culture, spirituality and relationships* are crucial when working with Pasifika people; and the *commitment and knowledge* of an organisation to work responsibly with its Pasifika clients and their families.

The central focus of the framework is the competent worker, the practitioner or clinician. It is the understanding that this role and the competence of the person in this role will impact significantly on the client and their family. It also emphasises the equal importance of competency in cultural theory and practice; alongside competency in clinical theory and practice. An issue for a non-Pasifika competent worker may be integrating their clinical theory and practice, with education and learning within the cultural realms of theory and practice. Anecdotally, there are many who continue to seek cultural competency workshops and training courses to enhance their practice with Pasifika people. While this continues to be important, the author agrees with Tiatia (2008) in that cultural competence is only partially met with behaviour change. A genuine shift in attitude alongside an acceptance that there is an alternative worldview will assist to maintain behaviour change and work with the principles of the Seitapu framework.

Attending a cultural competence workshop is a first step to genuine engagement with this community. Working with Pasifika youth and their families requires insight

to your expectations and biases that includes your own lived experiences with this group. Given that many of our practitioners are non-Pasifika, exposure and experiences in services and settings that are predominantly Pasifika is recommended. Pasifika festivals and events are encouraged however this only shows one side of Pasifika culture. Experiential visits to shopping malls and townships that are predominantly Pasifika can provide opportunities to notice your own response(s) and the response(s) of Pasifika people towards you, outside of a formal setting or engagement. Experience what it is like to be a minority among a dominant ethnic setting other than your own. Engage with Pasifika friends and colleagues, and seek out opportunities to observe in natural settings, such as church or home life environments. It is important not to expect or aim to have the same impact as a Pasifika practitioner or researcher among the Pasifika community. The reality is a non-Pasifika person will never look or talk like a Pasifika person, however one can still personally and professionally engage successfully with Pasifika communities.

However and unfortunately, there has been numerous occasions when professionals such as clinicians and researchers inadvertently or purposely overlook or minimise cultural principles, values and protocols in settings. For clinicians, this can be as simple as not removing shoes, speaking to the young person without acknowledging the parent and/or elder; or outlining the purpose of your agenda without acknowledgement of the home you are entering. For researchers, it can be using western models of engagement and questionnaires without any consideration of the cultural context of their participant. Sometimes, a common error is prioritising clinical or research protocols by delving first into confidentiality and consent; rather than prioritising engagement as a central focus among Pasifika youth and their families. Avoiding eye contact can be seen as a lack of engagement when on many occasions, it is a sign of respect towards the other person particularly if they are an elder or in an authoritative role. Building the va between a psychologist and their client, or a researcher and their participant can provide a platform for genuine sharing of information, learning and engagement to occur. Paying attention to the va and understanding the meaning and importance of respect, humility and love (from a Pasifika worldview), are fundamental principles among Pasifika families and community.

Pasifika people are relational beings from a collective worldview, yet living in an individualistic society where these principles can be compromised. Therefore, practitioners and researchers need to adapt their framework of practice to ensure authenticity from their client or participant. In the next section we will look at Shea's (1998) model of clinical interviewing and how one can adapt this, drawing on the principles of Seitapu framework and the authors' own clinical and cultural experiences of working with this population group.

Shea's (1998) model of interviewing

Shea (1998) identifies five phases of clinical interviewing that can be applicable to all interviewing situations. A broad summary of this is provided:

Introduction

This generally involves telephone contact, initial face to face meeting that includes shaking hands, offering something to drink, chatting about a neutral subject, establishing rapport, putting client at ease; educating clients and their expectations; and explaining the purpose of the interview. In his work, Shea (1998) states that an introduction begins when a clinician and their client see each other and ends when the clinician is comfortable to explore the reasons why a client has come in to see them. Discussion is held regarding the environment to start building rapport and providing them with something to drink. Following this, efforts are made to put the client at ease by alleviating any fears they may have regarding the interview, encouraging clients to be interactive and ask questions; and explaining confidentiality. Throughout this part of the process, small talk and chatter during the introduction stage is seen as a positive method to help put clients at ease. Finally, evaluating the expectations of the client will provide a pathway to the opening.

Opening

This includes identifying the purpose of the client's attendance, focussing on the client's view of the problem, non-directive listening, providing structure and support; and evaluating how the interview is proceeding. Shea (1998) suggests the use of opening statements such as *"What brings you here today?"* to encourage the client to share what has led them to seeking professional support. Based on the level of disclosure by the client, the clinician may need to prompt, encourage and guide the client in order to get an overall sense of what has been asked of them. Attention is drawn towards the client's behaviour during the opening phase and whether closed or open questions are needed pending on the clients' response. During this phase, Shea (1998) encourages clinicians to evaluate the process and consider how they will proceed to the next stage of the interview.

Body

This involves directive listening and gathering of information. Shea (1998) primarily refers to this phase as information gathering. The purpose of the interview is explored during this part of the process and may change as information is shared by the client. Certain processes that include clinical judgment and exploration in relation to the presenting issue is used during this period. This is generally where the clinician begins to 'paint a picture' of the client in relation to the referral question or brief; unless this has changed due to the information shared. If the interview has changed, for example if the client discloses risk then the interview will undertake a different direction.

Closing

As one heads to the conclusion of a session, it is timely to begin to reassure and support the client. It is time to summarise the themes discussed, acknowledge the clients' attendance and to discuss whether client may have any questions or thoughts about the interview/assessment. It is also important for the clinician to raise with the client feelings of hope and how therapy may help them. Shea (1998) acknowledges the issue of clinicians rushing through this part

of the process and therefore the gathering of information in the Body process needs to end with an appropriate timeframe to close (Sommers-Flanagan & Sommers-Flanagan, 2003).

Termination

Timely session ending and guiding termination.

A proposed model for clinical interviewing/talanoa with Pasifika youth and their families.

Shea's (1998) clinical interviewing model does not consider the culture of the client. Therefore an adaption of the model is proposed for working with Pasifika youth and their families. This model can be applied among Pasifika youth and their families involved in services that includes (but is not limited to) mental health, justice and educational settings. The fundamental principles of this revised model draws on the core beliefs, values and practices of the fa'asamoa that may be used when interviewing or conducting an assessment with other Pasifika youth populations

Faafeiloa'i - Introduction

O lau amio o lau lauga sili lea – Your behaviour and body language (including the environment) is your most influential form of communication

If families bring an elder, chief or minister, they should be the first person to acknowledge and welcome and it is probable that they will have speaking rights for the family. This is perhaps the most crucial part for engaging a Pasifika youth and their family. First impression is a lasting impression. If available, draw on the resources in your organisation such as cultural advisors. Pasifika cultural advisors can act as a bridge to connect between the two worldviews of the Pasifika young person, their family and the clinician. Pasifika people are more likely to engage in conversations with those who are similar to them and understand their identity and sense of belonging. If they are meeting in your environment, consideration should be made as to whether the environment promotes familiarity and comfort such as displaying Pasifika artwork and furniture.

In general, the names of Pasifika people are linked to their identity with family and may include ancestors, genealogy, land and/or environment. It is important and respectful that attempts are made to correctly pronounce and spell the name of your client and their family. Furthermore, greeting in their native language shows genuine effort to engage with the young person and their family. In addition, good hospitality is crucial for engagement and will generally comprise of refreshments provided at the beginning of the assessment or interview.

When everyone is seated, a brief moment of pause is suggested before asking the family if they would like to start the meeting in a certain way. A general introduction can be to request from the elder or parent if there is any particular way they would like to begin the process. You can suggest that in your work with Pasifika families, you notice the importance of starting with a prayer, and that you would be open to this formality. However, be prepared to have an alternative method of opening in the event that the family return the responsibility to you to begin the session as a show of respect. Once this has concluded, the relationship begins to form as introductions begin. Identity is important as the identity

of Samoans is relational (Mo'a, 2015). Pasifika people will introduce themselves on the basis of their ancestral links to land and people. It would be helpful for you to do the same alongside your professional disclosure. Shea (1998) does not include any personal disclosure or sharing of self in clinical interviewing. However, Pasifika people engage with one another on the basis of who they are and what they mean to each other. Therefore, sharing your own identity to what you are comfortable with, is likely to provide greater engagement and reciprocity from your client. This can include a brief dialogue of where you were born and raised and who is in your family. If you have migrated to Aotearoa, this is a key opportunity to draw on the potential of similar experiences to migration.

If you are visiting a home, it is important to acknowledge your awareness that you are in their home and to be respectful of their environment. Your smile, your mannerism, your tone of voice are all important aspects of relationship building with Pasifika youth and their families. It is suggested that a conscious effort is made to engage with the elder and parent(s) in the room in the first instance. It is important to understand where they come from and their stories of migration to Aotearoa, including their history with the western culture. As you observe Pasifika youth and their families, look for signs of engagement that can be seen with a relaxed body language and ongoing conversation flow. Be aware of your own experiences and biases that may misinterpret what is being observed. For example, when a Pasifika parent speaks on behalf of the young person, this can be culturally appropriate and respectful rather than the Pasifika parent seen to be controlling. Notice your biases and explore these with the Pasifika parent and with the young person when seen on their own.

When a Pasifika youth begins to speak and there are smiles or acknowledgement from the elder or parent, this can often be a sign that the "formal" assessment can begin. However, it is important to note that you are likely to have already obtained crucial information to your assessment through the conversations and observations made. If this has not eventuated, a suggestion could be to acknowledge and normalise the process in the room. A statement such as *"I notice that people might be feeling uncomfortable with our meeting today. It is not uncommon for this to happen as it is something new and unknown; and we do not know each other. However, let's try to get to know each other more as this can help all of us as we go through this process"* can be useful. How you deliver such a statement and your mannerism and approach such as whether you are smiling, exuding warmth with a non-judgmental tone will have more weight than the content of your statement to Pasifika youth and their families. This can often be a timely process, however for genuine and honest conversations to take place, the outcome of your assessment will be dependent on this part of the interview. Some assessments and interviews necessitate a need for the young person to be seen on their own. This can respectfully be undertaken by asking parents/elders for permission to do this while the young person is present. It also helps the parent/elder to know that often there are things young people will say when they are on their own as it may be disrespectful when said in front of them.

As a clinician or researcher, your ability to relate that includes your relational skills, will determine the authenticity of engagement by Pasifika youth and their families. It is important to understand that for Pasifika people, it is not what you say to them that is remembered, it is *how you make them feel*. Once everyone has shared their own personal background, confidentiality and consent should now be discussed. The reason why confidentiality and consent is not the first piece of information to share is that the relationship building is prioritised as is expected among Pasifika communities. The reality of confidentiality is, in the author's opinion, to protect the clinician. If the young person and their family wants to disclose their information then that is ultimately their choice.

The introduction plays a significant role in the first assessment/interview. This determines the outcome of the process and whether engagement is likely to be genuine. Therefore, while the timeframe for this process can be significant, a genuine outcome(s) will far outweigh the time invested in this process.

Talanoa - Body

The talanoa is a research methodology used to gather information for research purposes with Pasifika people and communities (Vaioletti, 2009). We believe that this can be adapted to allow the young person and their family to talanoa and share the story. Sharing of stories is a traditional method among Pasifika communities to explain and talk about life situations. Drawing on the principles of talanoa can allow for an unstructured interview with opportunity for the clinician or researcher to carefully guide the interview as it unfolds. In some cases, it may be useful to ask the young person and their family closed questions, or short open-ended questions, such as: *"who lives at home? What school do you go to? Do you like going to school? Who's the boss at home?* These type of questions can assist in the relationship building. These are questions that you know the young person and their family can answer so that they warm up to the process of talanoa in a clinical or research setting. As rapport continues, one can begin to gradually transition to more directed open-ended questions to allow for talanoa to take place. As talanoa happens, the clinician is actively listening and drawing on the information to inform their assessment. If talanoa appears to move away from the brief, you can re-direct the conversation such as *"can I just ask you again about your talanoa on _____ or, what did you mean when you talked about _____?"* As stories are being shared, look for stories that contribute to your brief, or research topic, to expand or discuss further during the talanoa.

Fa'aiuga - Closing

Similar to Shea (1998), appropriate time is needed to close off the session. Time needs to be given for the elder/parent to provide a few comments including the young person. You will also summarise and bring things to close, including a where to from here for the family. It is important that the family are aware of the next step in the process. As you are closing, it is important to continue to observe body language and relationships within the family. If you started with prayer, make a suggestion to end with a prayer for a formal close to

the meeting. As Shea's (1998) model of clinical interviewing has been contextualised to the Pasifika population, there are key application tools that are practical and considered useful for this group.

Application tools for engaging Pasifika youth and families

By having a comprehensive understanding of the way in which Pasifika people view the world, one can move towards implementation of a practice that draws on Seitapu and their own experiences as a non-Pasifika practitioner/clinician or researcher working with Pasifika people. The following provides a brief snapshot of practical tips and strategies when engaging with Pasifika youth and their families.

• Appropriate dress wear that is respectful of Pasifika cultures is important. This typically includes covering shoulders and midriff and avoiding short skirts and shorts. If conducting a home visit, don't forget to take your shoes off even if they tell you not to, however health and safety reasons should be prioritised.

• Take something with you visiting their home. Food is always a good way to break down a barrier. You can always take a packet of biscuits or snacks as a goodwill gesture to them for taking the time out to meet with you. If they offer you a cup of coffee or meal at their home it is respectful to accept their gesture of goodwill. Therefore, make sure you have given enough time to your appointment. Sometimes the appointment will be put on hold to have the coffee or meal, follow through with this as your clinical observation skills are in place that can inform your interview while a break is being observed.

• If they are meeting in your environment, provide them with biscuits and tea.

• Is there a Minister or elder that will attend the first interview? They must be acknowledged first and interaction with them should be prioritised. Ask them how they would like the meeting to proceed, for example *"Mr _____ (or Ms ____) can I ask you to open our meeting today?"* If they are unsure, ask if they would like to start with a prayer as that has been a common practice you observe, or understand, among Pasifika families that you work with.

• Learn to pronounce their names correctly rather than attempting to pronounce the name in the first instance. Ask colleagues of the same ethnicity to assist with pronunciation, or ask the young person and their family. You could say something like *"it's really important that I pronounce your name correctly, how do I say your first name?"*

• Acknowledge that there may be some cultural differences in practices and share a bit about where you are from. Normalise and acknowledge the fact that you might not know much about their culture and ask brief questions about their culture. If you are in their family home, acknowledge photos or ornaments in the home and ask about them. This can provide them with a sense of mastery to share with you things that you do not know or have experience in.

• Use of language. Most Pasifika youth seen in various services may arrive with parents where English is the primary language for the young person, though it is a second language

for parents and elders. You need to be aware of the level of language competence across all members of the family. For the elder and parents, consult and include cultural advisors. If this is not available, simple language spoken slowly will be useful. Be mindful that often nodding does not mean that they understand or agree. It is often a behaviour that is practiced by Pasifika people to allow for the process to continue so that they do not hinder the process. Always paraphrase and ask questions back to the young person and their families to ensure their understanding is appropriate.

- If you are a bit nervous seeing a client with a culture different to your own, imagine what is it like for the client and their family who are seeing you, and yet you are in a position of authority? Be mindful of this as it is common to focus on the purpose of the assessment, rather than on *who* is attending. Be curious with Pasifika youth and their families, engage with them and respectfully ask questions when you are unsure about why processes or protocols are practiced. This contributes to a more respectful, transparent and collaborative relationship.

Conclusion

Similar to many indigenous and ethnic minorities in Aotearoa and globally, working with Pasifika youth and their families can be challenging for practitioners, clinicians and researchers. However, drawing on Pasifika resources such as the Seitapu framework of cultural and clinical competency will build one's awareness, knowledge and skill necessary when working with this population group. Working with Pasifika communities requires the relationship to be prioritised across all areas of engagement to ensure that the va continues to be nurtured and protected. Therefore, having an understanding of the Pasifika worldview, its principles, values and beliefs, and implementing the suggestions raised in this article is likely to better prepare clinicians, practitioners and researchers in their talanoa with Pasifika youth and their families.

Acknowledgement:

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Whai tikanga: The application of a culturally relevant value centred approach

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This article presents and discusses the development of a kaupapa Māori (Māori centred) values based intervention, Whai Tikanga. The article briefly describes western perspectives of values based practice utilised within psychology, and discusses Māori perspectives of values as kaipuripuri (holders of traditional knowledge) with a deep connection to whakapapa kōrero (traditional Māori narratives). The application of the Whai Tikanga Values Card Sort (WT-VCS) will also be introduced. The authors propose that the WT-VCS exemplifies the importance of values centred approaches to engagement within the therapeutic context with Māori, building shared cultural understanding, and engaging in the transmission of Māori knowledge in the therapeutic context as a source and method of traditional healing

Key words: Mātauranga Māori, Kaipuripuri, Te Whare Tapa Wha, Ngā Take Pū, Values, Valued-living

Culturally congruent interventions have been noted to contribute to enhanced engagement, and assist in the development of competencies linking indigenous theory and clinical practice (Britt, Gregory, Tohiariki and Huriwai, 2014). Muriwai, Houkamau and Sibley (2015) have also demonstrated the importance of connection to one's cultural values and practices (cultural efficacy) as a protective buffer to psychological distress for Māori experiencing psychological distress. To date, there are very few examples of indigenous values being applied in the context of clinical practice on this basis. Currently psychological literature has a tendency to frame values based interventions on dominant western European values without acknowledging the importance of indigenous knowledge and the values based practices that reside therein.

Western European values based treatments are influenced by a standard belief that there are a set of values that are cross cultural and universal. Ultimately, this position denies the uniqueness and utility of indigenous history, practices, aspirations and experiences in the process of treatment and change. This focus on the universality of values and denial of the uniqueness and utility of indigenous values can increase the risk of treatment disengagement, treatment failure, or culture-related stereotypes (Centre for Substance Abuse Treatment, 2014; Guo & Hanley, 2015). Additionally, it has been argued that psychological therapies such as Cognitive Behaviour Therapy (CBT) do not acknowledge the importance of values and their influence on the therapeutic relationships and processes, primarily focusing on the amelioration of symptoms or the development of new skills (Plumb & Stewart, 2009; Asnaani & Hofmann, 2012). Mason Durie (2003) argued that this approach was inwards and downward, making traditional mainstream psychological approaches less likely to address the symbiotic relationship between the individual, the collective, the environment and te ao wairua (the spiritual world). This narrowed approach to treatment fails to acknowledge and address the pervasive nature of historical and intergenerational trauma, which occurred as a consequence of colonisation, and has systematically exacerbated a range of psychological and social conditions

for Māori (Pihama, Reynolds & Smith et al., 2014; Wirihana & Smith, 2014; Center for Substance Abuse Treatment, 2014).

This article aims to clarify how, by using a Māori centred psychological approach to therapy, and by integrating values based methods, practitioners can use traditional Māori concepts of health and promote the transmission of Māori values in order to enhance engagement, therapeutic alliance and psychological outcomes. These concepts will be drawn together and presented within a therapeutic tool that integrates an established approach to exploring values–a Values Card Sort (VCS); traditional approaches to the transmission of Māori values – whakataukī; and a Māori model of health - Te Whare Tapa Whā. This tool has been developed as part of a wider resource for Māori practitioners contained within 'He Puna Whakaata: Therapeutic Activities to Guide Change' (McLachlan & Huriwai, 2016).

A Māori centred psychological approach to therapy

Identifying a Māori centred approach to psychological therapy requires consideration of several important factors. First, traditional Māori approaches to wellbeing existed in the context of a complex collective tribal society that upheld a strong relationship with the natural environment and, was founded on the basis of extensive genealogical oral traditions (whakapapa kōrero). These oral traditions were transmitted across generations using pūrākau (storytelling), waiata (song), whakairo (carving), rāranga (weaving), moteatea (chants), oriori (lullabies) and pepeha (genealogical narrative) (Lee, 2009; Pihama, Te Nana & Cameron et al, 2015; Smith, 2008; Wirihana, 2012). Second, there is significant diversity within the Māori community regarding identity as based on tribal affiliations and this diversity was exacerbated by Māori experiences of historical trauma (Pihama et al., 2014; Reid, Varona, Fisher & Smith, 2016; Wirihana & Smith, 2014). Third, Māori experiences of historical trauma, and the ongoing systemic and individual racism that has occurred as a result, have severely impacted the oral intergenerational transfer of Māori values, beliefs and practices across generations. As a consequence, Māori experience varying degrees of enculturation (learning group's culture, through experience,

observation, and instruction) and acculturation (learning and adaptation to another culture), which shape levels of affiliation, identity and access to te ao Māori. These in turn have a direct impact on the application of kaupapa Māori (Māori centred) practices within therapy.

Reid, Varona, Fisher and Smith (2016) advised that assimilative practices by Māori were a 'survival response' to historical trauma, which facilitated the internalisation of 'negative views' of Māori ways of being. Hence, it cannot be assumed that those identifying as Māori will have an understanding of te reo Māori me ōna tikanga (Māori language and customs), or that that they will have access to knowledge of their whakapapa (genealogical) connections and subsequent associated bodies of knowledge. As a result, the utilisation of te reo Māori me ōna tikanga in psychological practice may have the potential to facilitate a state of whakamā (embarrassment and or sadness) in those who lack confidence in engaging with Māori practices, values and experiences. However, when Māori engage in kaupapa Māori activities in environments that are non-judgemental and are founded on a basis of manaakitanga, healing of whakamā can occur (Wirihana, 2008).

Literature regarding Māori models of health has been growing steadily over the past three decades. For example, Te Wheke developed by Pere in 1984, Ngā Pou Mana developed by Henare in 1998 and the Meihana Model developed by Pitama and colleagues in 2007. Te Whare Tapa Whā, first developed in 1982 by Mason Durie during a Māori health workers hui (meeting) (Durie, 1994) is one of the most commonly applied Māori models of health applied in mental health and addiction setting in New Zealand. Te Whare Tapa Whā is both a framework and metaphor for viewing a range of personal and social health domains important to Māori, as a unified and holistic model. As a metaphor, the model posits four domains of health important to Māori, as taha (sides) of a whare (house). These are Taha Hinengaro (Mental Wellbeing), Taha Whānau (Social Wellbeing), Taha Tinana (Physical Wellbeing) and Taha Wairua (Spiritual Wellbeing). This model has been applied in guiding both assessment and treatment approaches, assisting both practitioner and whānau to explore areas important to wellbeing in order to identify challenges, strengths and goals. Balance across these taha is seen as vital for wellbeing, with illness being a manifestation of a break down within or across these domains (Glover, 2005). The metaphor of the whare itself is argued to align with 'fundamental tenants of Māori epistemologies'(Glover, 2005. pg14). Moreover, McLachlan and Huriwai (2016) impart that the whare metaphor can 'evoke notions of history, identity, connectedness and collaborative effort' (p11). Conversely, as a model, it is has been argued that it 'does not define the uniqueness of Māori as a cultural entity' (McNeill, 2008. p102); yet its simplicity is argued to provide broad appeal and versatility for working with Māori (Durie, 1994; McNeill, 2008).

Māori models of practice have evolved alongside Māori models of health. The application of tikanga (protocols) consistent practice such as the Pōwhiri Poutama Model (Huata, 1997) and the therapeutic benefits of tikanga and mātauranga Māori (Māori knowledge) in the context of therapy have been emphasised when working with Māori (Huata, 1997;

Drury, 2007; Pomare, 2015). Although research regarding the application of these theories in clinical practice continues to remain limited and very little of this is evident in clinical practice (Muriwai, Houkamau & Sibley, 2015). Additionally, Durie (2003) identified that within Māori-Centred approaches 'Māori concepts and values form basis for interventions' (Durie, 2003. p47). He proceeded to develop a Māori centred counselling model in response to the limited focus of western psychological practice - Paiheretia. The model has three broad aims including developing a secure cultural identity, establishing balanced relationships, and achievement of reciprocity with wider environments. It reflects the socially mediated nature of wellbeing and highlights the importance of cultural identity within the Māori community.

A Māori centred psychological approach to therapy, therefore, is one based upon Māori concepts and values and requires Māori therapists to have access to Māori networks and knowledge of Māori custom and language (Durie, 2003; Pomare, 2015).

Whakapapa korero as the foundation for kaupapa Māori based therapeutic activities

The term 'values' has been defined in various ways. For example, Bonow and Follette (2009) state that values are present when 'something (e.g., a specific object, a state of being, or a way of life) is important because it is what is good to pursue or possess' (Bonow & Follette, 2009, p69). Values are so integral to human relationships that they have been examined by poets and philosophers and utilised by spiritual and indigenous healers for millennia (Coyte, Gilbert & Nicholls, 2007).

Acceptance and Commitment Therapy (ACT; Hayes, 2004) is a third wave behaviour therapy that has a values focus as a distinct area of difference from earlier Behavioural Therapies and subsequent Cognitive Behaviour Therapies (Hayes, 2004). ACT incorporates a range of metaphors and experiential exercises within therapy. One such metaphor highlights values as a compass or a north star where values are seen as the bright star ahead in the distance, points on the compass, or the direction in which we head. This view acknowledges that we may achieve goals along the way, and proposes that these are part of the journey of valued living (Bach & Moran, 2008). This highlights two important roles played by values. Firstly, they are important and desirable and, secondly, values guide behaviour. This highlights a further theoretical and clinical development within ACT, which focuses on committed action and value-directed living. Committed action represents a process by which whānau are encouraged to engage in behaviour in service of their values and, which requires flexible persistence (a process of reflection and adaptation of behaviour and reinforcement). Committed action is an important part of engaging in value based behaviour. This has also been referred to as value-directed living, 'engaging in an ongoing stream of desired, personally worthy actions' (Bach & Moran, 2008, p146). The following summary of values and valued living is provided by Flaxman, Blackledge and Bond (2011):

- Values are not feelings; they are about what you do; valued living (or valuing) means pursuing what matters to you with your hands and feet. Values are personally chosen life directions, rather than what you feel you should, must, or have to do.

- Values provide the direction, while goals and actions help you move in that direction.

- Valuing tends to bring a sense of vitality, purpose, and meaning to life.

- Unlike goals, values have no end point; they reflect the quality of your actions (e.g. how you choose to be in your various relationships and roles) (Flaxman, Blackledge & Bond, 2011, p38).

Motivational Interviewing (MI; Miller, 1983) and ACT are argued to both share common features, including enhancing commitment to behavior change, using a client's values as a means for enhancing this commitment, and specifically working in the medium of client's language processes to achieve this goal (Bricker & Tollison, 2011). A wide range of tools and activities are utilised within ACT to help clarify values and the level by which someone is living by these values. These include: the Valued Living Questionnaire (Wilson, Sandoz, Kitchens, & Roberts, 2010); The Bull's-Eye worksheet (Lundgren, Dahl, Melin, & Strosahl, 2008); and Epitaph and Eulogy exercises (Hayes et al., 1999). MI engages in values clarification in order to explore how living by these values may be affected by specific target behaviour such as alcohol or other drug use.

The primary exercise for clarifying values within MI is the Values Card Sort (VCS) exercise. The VCS activity was developed for people with substance use problems by Miller, C'de Baca, Matthews and Wilbourne (2001). It was designed as an activity intended to explore the discrepancy between a person's values and their substance use behaviour (Moyers & Martino, 2006). A VCS is a fairly simple activity to facilitate, and it is dependent on practitioner knowledge and application, and the therapeutic relationship as to the depth and direction the activity can take. There are a range of cards available that are utilised within a card sort approach. Each card has a value label and a brief description of the related value. Changes are often made to the content of the values for specific populations, such as people experiencing schizophrenia (Arkowitz, Westra, Miller & Rollnick, 2008; Moyers & Martino, 2006).

In general, a practitioner provides a whānau with a set of values cards and asks them to read them and separate them according to how important they are along a sliding scale from not important; important; and very important. In this way, whānau are affirmed that different people may value different things, and deciding between values may be difficult. The practitioner is observant throughout the selection process and can enquire when a person may be having difficultly deciding between cards. They may not understand the meaning of the card, or the value may bring up important stories or conflicts for them. At this stage a discussion takes place and the practitioner explores how the person is living by their most important values and how successful are they at living by these values. This provides the foundation for developing discrepancy as the practitioner is able to explore,

for example, the relationship between their substance use behaviour and their ability to successfully live by these values. The practitioner can then clarify what living by these values may look like for the person, identify barriers and create an action plan.

Kaipuripuri: the transmission of Māori values

Several terms have been used to reflect the concept of values from a Māori perspective including kaingakau, which could be seen as nourishing ones desires, or *take pū*, which can be noted as the source of issues of importance and whai tikanga, which can be translated to mean seeking what is correct or appropriate (Pohatu, 2005; Whaanga, 2012). Ritchie (1992) argued that it is difficult to portray Māori values in simple or analytic terms as they often transcend the material worldand reflect the interrelated and symbiotic nature of Māori beliefs. As an example, Māori values such whanaungatanga (relationships) has been cited as the 'the basic cement that holds things Māori together' (Ritchie, 1992, p67), however, a broad range of values are encapsulated within whanaugatanga, including: whakapapa (genealogy), manaakitanga (hospitality), wairuatanga (spirituality), rangatiratanga (status) and kotahitanga (unity). Each of these values and concepts also includes, and are related to, other values and concepts reflected in tikanga (protocols). Tikanga has been explained as doing what is right or correct - tika (right) ngā (plural). For example, reciting a pepeha is the correct process of claiming and transmitting ones whakapapa in meeting new people within formal settings, and offering kai (food) is part of the correct process for welcoming guests. Moreover, tikanga Māori have emerged and adapted over time and are maintained by a dynamic and evolving process, which is required to respond to new challenges, needs and ideas (McLachlan & Huriwai, 2016; Reid, Varona, Fisher & Smith, 2016).

The term kaipuripuri (to contain, hold in memory) has been used to reflect the objects or process by which ancestral voices are transmitted across generations (Pohatu, 2005), such as those within pūrākau and waiata (Marsden, 2003; Rameka, 2016). Similarly, Wirihana and Smith (2014) used the term whakapapa kōrero to reflect the knowledge that is transmitted within and across whānau, hapū and iwi. Whakapapa kōrero are held within a wide range of cultural practices and are noted to be 'rhetorical in that the telling is a means of preserving moral and historical messages and values' (Rameka, 2016. p392). As discussed earlier, several Māori traditional oral practices have been identified as transmitting ancestral voices, these include, but are not limited to: te reo Māori (Māori language), whakapapa (genealogy), karakia (incantations), whakairo (carving), ta moko (tattoo), tukutuku (panel weaved patterns), waiata (song), haka (posture dance), oriori (laments), pōwhiri (formal engagement process) and tangihanga rituals (funeral).

These practices can be used to facilitate healing and promote healthy expression of emotions (Wirihana & Smith, 2014). Sadly, however, due to the range of systemic and intergenerational problems that have occurred as a result of historical trauma, tikanga, reo (language) and mātauranga Māori (Māori knowledge) have been stripped away (Muriwai,

Houkamau & Sibley, 2015; Reid, 2016; Reid, Varona, Fisher & Smith; Smith, 2016; Wirihana & Smith, 2014). Nonetheless, increasingly research has shown that the use of mātauranga Māori has a direct therapeutic benefit in the context of clinical practice (Pomare, 2016; Te Nana, 2016).

Whakataukī, along with whakatuākī and pepeha are part of a collection of traditional proverbs that are used to convey thoughts, values and advice, particularly of past generations (McLachlan & Huriwai, 2016). A whakatuākī is associated with its author, place of origin, original audience and reason of formulation. Pepeha are iwi or hapū oriented, and more concerned with identity and connection. Whereas whakataukī are more generalised. Despite its use being wide spread, the author of the whakataukī and initial purpose may be unknown. Although a disconnection from the original author and purpose may be true, the teachings within a whakataukī are still evident. Whakataukī have been identified as another method of kaipuripuri 'handing down ancient wisdom and knowledge through the generations to guide people's lives, and treasures from the past to support our aspirations for today and the future' (Rameka, 2016, p.394). They have been cited as transmitting ancestral 'valued characteristics, personal virtues, modes of behaviour, life lessons and appropriate courses of action' (Patterson, 1992 cited in Rameka, 2016, p.394).

The use of pūrākau within psychological therapy with Māori has been increasingly discussed within the literature (Cherrington, 2003; 2016; Tamanui, 2016). Cherrington (2003) stated that pūrākau 'must have a place in the kete of Māori psychology' (p.117). Characters within pūrākau (Māori legends) have been identified as possessing both mythical like powers, yet also human like experiences such as love, loss, struggle and achievement (Rameka, 2016). These narratives add to the appeal and enhance the ability to connect with these stories. Rameka (2016) identified pūrākau as having two functions, firstly, as an outward ideal that one can work towards and measure performance, and secondly, as a means of instruction and validation. Cherrington (2003) identified that despite the use of pūrākau and pakiwaitara (stories) as a therapeutic medium, little had been written or researched about them.

More recently, research has highlighted the benefits of using these mediums to support the process of healing from trauma (Te Nana, 2016; Wirihana & Smith, 2014; Cherrington, 2016; Tamanui, 2016). However, the application of pūrākau and other mediums of transmitting values and tikanga continue within the community by experienced cultural practitioners, and by leaders in hauora Māori such as Mark Kopua and Dr Diana Kopua in their work on Mahi-a-nga-atua (pūrākau of atua as the basis for transmitting values and healing). The approach used by Diana and Mark Kopua is described by Cherrington as 'te taha wairua, and the belief that as descendants of ngā atua we often display characteristics or traits that reflect different atua' (p.118). Cherrington (2016) provided recommendations for the training of practitioners in the learning and application of pūrākau within psychological therapy, and exemplified the importance of the practitioner nurturing their own in-depth understanding, and experiential knowledge of ngā atua and te taha wairua.

In summary, there are similarities between Māori and

dominant culture concepts of values and value-related behaviour as discussed earlier. There are likely broad values which may transcend cultures, however, it is evident that Māori prefer and prioritise those values which reflect tribal and ancestral values, characteristics and worldviews. Values that are sourced from the deeds of atua (gods) and the words and actions of tūpuna (ancestors) are held and transmitted through engagement with whakapapa kōrero and kaipuripuri such as whakataukī, waiata and pūrākau. Engagement in culturally bound values contributes to a strengthening of identity and continues the thread of whakapapa and transmission across time. The term take pū (source of the issue/importance) is appropriate for values, whereas Whai Tikanga (pursuing correct behaviour/what is right) is appropriate for valued-related behaviour, or value-based living. The following section explores how whakapapa kōrero and a Māori model of wellbeing, Te Whare Tapa Whā (Durie, 1994), have been integrated into a Values Card Sort exercise (VCS) in the form of the Whai Tikanga Values Card Sort (WT-VCS) and related therapeutic activities.

The Whai Tikanga Values Card Sort (WT-VCS)

The Whai Tikanga card sort (WT-VCS) is aligned with the basic tenants of the Values Card Sort (VCS); however the WT-VCS has had significant adaptions made to both content and process to align with Māori preferences for culturally based practice consistent with whakapapa kōrero and Māori models of wellbeing. These adaptations adopted similar previous adaptations of psychological treatment approaches and resources for working with Māori (Bennett, Flett & Babbage, 2008; Mathieson, Mihaere & Collings et al., 2012). The WT-VCS has four distinct differences from a standard VCS which are described further in the following sections. These are:

1. Ngā Take Pū: Māori specific values.
2. Kaipuripuri: whakataukī in the transmission of whakapapa kōrero
3. Incorporation of metaphor and whakapapa kōrero
4. Application of Māori models of wellbeing to practice

Ngā Take Pū: Māori relevant values

The content of the WT-VCS came directly from mātauranga Māori; they are not translations of 'western' values. An initial list of 34 Māori values was drafted by the author Andre McLachlan. The drafting of this list was to provide an initial set of values for further consultation and development. This initial set of values was drafted from the author's experience of 25 years working within kaupapa Māori mental health and addiction services. This initial list of values was evolved through consultation with two kaumātua (both with extensive experience in mātauranga Māori, education and health care) and three Māori Health practitioners, with leadership roles within the mental health and addiction workforce. These kaumātua and Māori Health practitioners had strong whakapapa to iwi within and across the Rangītikei and Whanganui regions.

Respondents were asked to comment on the values, description of the value, and whakataukī (tribal saying or proverb) associated with the each value. Each person was then met with individually to discuss the content and identify those to be retained, excluded, adapted or added. A workshop was also conducted with 25 Māori psychologists, including clinical, community, education and organisational psychologists; and 22 Māori psychology students from throughout Aotearoa (New Zealand) at the inaugural He Paiaka Totara (National Māori Psychology Body) wānanga (workshop) at Tokorangi Marae in June 2016 (Waitoki & Rowe, 2016). These meetings were conducted to gather feedback on both the content and the process of the WT-VCS. Based on feedback from these processes, a second draft of values and associated whakataukī were developed by Terry Huriwai at Te Rau Matatini, a Māori workforce development organisation.

Kaipuripuri: whakataukī and the transmission of whakapapa korero

Each card has a whakataukī (proverb or saying) or whakatuākī on the back of the card (see image 1). Whakataukī and whakatauāki are important kaipuripuri (holders and distributors) of ancestral knowledge, values and behaviour.

> Not only does the *whakataukī* stress the importance of a secure Māori identity to the well-being of the individual, but it also highlights an interpretive system that frames Māori world views, including the spiritual origins and direct connections to the gods (Berryman, 2008, cited in Rameka, 2016, p.394).

The placement of the whakataukī and whakatauāki on the cards allows for more in-depth kōrero (whitiwhiti kōrero), along with a deeper understanding of each value and provides a direct link between the value and one of the traditional kaipuripuri - Māori approaches for promoting traditional ancestral knowledge, values and behaviour.

in the future; those which are important (hira) will be placed in their bag to take with them; and those of the highest importance (whakahirahira), are kept close to their heart in their chest pocket, as seen in image 2.

Image 2. Example of Values Cards sorted according to importance

Image 1. Front and reverse of Whai Tikanga Values Card

Incorporating metaphor and whakapapa korero

The WT-VCS process utilises the metaphor of taking a journey and by doing so acknowledges the importance of all values. Whānau are asked to imagine they are going on a journey, and to consider those values that are less important (ehara i te aha) and can be left at home on the table for use

As with a traditional VCS, whānau are then tasked with further narrowing their selection of most important values. Within the WT-VCS process, whānau are asked to reduce the list to 20. These values are then explored and discussed in the process of narrowing down to a list of five. At this point the practitioner begins to take this opportunity to engage

in further whakawhanaunga. This is done by exploring the connection of the value to whakapapa kōrero and what this value means to the whānau and how they would like to live by this value. This also facilitates the process of whakawhitiwhiti kōrero (shared in-depth exploration). For example, whānau are encouraged to share their experiences and whakapapa kōrero associated with these values from their whānau, hapū and iwi. These can be done by discussing personal memories, pakiwaitara, waiata and pūrākau. Discussion can take place between practitioner and whānau to share different perspectives of these values and whakapapa korero. This can aid in creating a shared understanding of the value, add richness to the understanding of the value and, due to disclosure regarding values form both the whānau and the practitioner, a deeper level of whanaungatanga (relationship) can occur. This is especially important when working with Māori as the process of whakawhanaungatanga is integral for facilitating engagement with Māori and developing a therapeutic alliance (Pomare, 2015). Whānau are then asked the following questions:

- What does this value mean?
- What does living by this look like for you?
- Who have you seen live by this value?
- How did they show it?

Following this, more standard VCS questions addressing discrepancy between take pū and whai tikanga (valued related behaviour) can take place, such as:

- How do you think you are living up to this in your life?
- How can you action this Take Pū in your life?
- What might get in the way of living by this Take Pū?

These are some of the most important steps in moving values clarification into Whai Tikanga, or what ACT terms committed action.

Applying Māori models of wellbeing to practice

Te Whare Tapa Whā (Durie, 1994) has been incorporated within the WT-VCS by thematically connecting each take pū to one of the four taha. Within the WT-VCS, this is represented by the placement of a symbol on the corner of each card. These symbols represent which of the four taha they connect to (refer to image 1 and 3).

Image 3. Whai Tikanga Values Card formed as a Whare (house)

Within the WT-VCS process, whānau are encouraged to return to their initial top twenty values. They are then introduced to the Te Whare Tapa Whā model of wellbeing, and are directed to re-order their top twenty cards according to which taha they are associated with. They will therefore have four quadrants of cards according to which symbol they are related to, providing a visual representation of their whare. This demonstrates to the whanau the strength of each taha, and the balance across the four taha.

Once the cards are laid out in this way, whānau can be guided to explore the balance present, or the lack thereof, which can be done by asking the following questions:

- How are their taha balanced?
- Where are their strengths?
- What are their views on where the strengths lie in comparison to the other domains, and
- Are there changes they would like to make?

The Te Whare Tapa Whā component of the WT- VCS opens up a range of therapeutic activities for identifying behaviours that strengthen each taha. In addition, the identification of barriers to wellbeing in each taha will assist towards establishing goals to live by their values, strengthen their taha and draw closer to people who support them in this journey. These activities include the Whai Tikanga Pleasant Events Schedule (also aligned with Te Whare Tapa Whā) and a Korurangi (a culturally relevant sociogram for identifying supports and quality of relationships). These activities and resources are contained within 'He Puna Whakaata: Therapeutic Activities to Guide Change' (McLachlan & Huriwai, 2016). This manual outlines different ways the processes can take place and be adapted for different populations as well as discussing the important aspects of cultural practices that support the application of the WT-VCS and associated therapeutic activities.

Since the development of the Whai Tikanga Values Card Sort (WT-VCS) resource over 200 practitioners (pre dominantly Māori) across alcohol and other drug, harmful gambling, justice, mental health and social services working in both youth and adult settings and geographically spread from Kaitaia to Dunedin have received introductory training in the use of the Whai Tikanga cards. Generally, feedback at the workshops has been enthusiastic, particularly with the anticipated benefit of being able to utilise a Māori centred vehicle in promoting and supporting change. Practitioners using the cards have reported being able to explore thinking, emotions and behaviours in a more extensive and relevant way for the Māori they are working with than using 'standard' value card sorts. They have also feedback that working within a context of whakaaro Māori (Māori ideas/thoughts) and taking the opportunity to explore these using whakatauāki and traditions has helped engage whānau in a process of cultural linkage and re-enculturation (see Sellman, Huriwai, Ram & Deering, 1997; Huriwai, 2002), which in turn has enhanced consideration and maintenance of change. Another common report has been the satisfaction of practitioners who find themselves engaged in working with positive aspirations rather than focussing on ameliorating symptoms of distress and focused on deficit modes of thinking.

Finally, this resource was developed in response to the

need for therapeutic activities, which promote kaupapa Māori based methods of engagement with Māori experiencing psychological difficulties. It was developed to contribute to the growing depth of skill and knowledge that continues to advance in the field of kaupapa Māori psychology. Most importantly, it is hoped that it will contribute to the ongoing advancements kaupapa Māori mental health and addictions services are making within Aotearoa for Māori who access these services. To summarise, it was the goal of the authors to encourage Māori clinicians to begin a process of shifting from knowledge, to understanding, to depth, in our work with whānau Māori (Huriwai, 2017).

Discussion

This paper sought to explore how Māori values could be integrated into the context of psychological practice in order to support a culturally congruent therapy approach. Utilising knowledge based in take pū (Māori values; the source of issues/things of importance) and whai tikanga (seeking what is correct or appropriate) reflects and extends upon ACT concepts of values and value-related behaviour in current western based psychological approaches. The incorporation of whakapapa korero through the use of whakataukī within the Whai Tikanga Values card Sort (WT-VCS) has the potential to highlight how values can provide a central motivating force in identifying meaning and making change. In addition, this tool has the potential to provide a central point for measuring action towards change, and to inform the ability to promote the search for meaningful engagement in the process of facilitating change. Moreover, using values as the basis of this resource exemplifies the link whakapapa korero can provide to Māori creation stories, which honour and respect the traditional Māori narratives maintained by kaipuripuri. Research highlighting cultural identity as a protective factor provided the basis for the development of this resource and will ideally encourage the development of future resources utilising whakapapa korero in the therapeutic context. Values based interventions within current psychological practice present as universally accepted. As a consequence, current values and subsequent practice interventions tend to overlook and, at times, minimise the unique history and whakapapa of Māori. Unfortunately, this has the potential to increase poor engagement and treatment failure and can exacerbate racial stereotyping and whakamā (shame).

Calls have been made for more inclusion of whakapapa korero and Māori models of health in therapy and, although there has been progress in this regard, more research is required, which explores the clinical application of these processes in the field of psychological research and practice. The Whai Tikanga resource also extends on the use of Te Whare Tapa Wha Model as a practice based intervention. It demonstrates how this model of practice can provide a rich context for the development of shared values, understanding of health and wellbeing and the development of therapy goals that align values with behaviour and wellbeing. It is the aim of the authors to contribute to this process and to encourage the use of the Whai Tikanga resource to reinforce the pursuit of wellbeing through the lens of whakapapa kōrero using a Māori framework of health – Te Whare Tapa Whā.

Finally, the WT-VCS resource contributes to the development and enhancement of the practice of both MI and ACT with Māori, by Māori practitioners. Due to the inclusion of whakapapa korero within the resource, these cards have been considered a taonga by nature when in use by Māori practitioners. However, as a resource they will require ongoing review and discussion regarding their utility and the application of whakapapa korero within the therapeutic context. A review of this application is envisioned in future, which will explore the impact of the use of the WT-VCS in the therapeutic relationship, and will examine how the resource has increased therapeutic alliance, motivated change, and improved engagement in value-related behaviour.

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Māori men: An indigenous psychological perspective on the interconnected self

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The positive relational practices of Māori men are seldom explored in academic research. Responding to this gap in the literature, this article explores how Māori men negotiate a positive sense of self and relationships. This research is guided by kaupapa Māori research practice, Māori cultural concepts, and relational understandings of identity and wellbeing. Our ethnographic approach involved direct observations, engagement in shared cultural practices and narrative interviews. During these interactions, participating men invoked a positive sense of self through accounts of belonging, reciprocity, dialogue, intimacy, and care for themselves, their whānau, and traditions. We found that Māori men's identities are negotiated through interactions with whānau (immediate and extended family), and particular places and practices. Our participants demonstrated how Māori men's positive self-constructions are fundamentally interconnected with other people, cultural traditions, socio-cultural practices, physical and symbolic places, as well as their own health and the health of those around them.

Key words: Māori men; interconnected self; identity; indigenous psychology; whakapapa; whānau; tūrangawaewae

Background

Recent decades have seen a renewed emphasis on indigenous psychologies, the goal of which has been to develop psychological knowledge that is understood and experienced by, and is native to the people it is designed for (Allwood & Berry, 2006; Kim, Yang, & Hwang, 2006; Waitoki & Levy, 2016). Such developments of indigenous psychology in Aotearoa are also part of a response to the colonial tendencies of North American and European psychology today (Hodgetts et al., 2010; Nikora et al., 2017). The self is central to psychology, and in mainstream North American and European psychology the self is conceptualised as an autonomous and separate unit. In contrast, a Māori sense of self is fundamentally interconnected. It is made up of personal and collective identities and takes form through ongoing interactions with other people, the environment, physical and spiritual domains, history and the present, and extends beyond the individual body (Love & Waitoki, 2007; Marsden, 2003; Mead, 2003). As Durie (2012) argues, when Māori think about themselves they often do so with relation to a collective body, which demonstrates that Māori identities "exist in relationship to something else" (p. 157). This 'something else' is the environment we inhabit and are part of, the people within that environment, and the objects we hold dear.

Although individualism, as prescribed within the dominant Anglo-American psychology (Hodgetts et al., 2010; Markus & Kitayama, 1991) is foreign to traditional Māori intellectual narratives of the self, less individualistic accounts have been available in the social sciences for some time. The notion that Māori identity is relational and emplaced resonates with William James' (Hermans, 2013) argument that the self is not just located within the skin of a person or separate from the environment and other people. James argued that the self-relevant parts of the environment belong to the self, promoting the notion that the self extends beyond the body – the extended self. The extended self stands in contrast to the Cartesian dualistic notion of the self as a separate entity from the environment, and people within that environment. The extended-self challenges psychology's focus on the self as largely ego-centric, preferring a more 'ex-centric' approach.

The 'ex-centric self', includes our environment, activities and whatever else draws the internal self, outward. More recently, Hermans and Geiser (2012) have argued that we can only understand the self when we realise we are living both in an internal space (inside our minds or in our skin) and an external or extended space (the space outside of our body). Central here is the concept of the dialogical self. The word dialogical means 'relating to' so in this sense the self is 'relating to' the internal and external space. Māori notions of interconnectedness are very similar to the Chinese tradition of the cobweb self where the self "is an indispensable vehicle for achieving societal goals and the self is a team player in society" (Li, 2013, p. 30). So to privilege the Chinese cobweb self, dialogical self, and ex-centric self, is to privilege the pluralistic nature of what it means to be human. This is not to discard the dominant global approach to psychology, but to understand its usefulness within the cultural context of its own development and the possibility for the diversity that indigenous psychologists bring.

Research Focus

This article documents how Māori men draw upon their culturally-patterned relationships with other people, traditions, objects and places to construct their sense of self. Men's identity is important as it is linked to wellbeing, heritage and group affiliation. It enables us to look at the personal and social-self understandings of men and how they 'do' being men in the world. Advancing concepts germane to Māori men's lived Māori cultural identities, provides a way for such men to be understood within the historical contexts of both the Māori world and settler society. As we will demonstrate, the collective nature of Māori culture remains a crucial anchor

point for the formation of our participants' identities and relationships that can lead to positive health outcomes (Durie, 2003). By taking a strengths based approach, we explore the positive and relational dimensions of Māori men's lives and draw attention to their resourcefulness and resilience in navigating the complexities of contemporary society. Such an approach to research sits in contrast to the widespread coverage of Māori men's failings in education, unemployment, crime, health, high prison rates, and lower life expectancy than Māori women and non-Māori generally (Ministry of Health, 2010, 2013).

According to Stanley (2002), psychology has tended to see Māori men "as the perpetrators of the problems. There is very little focus on finding solutions for Māori men, with Māori men" (p. 81). Unsurprisingly, Māori men's shortcomings are apportioned to individual self-negligence with little regard to the long term impacts of colonisation and the social determinants of health (Hokowhitu, 2004; Marmot, 2005). By drawing upon Māori notions of interconnectedness and interdependence (Durie, 2002; Hodgetts et al., 2010) this article promotes accounts of belonging, inclusion, trust, reciprocity and support, that these men can utilise to invoke a sense of wellness and self that is broader and more dynamic than the picture painted in academic research or mainstream media portrayals (Rankine et al., 2011; Wall, 1997).

The remainder of this article is presented in three sections that explore the ways in which Māori men in this study foster the interconnected Māori self in different spheres of their lives and through a range of Māori relational practices. To begin with we overview our research strategy which includes a description of the participants, processes of engagement and kaupapa Māori methodologies. Section two focuses upon the findings where the men's sense of self is expressed through their connectedness to their tūrangawaewae (traditional place to stand, place where one has the right to stand), whanau (immediate and extended family), kaumātua (elders) and whakapapa (genealogy) from which health can be derived. The third and final section will provide some concluding comments and implications for psychology.

Research Strategy

This article draws upon accounts of five Māori men in working class occupations, who engage in traditional and more contemporary Māori cultural practices. Our participants either lived in their traditional homelands or visited regularly (see Table 1) and were contacted through the first author's personal and familial networks. This in-depth qualitative research was not designed to search for universal truths (Flyvbjerg, 2001) among Māori men, but rather considers the role Māori cultural concepts have had in our participants ability to flourish (Kingi et al., 2014).

An ethnographic approach was utilised over a 12 month period in an attempt to observe the participants within their everyday contexts through observations and by participating in shared practices (Angrosino & Mays de Perez, 2013; Simmel, 1997). Communication and engagement with these men occurred in their homes, the homes of their relatives, at community or whānau events or on their marae (ceremonial courtyard and ritual arena specific to the socio-cultural

history of a sub-tribe and or tribe). The emphasis was on engaging openly with these men and producing material that could inform a joint interpretation of their lives, rather than simply obtaining information to be analysed solely by researchers. One to one narrative interviews were conducted to ensure "rich or 'thick' descriptive accounts. For some of the men, interviews took the form of 'walk-along' discussions where participants were prompted by the meanings of their surroundings and environments with relation to the topic at hand (Evans & Jones, 2011). In some cases, this meant discussing life experiences outside of their children's kohanga reo (early childhood centre) and kura kaupapa (total Māori immersion primary school). On another occasion, this meant participating in a 'whānau-golf' day or the dismembering of a beast (cow) in preparation for a family tangihanga (traditional Māori death ritual/funeral process). In this regard, the first author witnessed the multiplicity of roles the participants held and how these roles would sometimes converge, overlap or remain separate. Thus, the observations looked locally at particular events in order to understand the broader systemic elements of people's socio/cultural worlds.

Table 1: Demographic details for Participants

Pseudonym	Age	Iwi (tribal affiliations)	Occupation	Partner	Children	Current place of residence
Waka	36	Taranaki	Tertiary student	Yes	Yes	Hamilton
Winiata	44	Tuhoe	Fencing/Spraying	Yes	Yes	Ruatoki
Pāora	45	Tuhoe	Security	Yes	Yes	Whakatane
Awa	38	Ngati Awa	Operations manager (factory)	Yes	Yes	Whakatane
Tame	40	Tuhoe	Manager of At Risk Youth programme	Yes	Yes	Rotorua

This research was guided by a Kaupapa Māori framework, which meant legitimising Māori ways of being, values, core assumptions, ideas and knowledge as important aspects of research (Jones, Crengle, & McCreanor, 2006; Smith, 2012). The need for kaupapa Māori research is particularly evident today because of the failure of 'mainstream' psychological research to respond openly to indigenous knowledge and the survival or well-being of indigenous people (Stewart-Harawira, 2013). A kaupapa Māori approach does not, however, mean discarding all European knowledge, but instead views Eurocentric ways of knowing as possessing some insights whilst being generally relative to the cultural context of its own development.

The decolonising of Eurocentric research also requires us to challenge colonial notions of the individual, as the decontextualised and autonomous self, and to instead

advance the notion of the self as the relationally and collectively situated person. Another part of drawing upon a kaupapa Māori approach is to understand the position of the researchers. The first author is of Tūhoe descent and raised within traditional Māori ways of being and knowing. The second author is of Kai Tahu descent and the third author is of Pākeha and Dutch heritage. The authors have between 10 to 20 years working within the kaupapa Māori research space and are members of the Māori & Psychology Research Unit (University of Waikato).

The analysis process was guided by the research corpus and shaped by a Māori knowledge paradigm and Māori cultural concepts. In addition, we drew on the notion of researchers as bricoleurs (Kincheloe, 2005) who can operate inter-disciplinarily to combine methodological and analytical strategies required for a specific project. This analytic strategy engages with the critical nature of everyday life and the complexities of men's interactions, relationships and well-being. Our analysis moved beyond the description of specific stories to make broader observations about the ways in which social relationships and practices are rendered meaningful through these narratives (Hodgetts & Chamberlain, 2013). By drawing upon Māori cultural knowledge as a key interpretative and analytic framework, we question the Eurocentric nature of psychology taught in Aotearoa that positions Euro-American psychology as superior to Māori worldviews, and which impoverishes our understandings of the relational nature of being Māori (Nairn, 2012; Nikora et al., 2017). More specifically, this article contributes to work on indigenous psychologies that is anchored in a Māori understanding of the self, which for Aotearoa emphasises the retention of an identity as Māori and the centralising of Māori aspirations and priorities beyond those set by mainstream psychology.

Analysis

Tūrangawaewae, marae and the interconnected Māori self

Being Māori is felt, embodied, and emplaced (Hodgetts, Rua, King, & Te Whetu, 2016). The men in this research argue that their sense of self is culturally, relationally and geographically located within their tūrangawaewae. Tūrangawaewae means 'a traditional place to stand', where the men can say: "I belong here. I can stand here without challenge. My ancestors stood here before me. My children will stand tall here" (Mead, 2003, p. 43). Connecting to the place of one's ancestors is important for Māori to sustain whakapapa as a core part of the Māori interconnected self. For Winiata, his sense of self as a Māori man is "to know where you're from". To know who you are and where you are from constitutes an embodied and enacted form of knowledge where whanaungatanga (relationships) and whakapapa (genealogy) are embedded in place and layered with various forms of cultural knowledge, practices, expectations and obligations.

Winiata's tūrangawaewae is in Te Urewera, the densely forested ancestral homelands of the Tūhoe tribal people. Winiata's sense of belonging is inextricably connected with this landscape: "...with the bush, how you live in the bush and obviously living up here [in Te Urewera], that's a big part of your life". Winiata also describes the importance of hunting and farming in this area where he is enculturated into his tribal whakapapa (ancestral genealogy). One of Winiata's aspirations is to ensure he passes on his practical skills and knowledge of 'the bush' to younger generations, most of whom now live in urban centres. By bringing nephews, nieces and his own children out of the daily 'humdrum' of life in the settler society and back to spend time in Te Urewera, Winiata can ensure younger whānau have an embodied and emplaced experience of their belonging in this place as their tūrangawaewae (place of belonging).

When Winiata talks about Te Urewera and the hunting and camping, he reflects upon his origins, which are ancient. These landscapes are sustained by personal and regular visits where positive experiences are derived for Winiata and his whānau. Intimate knowledge of the landscape ensures that the place lives within them as much as they live within the place. The attachment Winiata has with Te Urewera is what can be referred to as the 'Tūhoe–Te Urewera synonymity'. For Te Awekotuku and Nikora (2003), this is the notion that, "people make places just as much as places make people. People and places derive their identities from each other to a significant extent" (p. 11). The synonymity between people and landscapes can provide beneficial qualities for men who are part of a broader cultural narrative regarding what it is to be a Māori man. To separate the human and physical environment is to transgress traditional notions of the interconnected Māori self as Te Awekotuku and Nikora (2003) explain:

> *Tūhoe retain a strong sense of being Tūhoe, and a very deep sense of attachment with Te Urewera. This attachment is more than an emotional and cognitive experience. It is both an actual and symbolic relationship formed by people giving culturally shared emotional/ affective meanings to Te Urewera forged through genealogy, cosmology, pilgrimage, narrative and economics (Te Awekotuku & Nikora, 2003, p. 15).*

Engagement with the ancestral environment, including stories relating to the creeks, hills, ranges, ridgelines, rivers, flora, and fauna in Te Urewera, is associated with the geography of the participants' identities as Māori men connected to their tūrangawaewae. A sense of well-being materialises in the physical and cultural elements of Tūhoe's ancient relationship with Te Urewera.

Within the vastness of one's tūrangawaewae, the other significant places are marae, which exist as important cultural institutions in this landscape. The marae is the heart of a hapū (sub-tribe) and is the epitome of collective identity. The marae is the ceremonial courtyard and the ritual arena specific to the history of the hapū. Marae are important socio-cultural spaces, as is summed up by Te Rangihau (1992, p. 186): "The marae is the repository of all the historical things, of all the traditions, all the mythology and other things which make up the tangibles of Māoriness...". The marae is also a geographical space for these men where a sense of well-being is derived through interaction between kin of the marae, and the physical environment occurs. For example, Tame talks about his sense of self as "being involved with the marae when I can".

Participating in marae affairs, Tame's identity as a hapū and tribal member where heritage, care, respite, belonging and the cultivation of relationships are enacted. Through participation in whānau activities, events and cultural institutions at the marae, belonging and a sense of community occurs for these men. Without relegating all Māori cultural knowledge and practices to this space, the marae does provide the men with a cultural bastion that strengthens their identity as Māori interconnected selves.

Various scholars have argued for the importance of addressing indigenous health through culturally holistic approaches that emphasise the health-enhancing impacts of community ties and secure links to place (Hodgetts et al., 2016; Penehira, Smith, Green, & Aspin, 2011). Māori models of health emphasise the complex interplay between people and their environments. As such, the health of a person includes the places in which they reside and the relationships in these places. The men's engagement and emplaced practices reproduce a shared cosmological bond with their marae and tūrangawaewae (place to stand) by reminding these men that they are a product of their environment and that they can draw strength from their history and from belonging in such places. This connection between social activity and the physicality of marae can be so 'taken-for-granted' that one can forget how culturally distinctive the marae can be for one's sense of being Māori. This was particularly so for Waka:

> To put it into context, you don't know you're Māori until you step out of the game. So when we went to Hong Kong, we didn't realise how small New Zealand was and you didn't realise how distinct you were. Just, for example, a tangihanga. Grew up around the marae, somebody passes away, they come to the marae and groups come on and all that.

'The game' to which Waka refers is the Māori world and its cultural mores. In using this metaphor, Waka alludes to the taken-for-granted Māori ways of being and interacting in spaces such as the marae, knowledge of which is cultivated through regular engagements. Waka reflects on how this taken-for-granted world was ruptured when he travelled overseas. Having a strong association with whānau, hapū and iwi and being involved in associated tribal practices is considered a central element to these men's Māori identity and competence in the Māori world (Durie, 2006). Remaining connected to the Māori world also depends upon access to key cultural and geographical features such as land, and marae. Being geographically disconnected from one's tūrangawaewae (traditional place to stand), as many 'urban Māori' who reside primarily in the settler society are, does not make these people any less Māori. It can, however, make it more difficult for people in such situations to realise their cultural selves in traditional ways (Durie, 2006). Regular visits to one's ancestral land and marae, for those who know where it is, provide one means of reconnection to, and exploration of, the self and ancestral place to belong. For example, Awa has been taking his children back to the marae to participate in whānau volunteer working days. During these visits his children have the opportunity to explore and discover who they are as members of their whānau and hapū:

> I've been taking my kids back (to the marae) and

they go, "Koro [grandfather/elder/kaumātua], there's someone with our name over there", and my dad goes, "...that's my father, that's your great grandfather" and the connection I've seen in them. The rest of the day I see them sitting around that headstone, touching it and "...why does he get this big monument dad?" and I go "...because he was a chief for our people and because they thought he was special".

For Awa these visits have ensured the cultural connectedness of his children, *"I'm confident my children under my guidance, I can get them to close the [cultural] gap, I'll push them across to close the gap"*. Awa's actions are opportunities for making whakapapa connections and represent one aspect of a cultural process towards a vibrant Māori identity. For the children, being with their koro (and kaumātua) on the marae and being able to ask questions ensures intergenerational connectedness. Their koro represents the living face of those ancestors who have passed and affirm the children's sense of connection and belonging in place.

In sum, the participants' sense of belonging is bound to their tūrangawaewae or ancient sense of geographic place(s), as much as it is to their whakapapa. Places like Te Urewera are proverbial constants in their lives and reinforced by the whakataukī (saying) "Whatu ngarongaro te tangata, toitu te whenua - People perish but the land is permanent" (Durie, 2001, p. 115). The permanency of place, like the marae, is a helpful notion for these men against a backdrop of colonial destabilisation in their lives. The marae is an everyday institution for these men. Not all Māori have retained such connectedness. However, these men have. Connectedness to their tūrangawaewae (traditional place to stand) and marae provides strength and cohesion for these men as well as their past and future generations. Connections to place, the past and cultural institutions in the present provide a sound relational and material basis for expressions of Māori identity.

Whānau

In the on-going engagements with these men there were constant references to their partners and children as significant to their sense of who they are. In fact, all but one of the men were interviewed in their homes where partners, children, and/or extended whānau members were present. Family members would often be involved in parts of the interview as they busied themselves with everyday routines that involved cooking meals, making cups of tea, cuddling their babies, and reassuring the older children as they played outside. Having family members around allowed the men to engage them as a sounding-board for recalling events, people and practices. The men would also be corrected or reminded about seemingly unremarkable and taken-for-granted aspects of their lives. Pāora, for example, talks about the balance he has with his wife, the support she provides for him and their children. When Pāora's 14-year-old son walks past us in our interview, he is prompted by his son's presence. Pāora claims his son sometimes snuggles up to his parents at night to feel assured and connected:

> ...he's loved to the max by his mother, his sisters they spoil him and he's not whakahīhī [vain or conceited]... He's all respect when he talks to people. Quite a humble

boy and for us that's the boy we want. Even at 14, 15 in a month, sometimes he'll jump in between me and his mother at night and sleep with us bro. Which isn't really romantic, but that's who he is and for us as whānau we're cool with that (Pāora).

A sense of humility, kindness and regard for others are values the men highlight as important features for who they and who their children are. This is consistent with Pere's (1991) reflections on aroha (love/support) being at the core of whanuangatanga (relationship/sense of family connection). As a fundamental Māori concept, aroha (love/care/support) underpins relational care through actions and everyday practices as a contribution towards the well-being of whānau. In talking about his son and associated relationships, Pāora presents himself as a caring Māori father who is a key link in whakapapa. In this way, aroha is central to Pāora's sense of self through parenting and nourishing the psyche or spirit of whānau as a way of honouring and reaffirming their whakapapa. The concept of aroha (love/support) extends beyond words. For Pere (1991, p. 6), it entails actions, in that "each person respecting and caring for the other engenders a climate of goodwill and support". Even though Pāora's son is no longer a child, Pāora is reassured that his son has retained closeness with his parents and siblings.

Such intimacy in interconnectedness is important to these men, especially those who have a large whānau. Kinship binds these men to their whanaunga (relative, relation, kin), where they draw warmth, aroha and resources from their entire family and extended whakapapa. Pāora and Winiata are first cousins and they share over 80 first cousins with whom they are in constant contact. Awa is one of seven siblings as well. Tame has five other siblings, and was raised by his grandfather among his uncles, aunties and cousins. Waka reflected upon the influential nature of his whānau,

Definitely the whānau, mother, dad, brothers. That's the influence really. My mum has 11 brothers and sisters...I thought that was usual until you move away from your home and you think, 'ah, 11's a humungous family'. I thought everyone has 11. The old man has 14 brothers and sisters so it's like that was the norm. Big families, heaps of cousins was the norm...

A collectivist approach to the men's sense of self is lived through connections with whānau. Subsequently, the men find well-being within collectivist groupings or whānau beyond their immediate selves. Oishi and Diener (2009) have shown how different cultural groups appear to derive well-being by different means. These authors compared the well-being of Asian and European Americans and found that:

European Americans appear to gain and maintain their well-being by achieving goals that they pursue for their own enjoyment and fun. On the other hand, Asian Americans seem to attain and maintain their well-being by achieving goals that they pursue to make important others happy and meet the expectations of others (p. 104).

The Māori men in our research identify with their cultural and whānau groupings, and to the associated obligations to each other as a pathway to enhanced health for themselves and the other people with whom they share whakapapa. Briefly, whānau like whakapapa is associated with relational, psychological and material resources, but it also relies on cultural knowledge of how to be, and act as part of the network.

Relationships with significant others are beneficial to people's physical and mental health as they can help make sense of the world by ordering it and reproducing it in meaningful ways. Such relationships can also provide what Stone (2005) calls a 'perceptual position'. That is, the men can use the perspectives of various people to generate insights and understandings of the world and their place in it through other whānau members. Knowledge of reciprocity, expectations, roles and responsibilities to the whānau are gained by being an active member and through caring practices associated with whanaungatanga (process of establishing relationships; relating to others) and whakapapa. If whakapapa is not nurtured through regular caring practices, and the physical practice of 'seeing', or kanohi kitea, disruption of the interconnected Māori self may follow. The Māori interconnected self relies on social relationships.

Kaumātua

A further extension of the men's whakapapa is the role kaumātua (elders) play in their lives. Kaumātua are seen as pillars of tradition within Māori culture who offer wisdom, humility and a living link to the past as suggested by the following whakataukī (proverbial saying) "he kitenga kanohi, he hokinga whakaaro – to see a face is to stir the memory" (Dyall, Skipper, Kepa, Hayman, & Kerse, 2013, p. 65). This whakataukī illustrates the role kaumātua can have in recounting lived connections with those ancestors long past and the traditions associated with their lived memories. The cultural strength of Māori communities comes from kaumātua who hold the knowledge of Māori cultural lore/law, act as the primary practitioners of cultural practices (since they have the strongest links to the past), and can be the cultural face of the whānau (immediate and extended family).

Durie (2003, p. 76) states, "the standing of the tribe, its mana (power/authority), as distinct from its size, relates more to the visible presence and authority of its elders than to the vigorous activities of its younger members". Such a perspective is also reflected in Pere's (1991) Te Wheke Health Model which has a dimension called 'hā a koro mā, a kui mā' which can be translated as 'breath of life from forebears'. Pere proposes that well-being comes from a positive awareness of elders and the influential role they play in the whānau and community and also in the transmission of traditional and historical knowledge. So when Winiata considers his identity as a Māori man he immediately states, "To respect your elders". For the participants, to respect one's elders is to acknowledge one's whakapapa and the presence of their kaumātua (elders) enhances the importance of their interconnected selves. The reverence held by the men towards their kaumātua is also reflected in comments about cultural practices and contributions to daily life:

I know my role at home [on the marae[1]] is to do the kitchen role because I know I'm not up to that calibre of

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1 Ceremonial courtyard and ritual arena specific to the socio-cultural history of a sub-tribe and or tribe.

my uncles and all the rest [of the elders] at home (Waka).

There is an expectation here that kaumātua roles occur within religious or cultural contexts, where their advice and wisdom is a taonga (tangible or intangible thing of value) to be appreciated and respected. While kaumātua assume these positions of responsibility, they are also watchful and mindful of people showing leadership within the whānau by engaging in expected practices by which they can make contributions to the group effort in spaces such as the marae. Awa, for instance, comments:

> *Some of the kaumātua want me to be there [on the paepae tapu; sacred oratory space of the cultural experts], but my role is really around the functioning of the marae so they [kaumātua] can focus on the tangihanga. So I'm just trying to help that come together (Awa).*

This quote reveals how Awa's kaumātua see his leadership potential. However, Awa thinks he still needs to increase his cultural knowledge to attain the status of someone who can operate confidently in the ritualised spaces of the marae. Instead, he offers his skills in other ways and more in terms of the daily management of the marae. Both Waka and Awa are middle-aged men and they understand the demands placed on kaumātua, so to support these elders, they provide what Durie (2003) calls 'industrial and executive leadership'. In this regard, Waka and Awa lead the day-to-day affairs of the whānau, marae and hapū (sub-tribe), but their kaumātua retain the status, tradition and integrity of their people. Without kaumātua leadership "a Māori community will be the poorer and at least in other Māori eyes, be unable to function effectively or to fulfil its obligations" (Durie, 2003, p. 76). Consequently, when the participants talk about 'respecting your elders', they are referring to the cultural health of their community. Their *mana* (power/authority) or identity as Māori men is related to the health of kaumātua who represent their tribal identity. Having kaumātua present in their lives, and the authoritative knowledge kaumātua are seen to hold, reaffirms the interconnected view of the self. The more practical industrial and executive leadership offered by men such as Waka and Awa combined with that of kaumātua and other whānau preserve the mana (power/authority) of a well-functioning and integrated hapū (sub-tribe) and iwi (tribe).

The men also reflect on the importance of regular everyday engagements with their kaumātua as a way of being present with them. For example, Waka commented, "Because we were always over their place mowing the lawns doing whatever because they couldn't do it…help out with their gardens." Such mundane activities or socio-cultural practices are important to whanaungatanga as they can build and maintain relationship. When Tame returns to visit his grandfather, who raised him, there is no expectation that he will be treated any differently to his experiences during childhood when the home was full of whānau. Tame states: "I'm 40 years old and I'm still sleeping on my grandfather's couch". He laughs at this notion, but for him where he sleeps is irrelevant as being home and embracing his whakapapa and associated whanaungatanga with his koroua (elder/grandfather) is more important than his own personal comfort and needs. Tame seamlessly moves back into the space as if nothing has changed, since Tame and his koroua have an interconnection that always exists. Connectedness in these moments reflects a 'natural rhythm' of people's everyday practices which act as pointers to understanding the importance of such innocuous activities (de Certeau, 1984) in relation to sustaining one's whakapapa and whānauangatanga. Building and maintaining these relationships in these moments is a sacred process as bonds of association and obligation are developed and practiced. It is a process that connects generations and keeps core values of respect, connection, reciprocity and support within Māori culture – from which these men construct much of their core selves and sense of belonging – alive into the future.

Whakapapa and Whanaungatanga as relational constructs

Whakapapa and whanaungatanga as cultural concepts emphasise the importance of the interconnected self in terms of being part of a larger social group where "human life is woven into relationships and situations and is not independent of context" (Hodgetts et al., 2010, p. 140). Here, we define whakapapa as 'genealogy', and as a cultural institution that allows one to lay claim to kin and tribal ancestral lines and group identities. In this regard, our participants can claim multiple whakapapa (genealogies) as well as a connection to the natural Māori world and the Māori cosmological realm. For this article, we define whanaungatanga as being a 'process of establishing relationships and/or relating to others'. Such relationships can occur within and outside of one's whakapapa. The importance of recognising these two Māori cultural concepts is in the men's ability to invoke an affiliation to whānau, hapū (sub-tribe) and iwi (tribe) membership through birth-right and broader whanaungatanga (relational) networks and associated practices (Mead, 2003) that contributes to a positive sense of self. Opportunities to solidify quality relationships with others occur through the men's participation in whānau life, cultural events, and traditions. These men's identities are relationally embedded into their whakapapa and the "social and cultural structures that connect them to others in multifaceted ways" (Hall & Lamont, 2013, p. 49). Pere (1982, p. 11) made clear the importance of whakapapa for Māori:

> *Traditionally, every adult person was expected to know and to be able to trace descent back to the tribal ancestor, or back to at least the common ancestor after whom the group with whom one lived was named. The rights and claims that an individual could make to the resources of the group she or he related to, or identified with, depended on such knowledge.*

The social bonds fostered through whakapapa and whanaungatanga (processes of establishing relationships/relating to others) are central to the Māori self, and for enhancing our participants' health. In valuing their social networks, the men define themselves with relation to others in ways that reflect their relational being, where broader processes shape their identities. Building and maintaining a cobweb of relational links through family and community ties is a sacred process through which bonds of association and obligation are developed and practiced. Opportunities to participate and build relationships or whanaungatanga allow the men to respond to the socio-cultural challenges facing Māori in contemporary times, where cultural isolation and fragmentation can lead to identity loss and ill-health.

Whakapapa and whanaungatanga offers the men a set of relationships they can draw upon for comfort, support, and identity so they need never feel alone. A connectedness to family networks and support systems also offers a 'multiplier effect' (Hall & Lamont, 2013) by which the men link with others, and benefit from the people and resources held in this social systems. In this regard, the men are always part of a 'social whole' where a sense of pride, belonging, connectedness and support occurs.

The importance of whakapapa as a social tool that binds people together is reflected in Waka's upbringing. Waka experienced the importance of developing a meaningful relationship to his whakapapa through the decision-making of his step-father who ensured that he remained connected to his biological father. Knowing the totality of a person's whakapapa was the intention of Waka's step-father, as he recalls:

> *My biological father is Tūhoe. My step dad who's Ngāti Porou, pretty much brought me up as his son, was legally adopted too. (He) wrote to my biological dad and said, 'Your son's here if you want him to come home for holidays, come pick him up'. So it was actually the step dad that made the contact and wanted me to go (Waka).*

Such extracts speak to how whakapapa is an anchor point for Māori society that holds people together and governs the relationships between kin. Even if a person does not know their whakapapa today, someone else may, and this relationship transcends personal identity to bind them to larger group-based identities (Ritchie, 1992). Waka's step-father wanted him to know his whakapapa intimately, and physically experience it through time spent with his biological family via kanohi kitea, *the seen face*. Kanohi kitea provides a cultural guideline towards ongoing and meaningful contact within the Māori world (Dansey, 1995). Waka's example reflects the point that the interconnected Māori self is not simply a cognitive psychological process, but one that must be experienced materially.

The Māori world expects people to enact their whakapapa through seeing each other physically, allowing opportunities for relationships to be established and to be reaffirmed. Processes surrounding whakapapa evolve and are negotiable but one thing is certain, whakapapa always requires nurturing as Waka experienced. Kanohi kitea (seen face) also involves seeing the ancestors, since whakapapa links those living today with earlier generations and thus extends beyond the notion of the separate Cartesian self. The contemporary Māori self thus reflects the living face of the ancestors and their associated stories. Consequently, through kanohi kitea the Māori interconnected self provides the men with a historical sense of relatedness to their whānau (family/families) and a manifestation of collective identity. As is the case with all our participants, Waka's experience of his entire whakapapa moves beyond simply acknowledging bloodlines, and demonstrates how a meaningful and realised relationship with his whakapapa was encouraged.

Whanaungatanga is a cultural concept that allows people to locate themselves across time and place, and is similar to whakapapa in terms of connectedness with generations past, present and in the future. Whakapapa reflects the relational dimensions of their identity that extend beyond the individual self. A dialogue with ancestors, is reflected in the Māori greeting, 'nō hea koe?' (where are you from?) or 'ko wai to whānau?' (who is your family wider/extended?). These questions are an attempt to locate the person through whakapapa and the spaces that whakapapa inhabits. This is an effort to 'see' the individual in the totality of their ancestral whakapapa (genealogy/genealogical ties), including their waka (ancestral voyaging canoe), iwi (tribe), hapū (sub-tribe), marae (ceremonial courtyard of the hapū) and whānau. These are points of narrative reference for creating connectedness to that person's interconnected self by recounting links both current and past. The simple Māori greetings are endeavours to 'see that person' within their familial and celestial totality. The individual is valued within that larger context of their whakapapa, and the question 'what is your name?' may come later, after connectedness and familiarity is formed with the person's whakapapa.

Concluding Comments

In our research, Māori men reflected their knowing of who they are by acknowledging interdependence through shared whakapapa (genealogy) and whanaungatanga. Their identities extend to other people, including kaumātua (elders) who can often embody their tribal identities. Fostering whakapapa through whanaungatanga (shared relational bonds), kanohi kitea (the seen face) and tūrangawaewae enhances the men's sense of being beyond the individualised Cartesian self, promoted in mainstream psychology. Yet, whakapapa and whānau are understandings that are compatible with classic European and American scholarship on the dialogical self, which see people as literally sharing parts of themselves with the environment and those around them. This relational notion of the self, evident in the lives of our participants, is important as it can buffer whānau living in economic hardship from adversity and negative portrayals.

Our research with Māori men could have easily adopted a negative, bleak and problem-focused orientation as often occurs within psychology (Wong, Steinfeldt, Speight, & Hickman, 2010). Our approach addresses the paucity of holistic and strengths-based research on Māori men in psychology (Hodgetts, Nikora, & Rua, 2011; Hodgetts & Rua, 2010; Hodgetts et al., 2016; Hutchings & Aspin, 2007; King, Hodgetts, Rua, & Te Whetu, 2016; Stanley, 2002). Instead, we present examples of Māori men who care and nurture others, and make positive contributions to their community. Our participants are agentic in their capacity to articulate and present a more complex and humane version of themselves whilst questioning the negative portrayals. That such identities as Māori interconnected selves are in play, demands the development of psychological understandings capable of generating a meaningful response relative to the cultural context of these men. Indigenous psychologies offer an approach to understanding the self beyond the dominance of mainstream Eurocentric psychological knowledge. However, much more needs to occur if we are to better understand the dynamics of Māori men's sense of self, place and position in society beyond the deficit approach.

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Whakairia ki runga: The many dimensions of wairua

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A growing body of empirical literature attests to the positive association between spirituality and well-being. Across a variety of countries and cultural contexts, many people indicate having had at least one 'spiritual experience' in their life, and endorse spirituality as personally valuable. For Māori, indigenous people of Aotearoa, wairua (spirituality) has always been acknowledged as a necessity of their health and wellbeing. However, what do Māori mean when they talk about wairua? Utilising a qualitative research approach, this article explores some ways through which Māori talk about wairua. Four themes were noted and are discussed. Wairua is fundamental to Māori existence and therefore, important to Māori health and wellbeing.

"He maha ngā peka o te wairua ... te wairua a te tangata,

te wairua o te whenua, te wairua o te kōrero, te wairua o te tamaiti,

te wairua o tēnā whakatipuranga o tēnā whakatipuranga;

te wairua o tātou matua tīpuna, te wairua whakahaere te tangata

kia tau te wairua."

"There are many different dimensions of wairua ... wairua of the people,

wairua of the land, wairua of the spoken word, wairua of the child,

wairua of different generations; wairua of our ancestors, the wairua that directs

and inspires a person to engage."

(Valentine, 2009, p.60)

Currently lacking definitional consensus, the term spirituality is used in a multitude of ways (Gall, Malette, & Guirguis-Younger, 2011). From a Western perspective, it most typically describes an intrinsic, autonomous, and subjective sense of transcendence or connection with a sacred dimension of reality, which provides meaning, purpose, connection and balance (Benjamin & Looby, 1998; Gall et al., 2011; Gallagher, Rocco, & Landorf, 2007; Midlarsky, Mullin, & Barkin 2012; Pargament, 2007; Sperry & Shafranske, 2005). In other places, it has been described as "an internal connection to the universe" (United Nations, 2009, p. 60). For Māori however, spirituality is culturally defined and best captured by the term *wairua*.

Spirituality and Psychology

A growing body of empirical literature attests to the positive association between spirituality and well-being (e.g., Cohen & Koenig, 2004; Cotton, Levine, Fitzpatrick, Dold, & Targ, 1999; Miller & Thoresen, 2003). Across a variety of countries and cultural contexts, many people indicate having had at least one 'spiritual experience' in their life (Landolt, Wittwer, Wyss, Unterassner, Fach, et al., 2014), and endorse spirituality as personally valuable (Kohls & Walach, 2006). Although historical figures concerned themselves with matters of the spirit (Hood, 2012), and there has been increasing interest in the psychology of religion and spirituality in recent decades (Miller, 2012), the contemporary discipline of psychology still largely ignores the fundamental value of spirituality to lived experience. Guided by a reductionist, materialist philosophy emphasising dominant scientific principles (i.e., objectivity, positivism, empirical verification), it is often at odds with more subjective, experiential, and transpersonal ways of understanding the world. Indeed, the Western scientific enterprise, which has spread around the globe and is assumed rational, logical, superior, and universal in its application of laws and principles, underscores much of what is considered to be the contemporary discipline of "psychology" (Levy & Waitoki, 2016). In reality, while useful and beneficial in its own right, this discipline is only a particular type of psychology – Western academic scientific psychology – that reflects the worldviews, values, and perspectives of certain cultural groups (Berry, Poortinga, Segall, & Dasen, 2002).

Arguably complicit in the ongoing process of colonization through its influence on core societal institutions (i.e., education, politics, employment, among others) (Berry et al., 2002), this type of psychology has rarely valued or accepted as legitimate, the indigenous worldview. Regarded with superstition and scepticism, indigenous spirituality has been one of the greatest victims, with its importance often being undermined, under-acknowledged, and misunderstood (United Nations, 2009). Indeed, an indigenous perspective on spirituality may not be easy to reconcile with adherents to this type of psychology, who "while perhaps holding spiritual beliefs, may not hold spiritual realities in at least the same esteem as scientific realities" (Love, 2008, p.27). Although indigenous spirituality may pose challenges to the philosophical foundations of Western psychology, its importance and value can no longer be diminished or ignored (Nelson & Slife, 2012), particularly in light of the increasing pool of *Western* academic literature suggesting spirituality is a substantial constituent of holistic well-being (Myers & Williard, 2003).

The growth of indigenous psychology has been instrumental in raising awareness that alternative realities exist for individuals depending on their cultural affiliation, and that spirituality may be a particularly salient reality for many

indigenous peoples. Defined as "the scientific study of human behavior or mind that is native; that is not transported from other regions, and that is designed for its people" (Kim & Berry, 1993, p.2), one of the objectives of indigenous psychology is to question the (assumed) universality of current psychological theory. By promoting theories, methods and practices that are inherently native and culturally relevant (Nikora, 1997), indigenous psychology challenges the underlying epistemologies embedded in Western psychology and encourages deeper understanding of indigenous perspectives (Koch & Leary, 1985). Consequently, indigenous psychology provides a useful foundation for exploring the fundamental value, meaning and relevance of indigenous spirituality to various indigenous communities.

Indigenous Spirituality

Spirituality is inextricably linked to ways of being for many indigenous people. Indigenous leaders have acknowledged commonalities in indigenous notions of spirituality, which can be differentiated from religion and are based on a sense of connectedness and respect for the "earth, ancestors, family and peaceful existence" (Christakis & Harris, 2004, p. 251). The importance of nature and a reverence for all living things is a primary guiding principle and takes on deep significance (Cohen, 1998; Portilla, 1980; Wright, 2013). The land is considered a portal or link to the original life-force energy of ancestors. At the cosmological level, life is considered to have emerged through the actions of primordial beings, ancestral spirits and deities, who bestowed upon humans the role of steward and guardian to their creations (Wright, 2013).

From an ontological perspective, indigenous spirituality is foundational to the construction of social relationships, and is manifest in cultural beliefs, practices, and values (Sue & Sue, 2008). Providing a lens for viewing and understanding reality, it gives existence meaning and purpose (Furbish & Reid, 2003). In that sense, spirituality from an indigenous perspective acknowledges the interconnectedness between the human situation and the natural environment, as well as the human situation and an esoteric realm. It acknowledges a wider connection to the universe as a living entity. The United Nations (2009) recognizes the role of spirituality in the maintenance of traditional knowledge and resources, which were "managed by indigenous and local communities since time immemorial, using customary law embedded in spiritual cosmology" (p. 66). Accepted as fundamental to human existence, indigenous spirituality "is not separated but is an integral, infused part of the whole in the indigenous worldview" (United Nations, 2009, p. 61). Indeed, intimately intertwined with a multitude of Māori cultural institutions, spirituality is of primary importance to the *tāngata whenua* (indigenous people) of Aotearoa New Zealand (Furbish & Reid, 2003; Kennedy, Cram, Paipa, Pipi, & Baker, 2015).

Māori Spirituality

The term 'wairua' is typically used by Māori in reference to the spiritual dimension of existence. Etymologically, wairua is comprised of two separate words - *wai* meaning water and *rua* meaning two – implying the existence of two entities, which paradoxically may be oppositional while at the same time complementary, thus hinting at the notion of a balanced wholeness. Wai can also be defined as unique, special, and unprecedented; while rua can also mean abyss or container. With this in mind, Bidois (2016) says wairua can mean that which is unique, special, and contained within. Although many would acknowledge a specific definition of wairua is near impossible, its fundamental role to Māori ways of being is widely endorsed. The *tōhunga* (Māori specialist) Māori Marsden (as cited in Royal, 2003) eloquently captured the salience of wairua, stating: "...ultimate reality is for Māori the reality of the spirit" (p. 47). Other notable Māori scholars have also highlighted the importance of wairua, with Rose Pere (1982) noting: "Every act, natural phenomena, and other influences were considered to have both physical and spiritual implications" (p. 12), and Henare (2001) suggesting it is "necessary for the existence of the body" (p. 209). Māori Marsden (as cited in Royal, 2003) further describes it as "the source of existent being and life" (p. 47), while Sir Mason Durie (1985) asserted: "Without a spiritual awareness, the individual is considered to be lacking in well-being" (p. 483).

Traditional notions of Māori well-being were very much dependent on beliefs, practices and behaviours related to wairua. For pre-European Māori, well-being was primarily the domain of tōhunga, who were spiritually sanctioned individuals with expertise in aspects of well-being, and utilised a variety of remedies and practices such as karakia and rongoā (Durie, 1998). Because Māori realities primarily revolved around interconnectedness with a spiritual realm, conceptualisations of illness and healing practices were influenced by such understandings, resulting in beliefs that "illness was a result of wrong living" or intervention from the spirit world (Parsons, 1985, p. 217). The role of tōhunga, as individuals with direct connection with the spirit dimension, was to restore balance to one's sense of spirituality. While the esteem with which tōhunga are held in Māori society has not diminished over time, punitive legislative practices such as the Tōhunga Suppression Act 1907, which may have been motivated by goodwill and the desire to achieve enhanced well-being outcomes for Māori, at least from the perspective of prominent Māori, like Maui Pōmare, who supported the Act, ultimately saw the outlawing of traditional Māori healing methods and the invalidation of tōhunga, as well-being practitioners (Durie, 2001; Jones, 2000). Consequently, wairua as a strong component of well-being for Māori was relegated to a less than favourable position, at least within the psyche of the ethnic majority and the dominant health care system (Durie, 2001; Jones, 2000; Walker, 2004).

Because of this history, wairua and its association with ill health is little understood within Western psychology, despite being the most widely cited aspect of Māori well-being (Cram, Smith, & Johnstone, 2003). While endorsement from Western psychology is not necessary for wairua to have meaning, value and legitimacy for Māori, its fundamental role in well-being suggests greater understanding of wairua is essential for a more culturally relevant psychology – particularly within the bicultural milieu of Aotearoa New Zealand, which obliges a standard of cultural awareness. However, this does not suggest Western psychology should be the lens through which a notion such as wairua must be examined and understood.

Traditionally, research about Māori-specific constructs was primarily conducted by non-Māori researchers, whose purpose in most cases was *not* to enhance the well-being of Māori (Ihimaera, 2004; Pere, 2006; Smith, 1999). Factors such as knowledge boundaries, who defines and owns the knowledge, and cultural differences, all served to misrepresent Māori ways of understanding the world (Ihimaera, 2004; Johnston, 1999; Smith, 1991). These historic incidences, combined with the materialist, reductionist philosophy inherent to Western psychology, demands contemporary attempts to understand wairua be done with a great deal of consideration and care. "Māori view … knowledge as highly valued, specialised and tapu (i.e., that it contains culturally-based restrictions around its use) and therefore must be treated with respect and protected" (Walker, Eketone, & Gibbs, 2006, p. 334).

Striving to find a comfortable location to explore wairua from an indigenous Māori psychological perspective was difficult. While we are firmly of the position an indigenous psychological approach is the best way to explore wairua, we were also aware our [HV and NTM] own worldviews and those of other individuals that identify as Māori, have been influenced – consciously, unconsciously and to varying degrees - by the cultural milieu we live in, which is dominated by Pākehā values. These "diverse realities" of contemporary Māori (Durie, 1994, p. 214) mean individuals, whānau, hapū and iwi have varied understandings of Te Ao Māori, and of wairua. Additionally, for many Māori, wairua is considered a delicate *tāonga* (treasure) imbued with *tapu* (spiritual restrictions), which invoke certain restrictions in its utilisation and understanding, as well as raising issues of Māori intellectual property. Aware of these concerns, and the diverse ways wairua has and continues to manifest in our own lives, we did not wish to privilege any views of wairua over others, nor did we intend to misappropriate knowledge relating to wairua, lest we *whakaiti* (belittle) the *mana* (spiritual integrity) of other Māori, as well as the construct of wairua.

Therefore, the only way to proceed was with caution and humility. Durie (2004) suggests it is not uncommon for Western science and indigenous knowledge paradigms to find some common ground without compromising the foundations they are situated, stating "Research at the interface aims to harness the energy from two systems of understanding in order to create new knowledge that can then be used to advance understanding in two worlds" (Durie, 2005, p. 306). While we did not utilise an interface approach, we were aware our positions as Māori individuals [HV and NTM] enculturated to Pākehā society might, by implication, result in an interface approach being non-consciously adopted. We did, however, believe our exploration would not compromise or minimise the importance of wairua.

In the updated edition of her seminal work, *Decolonising Methodologies*, Linda Smith (2012) speaks to the power of the written word, and how training in academia develops adherence to particular styles of writing, with little critical reflection of how the style may perpetuate a particular worldview. In writing this manuscript, we had to question why we were writing it and indeed who we were writing it for. We also had to question whether we wished to perpetuate a particular worldview, or whether our writing about wairua was our attempt to enlighten others about a worldview less written about.

Therefore, rather than adhere to a format typical of APA style academic journals, we wrote this manuscript in a way suiting our notions of indigeneity. We wanted to write in a way that potentially provides the most benefit to the most amount of people – especially those engaged in the discipline of psychology in Aotearoa New Zealand, irrespective of cultural or ethnic affiliation. The belief wairua should be understood more fully for advancing indigenous psychology, as well as empowering Māori within the discipline of Western psychology, and *Te Ao Hurihuri* (the modern/contemporary world) more generally to achieve and maintain well-being, further fuelled our motivation and guided our current exploration of this most sacred of constructs.

Our Search for Wairua

As part of her research to fulfil the requirements of a Doctorate in Clinical Psychology (Valentine, 2009), the first author Hukarere, supervised by the third author Ross, obtained knowledge about wairua from eight individuals who identified as Māori. Three were female and five were male, and ranged in age from 38 to 70 years old. Some held roles including university lecturers, Māori mental health workers, Māori ministers, Iwi representatives, and healers. Te reo Māori proficiency ranged from fluent to no fluency. Academic qualifications ranged from no qualifications to a PhD. Three were raised in urban environments and five in rural Māori environments. Participants were affiliated with Ngāti Kahungunu ki Heretaunga, Ngāti Kahungunu ki te Wairoa, Tūhoe, Te Whānau a Apanui, Rangitāne and Waikato. All participants were known to Hukarere, and we felt their personal circumstances and characteristics provided a range of understandings about wairua that reflect the 'diverse realities' of modern Māori.

Literature states qualitative enquiries allow an understanding of experiences through language, a more intimate connection with the knowledge being gathered, while also being more appropriate for complex topics of inquiry (Mason, 2002; Polkinghorne, 2005; Smith, 2003; Smith, Michie, Stephenson, & Quarrell, 2002). As wairua has not previously been widely written about, *kōrero* (talking, communicating) with individuals who identify as Māori was considered the most appropriate way of gaining knowledge, and was justified by the fact Māori hold knowledge transmission through mediums of language in high regard (Pere, 1982).

Of the eight contacts, two provided written responses, due to their geographical distance from Hukarere and their limited availability. Murray and Harrison (2004) found the use of email interviews to be effective, and for us they were a pragmatic solution that avoided the loss of two important contacts. Six people were interviewed face-to-face, in a place and at a time of their convenience. These kōrero lasted between thirty minutes and three hours. Guided by an indigenous psychology position that assumed Māori knowledge as equally valuable and worthy as other knowledge bases, an unstructured *tikanga Māori* (Māori process) approach ensuring *tino rangatiratanga* (self-determination) was utilised during communications.

Although not all Māori may want or know how to engage in ways incorporating tikanga Māori (Edwards, McManus, & McCreanor, 2005), where deemed appropriate by those Hukarere engaged with, *karakia* (prayers, incantations), te reo Māori, *whakawhanaungatanga* (rapport building), and *whakapapa* (connecting via genealogy) were incorporated.

A purpose of this exploration was to ascertain how Māori conceptualise wairua. Although the Māori individuals described a range of information relating to wairua throughout their kōrero with Hukarere, here we detail their responses to the question: "Based on your experiences, how would you *describe* wairua?" Smith (2003) stated "qualitative analysis is a personal process" and there is no specific "prescriptive methodology" to the analysis of the data (p. 66). However, Smith (2003, 2004) also notes four stages to qualitative data analysis, including transcribing interviews, establishing themes, connecting the themes, and finally creating a summary table. This process was largely followed as a means for examining the kōrero from each individual, and how they reflected our overall purpose of better understanding what wairua is to Māori. We felt four primary themes were consistently alluded to throughout each kōrero, and included:

1. Wairua is fundamental,
2. Wairua knows no boundaries,
3. Wairua is a perceived sensation, and
4. Wairua is relational.

These primary themes are discussed below with the use of quotes to reflect each. Importantly, these descriptions of wairua and their thematic grouping, is not exhaustive. Any number of themes could have emerged, and our interpretation of the data explicitly and implicitly reflects our own varied histories, circumstances, and understandings.

Wairua is fundamental to Māori existence

Throughout the kōrero, many spoke of wairua as fundamental to Māori existence, indicating it is a necessary part of what it means to be Māori and what it means to be human. In that sense, wairua is not negotiable, but an innate quality or entity; an active ingredient in the constitution of all Māori:

> ...it's not a concept but a practice that is part of being Māori...wairua can't be isolated from the rest of our being.

> ...it is important for Māori because it is one of the dimensions of being.

> ...every Māori have potential to have wairua. Whether they can understand what it is or not, it's still there.

> It's part of me, it's part of my whānau, it's part of my whānau whanui, part of who I am, and so, for me it's just there.

Some kōrero constructed the fundamental property of wairua in terms related to well-being. Because it is perceived as an essential part of being Māori, without an awareness or sense of wairua, there is no 'wholeness', and situations and circumstances become difficult to manage and/or negotiate, and so have the potential to adversely affect well-being:

> Wairua is our...kind of like the cement between everything. If we don't have that then we become disjointed.

> Wairua is a more instinctive way of dealing with situations and will determine what is tapu and noa for any given event.

> You can't talk Māori health unless you talk wairua, it's as simple as that. There are healthy Māori and Māori health, but they are not necessarily the same thing.

One particular kōrero highlighted the importance of nurturing wairua as a means of maintaining physical well-being, indicating again the essentiality of wairua for Māori:

> Kare au e wehewehe i tēnei mea te wairua. Ehara i te mea wairua tawhito tēnā he wairua hou tēnei mō tēnei Ao. A, ki a au nei ōrite katoa, ōrite katoa te wairua, a mō tēnei mea mō te hauora tinana me manaaki ra te wairua ka tika. Ēngari e rua ngā wāhanga e whā pea ngā wāhanga me manaaki hoki tinana whāngai i te tinana ka kai pai, ki ngā kōrero pai, kātahi ka whāngai te hoki wairua o te ngākau, a me ngā kōrero o roto i ngā momo karakia kia tae ai te whakatūtuki ki ngā mahi.

> [I am unable to separate this concept of wairua. I am not referring to an ancient wairua, but wairua that relates to this present world. Personally it is all the same, but in relation to the well-being of the physical self, one must nurture wairua appropriately. However, physical health is dependent on nurturing the wairua and certain aspects aid this process they are: eating proper food, using appropriate language, applying wairua to the soul along with collective/respective/extensive prayers/ rituals in order to meet the desired outcomes].

Wairua knows no boundaries

Throughout the kōrero, many conceived of wairua as existing outside of normal sensory modalities, implying it is an immaterial entity that cannot be seen or touched. In many ways, wairua was positioned as having an existence far greater in volume, essence and structure than human beings can conceive of:

> Wairua is a lot bigger than people can imagine.

> Wairua is so huge. It's just like everything we are. We can't separate it.

> I've never even considered to define it, you know it's too narrow for me because it's there.

> ...I think as Māori we all have the wairua, but sometimes we don't understand the extent of wairua.

> ...how it connects to everything we are...it's um, pretty

much how our whole essence spiritually, and how it connects from the spiritual to the physical.

Some kōrero acknowledged wairua can exist separately from individuals, and has the ability to operate without a person's explicit knowledge:

I also realise that wairua works without me even knowing. You know it's always in place and um it's a thing that happens, not between the physical and the physical, but the spiritual and the spiritual.

Each one of us is made up of two components...the physical me that you can see, that can talk, that you can hear, and then there is that identical one of me sitting beside me that you can't see but you can feel.

Wairua is a perceived sensation

Wairua was often described with words such as feelings, senses, impressions, awareness, and consciousness. In that sense, wairua was positioned as a particular type of knowing, almost a type of 'sixth sense', which may not lend itself to rational or logical understandings or explanations:

Wairua is... it's something that, you can't describe it, you can't see it, but you certainly can feel it.

...it comes to your mind, it's a little voice...some people see...I don't see...greater are those who don't see but believe...you feel.

...everyone has wairua, but some are more in tune than others.

Some kōrero implied wairua remains constant, and only as we become more aware of ourselves, do we understand what wairua may be and are able to perceive it more readily:

I'm aware most of the time where my wairua is and what impact it has on me at any given time, but also what effect it has on others.

You know how you grow up and like with the wairua you've got it...it's about you know always being aware, what to do with your wairua when you know it.

I can't say I understood it then, but I'm coming to understand what those things are now.

...a lot of times is it's about, yeah, learning from inside. Learning wairua from wairua, it's really hard, yeah, but the knowledge of wairua I find it's different...it's not a physical thing, so you're not gonna learn about it physically. You're learning and your knowledge of wairua is in that spiritual realm.

Wairua is relational

Wairua was positioned as having a relationship to everything in existence – past, present, and future. Kōrero implied it transcends space-time boundaries, and is a vital link to ancestors:

...how it connects to everything we are...how it's um pretty much our whole essence spiritually, and how it connects from the spiritual to the physical.

...it interconnects with everything we are, everything that we do, or what's in the past, and all that's going to be in the future.

...it connects our past with our present and with our future, and it um, and it connects individual well-being as well, as we, as our...you know the well-being of our hapū and our iwi.

Highlighting its complex and multi-dimensional nature, one kōrero positioned wairua as relational through its many and varied forms:

He maha nga peka o te wairua maha nga peka.. te wairua a te tangata, te wairua o te whenua, te wairua o te kōrero, te wairua o te tamaiti, te wairua o tena whakatipuranga o tena whakatipuranga, te wairua o tatou matua tipuna, te wairua whakahaere te tangata kia tau te wairua.

[There are many different dimensions of wairua... wairua of the people, wairua of the land, wairua of the spoken word, wairua of the child, wairua of different generations, wairua of our ancestors, the wairua that directs and inspires a person to engage].

Returning to Wairua

Our primary objective was to explore how wairua is conceptualised by those who value the construct most – Māori. Although we engaged in kōrero with Māori individuals who reflect the 'diverse realities' of modern Māori, many commonalities were noted regarding how this important construct is perceived, and it is hoped these kōrero will enhance understandings of what wairua is and means for Māori. Keeping with our indigenous psychology lens, we do not wish to over-interpret or analyse the kōrero in any way that imposes a meaning not necessarily intended by those we spoke to. However, a greater understanding of wairua is essential for a more culturally relevant and culturally responsive psychology, especially within the bicultural milieu of Aotearoa New Zealand. So, here we offer several implications of these kōrero for psychology in this country.

Threading wairua throughout psychology

Across the kōrero, wairua was positioned as necessary for existence. The notion of a spiritual reality being of primary importance to and for Māori is not new, and has been espoused by numerous Māori scholars for decades. So, it

comes as no surprise [to HV and NTM] wairua continues to be discussed in this way, and by Māori of varying affiliation and/or immersion in Te Ao Māori. It was also suggested wairua is necessary for well-being, as well as providing a link to Māori history and ancestors, and in that sense, is a major constituent of one's Māori identity. Despite this, wairua remains little understood within the discipline of Western psychology. Indigenous models of well-being, such as the widely cited and well-known Te Whare Tapa Whā (Durie, 2001), reflect wairua as an essential element of holistic health, and various works attest to the positive association between cultural identity and positive psychological outcomes (e.g., Ministry of Social Development, 2016). Yet, the fact spirituality in general is little acknowledged or catered for in psychology, suggests wairua is not overtly or explicitly addressed within psychological settings Māori come into contact with, which means Māori well-being and identity are being compromised. As a discipline with the enhancement of others as an underlying ethos, such a dearth of attention to wairua is concerning, particularly in light of its prominent role in the maintenance of well-being and cultural identity for many Māori.

A way to address the lack of attention to wairua, is to incorporate it as a fundamental component of psychological education, training, and development, as well as a necessary aspect of any psychological practice. How this is done will vary depending on the psychological context, and should be guided by appropriate advice and consultation with knowledgeable Māori. Within clinical contexts for example, given the limited number of Māori psychologists compared to the need for psychological services by Māori, non-Māori psychologists will likely be the main points of contact for Māori for some time. Professional development for all psychologists is important to, at the very least, be aware of the importance of wairua for a client and their whānau. Most importantly, any attempts to interpret or define wairua for use in clinical contexts must be dealt with based on a Māori worldview. Our greatest aspiration would be to have a sufficient number of Māori trained in Western psychology who are also comfortable, proficient and positioned in indigenous psychology, working in clinical contexts with Māori clients. Until this becomes a pragmatic reality, up-skilling and development of clinical psychologists is important.

From an educational and training perspective, injecting indigenous psychological perspectives into university psychology curricula would be a fruitful and important way of ensuring the value of wairua is portrayed to those aspiring to become psychologists. Levy and Waitoki (2016) suggest "course content is a key indicator of commitment to increasing Māori visibility in psychology" (p. 28), yet their report (Levy & Waitoki, 2015) found only two undergraduate courses across psychology departments throughout New Zealand universities, were specifically Māori-focussed.

Given this almost *complete lack* of exposure to Māori worldviews, it is highly likely most students studying undergraduate psychology will not encounter the term wairua throughout their degrees, let alone have a firm or even loose grasp of what wairua means and its influence on the lived psychological realities of Māori. Such a claim is not an exaggeration, as Natasha experienced in the

postgraduate course she teaches on culture and psychology. When introducing the topic of spirituality and wairua, it is not uncommon for students who have been born and raised in Aotearoa New Zealand to ask: "What is wairua?" Other than reflecting a wider societal issue related to exposure and understanding of Māori worldviews, this example highlights the dearth of visibility to wairua in psychological training, and begs the question of whether psychology trainees are adequately prepared to work in psychological contexts with Māori, without being aware of such a fundamental aspect of Māori well-being, identity, and reality.

Adjusting the Psychological Lens

A major impediment to the incorporation of wairua throughout all areas of psychology rests with the inherent value-base of Western academic scientific psychology (Love, 2003). As noted throughout the kōrero, wairua was described as manifesting in a variety of ways, which has been previously alluded to by Māori scholars, and was more recently encapsulated by Valentine (2016, p. 168), who suggests:

Wairua is not static, it exists on a continuum with many facets. For some, wairua comes in a small subtle voice. For some, a persistent overwhelming thought, impression or feeling that needs to be acted on. For some, wairua can be seen, heard or felt, and for others wairua is exemplified in their environment and their interactions. Dreaming is also an aspect of te ao wairua; the list is endless.

Across the kōrero there was notable emphasis on the ineffability, immateriality, and experiential nature of wairua. This is particularly important, in light of the ethos of Western psychology and its scientific ideals regarding *objective* reality. Wairua is substantiated based on Māori cultural understandings and is considered a fundamental part of normal, everyday reality for Māori. A pertinent issue for psychology is how to reconcile these Māori realities of wairua with the materialistic reductionist perspective dominating Western psychology. From a Māori perspective, wairua is intimately linked to a Māori psychology. Within this paradigm wairua as a necessity for Māori is legitimate.

A further issue relates to how Western psychology views, but also informs, societal views about normality and abnormality. Prevailing Western psychological perspectives about normal and abnormal behaviour typically rest on the extent experiences are verifiable, as well as being accepted by and understandable to, others. Yet, as our kōrero suggest, the subjective, immaterial, scientifically non-verifiable, and varied manifestation of wairua can be at odds with sanctioned notions of normality espoused by Western psychology. Often cited examples of this are claims of speaking to deceased others or spirits (e.g., Stewart, 1997), or specific occurrences in nature being causative of or explanations for certain behaviours (e.g., Tassell-Matamua & Steadman, 2015).

For Māori, such occurrences are typically unquestioned, and accepted as real and valid manifestations of wairua. Yet, from a Western psychological perspective, these occurrences would be considered as more closely aligned with some psychopathological conditions, rather than normative and acceptable explanations for certain behaviours. We are not

suggesting such behaviours, when manifest in individuals who identify as Māori, should be uncritically accepted as culturally normative. Clearly, a reasoned assessment inclusive of cultural consultation about a presenting behaviour, is the ideal. The challenge within this country is to implement a psychology that is effective for the dominant non-Māori majority, and to implement the many and varied forms of behaviour epitomised by wairua and normalised by Māori.

He whakamutunga mo tēnei wā/A conclusion for now

The history of psychology in this country often begins with the introduction and perpetuation of Western academic scientific psychology, with Māori contributions being invisible and/or minimised (Levy & Waitoki, 2016). Such marginalisation is no longer acceptable – especially when it comes to such a fundamental aspect of lived reality as wairua. While wairua may not align so readily with Western psychological perspectives of reality based on Western scientific ideals, this does not make wairua invalid or irrelevant. The message of our manuscript is not new – many dedicated people have and continue to champion the incorporation of Māori perspectives into the discipline of psychology (e.g., Love, 2008; Milne, 2005). But, it is our hope this manuscript plays a part in introducing and perpetuating a new way of doing psychology. One that proactively considers the fundamental importance of wairua to lived realities and the advancement of psychological well-being; always remembering that for Māori - wairua is culturally defined, it is real, it is relevant, it is everything. Without wairua, there is no well-being.

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Is the test of premorbid functioning a valid measure for Māori in New Zealand?

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This study examined whether scores on the Test of Premorbid Functioning (TOPF) accurately predicted current performance on the Wechsler Adult Intelligence Scale (Fourth Edition; WAIS-IV) in a sample of 284 neurologically normal Māori (age range 16-90yrs). Participants were recruited from seven areas of New Zealand's (NZ) North and South Islands, as well as from different iwi (tribes) to ensure a representative sample. The hypothesis that the TOPF would not accurately predict current WAIS-IV performance was supported. TOPF scores only accounted for between 32-36% of the variance in WAIS-IV Full Scale Intelligence Quotient (FSIQ) scores as compared to the over 50% typically reported in overseas studies. The TOPF accurately predicted FSIQ categorisation for just over half the sample. These findings suggest that the TOPF is not a valid measure of premorbid functioning for Māori in New Zealand.

There is an abundance of research indicating culture influences performance on neuropsychological tests (Brickman Cabo, & Manly, 2006), with disparities in test scores between majority and minority cultures (Brickman et al., 2006; Kaufman, McLean, & Reynolds, 1988; Razani, Murcia, Tabares, & Wong, 2006). This has relevance for Māori in New Zealand (NZ) as, while Māori comprise 15% of the population (Statistics New Zealand, 2013a), they are disproportionately more likely to be referred for a neuropsychological assessment than their Pākehā European counterparts (Dudley, Wilson, & Barker-Collo, 2014), with much higher rates of traumatic brain injury (Feigin, Theadom, Barker-Collo, Starkey, McPherson, Kahan, & Ameratunga, 2013) and stroke (Harwood, 2010). In NZ, inequity persists as a result of the "import and drop" approach to neuropsychological assessment (Ogden, 2001; Ogden, Cooper, & Dudley, 2003). While tests that were developed and normed overseas are used to assess, diagnose and plan rehabilitation for Māori clients (Ogden, 2001; Ogden et al., 2003); these tests are culturally bound and inaccurate when applied cross-culturally (Ardila, 1995; Brickman, et al, 2006). A potential result of this is misdiagnosis, inappropriate rehabilitation, and inappropriate financial compensation awarded (Ogden, 2001; Ogden et al., 2003).

In the few studies conducted, Māori perform more poorly than Pākehā on tests that rely on Western education and content, and Māori Perform better than Pakeha on tests that measure visuospatial abilities or on tests that have been adapted to include culturally relevant content (Ogden & McFarlane-Nathan, 1997; Ogden et al., 2003). One aspect of neuropsychological assessment, the assessment of premorbid functioning (PF), is of particular importance. Premorbid, or pre-injury functioning is the estimate of an individuals' level of functioning prior to injury/disease onset, and provides a baseline against which their current performance is compared. In most cases PF must be estimated, and specific tests have been designed to produce these estimates. Valid and reliable tests of premorbid ability should correlate highly with intelligence and be resilient to the effects of brain damage (Crawford, Stewart, Cochrane, Foulds, Besson, & Parker, 1989; Crowell, Vanderploeg, Small, Graves & Mortimer, 2002).

Overseas studies of word reading tests typically report that

at least 50-60% of the variance in Full scale IQ scores (FSIQ) is explained. For example, Crawford, Deary, Starr and Whalley, (2001) who followed up 179 individuals who had completed an IQ test at age 11 and administered the National Adult Reading Test (NART; Nelson & Willison, 1991) at age 77). The NART consists of a list of 50 unrelated, phonetically irregular words of graded difficulty which must be read aloud, with scoring based upon correct pronunciation. Performances on the NART and IQ were highly correlated (r = 0.73), accounting for 53% of variance. When applying Japanese and Spanish versions of the NART up to 70% of variance in IQ has been explained (Matsuoka, Masatake, Kasia, Koyama, & Kim, 2006; Schrauf, Weintraub, & Navarro, 2006). For example, Matsuoka et al in a normal elderly population (n = 50) compared a Japanese version of the NART (the JART) with the revised Wechsler Adult Intelligence Scale (WAIS; Wechsler, 1997), finding that the JART explained 61% of variance in IQ scores. These authors further reported that JART-predicted IQs were not significantly different between the normal elderly and age, gender and education matched participants with Alzheimer's disease.

Ogden et al. (2003) were the first to look at the premorbid estimation in a Māori sample, examining the Spot the Word (STW) test (Baddley, Emslie, & Nimmo-Smith, 1993).; a test in which the individual must identify which is the real word from a series of 60 pairs of real and made-up words (Baddeley, Hazel, & Nimmo Smith, 1992) . While the authors did not report the relationship between STW scores and intelligence quotient (IQ) scores they did note was that STW scores were significantly correlated with scores on the Vocabulary subtest, suggesting that they both measure verbal IQ. There have been three other studies on premorbid estimation in NZ: Baker-Collo, Bartle, Clarke, van Toledo, Vykopal, and Willetts (2008) who compared the STW and the NART; Starkey and Halliday (2011) who compared the NART and a newly developed NZ Adult Reading Test (NZART); and Lichtwark et al. (2013) who also compared the NART and NZART.

Barker-Collo et al. (2008) compared NART and STW estimates with Wechsler Adult Intelligence Scale (3rd ed; WAIS-III) scores in a sample of 89 NZ adults (75 NZ European; 14 Māori. For the NZ European participants, NART and STW scores correlated significantly with WAIS-III full scale

intelligence quotient scores (FSIQ) (rNART = .70, p<0.01; rSTW=0.70, p<0.01). For Māori participants, there was only a significant correlation between STW and FSIQ scores (rSTW=0.91, p<0.01) and not between NART and FSIQ scores (rNART=.27). This led the authors to conclude that the STW may be a more accurate PF measure for Māori. They hypothesised that cultural bias and differing word familiarity may explain the difference between the NART's ability to predict NZ European and Māori scores on the WAIS-III. The authors noted that replication with a larger sample was needed and called for the development of a NZ based version of the NART. While the NART and STW scores correlated significantly with WAIS-III full scale IQ scores for NZ Europeans, they only accounted for 49% of the variance.

The NZART is based on the same concept as the NART, but the words included are more appropriate to the NZ vernacular (examples include meringue and whenua). Starkey and Halliday (2011) compared the NZART and NART with scores on the Wechsler Abbreviated Scale of Intelligence (WASI); an abbreviated version of the WAIS-III. The sample consisted of 63 participants; 32 NZ European, 21 Māori, and 10 other. The authors initially conducted separate analyses for the NZ European and Māori data, but pooled them together when it was apparent that the findings did not differ. Overall, the NART and NZART explained 42% and 46% of the variance in the WASI FSIQ scores. As with the above study, this is lower than is reported in other international studies. The limitations of the study were its use of the WASI and not a full neuropsychological assessment battery such as the WAIS-III, and that the sample was not representative of the NZ population. The authors stated that additional work to develop the NZART would be worthwhile.

Lichtwark et al. (2013) sought to validate the NZART with a more representative sample, to again compare its performance to the NART and develop regression formulae for the NZART to predict Wechsler Adult Intelligence Scale (4th ed; WAIS-IV) IQ scores. The sample consisted of 67 participants (52 NZ European; 15 Māori). NZ European and Māori data were again analysed together. The percentage of variance explained in the IQ scores by the NZART and NART was lower than the two studies discussed; 33% for the NZART and only 26% for the NART. Lichtwark et al. (2013) called into question the practical and clinical utility of the NART and NZART as a result. The authors again noted that despite their endeavours, the sample size was small and not representative of the NZ population.

Overall, the findings suggest that the STW is an accurate PF measure for Māori, though only in a small sample (Barker-Collo et al., 2008), but that the NART and NZART have limited to no use with the NZ population as a whole (Lichtwark et al., 2013; Starkey & Halliday, 2011). Unfortunately all three studies recruited from the general NZ population and included only very small samples of Māori. As a result, both Starkey and Halliday (2011) and Lichtwark, Starkey and Barker-Collo (2013) highlight the need for further research in this area. The most recent permutation of the Wechsler intelligence scales (the WAIS-IV) was developed alongside a new PF test, the Test of Premorbid Function (TOPF; Wechsler, 2011), which is similar to the NART in presenting individuals with a list of 70 words that have atypical grapheme to phoneme translations which must be read aloud.

We are aware of only one other study that has looked at the applicability of the TOPF in NZ (Lichtwark, 2011; unpublished master's thesis); the results of which support the general trend that word reading tests are not accurate PF measures in NZ. The studies discussed thus far have recruited from a general NZ population and have only included very small samples of Māori. The focus of the current research is on the TOPF when used to estimate premorbid abilities in Māori. Current functioning is most commonly measured by performance on the Wechsler Adult Intelligence Scale (WAIS) and its revised editions (Lezak, Howieson, Bigler, & Tranel, 2012). The focus of the current research will therefore be on the accuracy of the TOPF in predicting scores on the most recent version of the WAIS battery, the WAIS-IV, for a sample of Māori in NZ.

Method

Participants

Participants were 284 adults who self-identified as Māori. Participants were excluded from the study if there was any indication that their cognitive functioning might be compromised by any history of psychiatric, neurological, developmental, behavioural or medical conditions; the same exclusion criteria used for the standardisation sample of the WAIS-IV (Wechsler, 2008). Participants were recruited from seven areas in NZ to ensure a representative sample from urban and rural locations, as well as from different iwi (tribes) from both the North and South Island consistent with the proportion of Māori living on each island based on the NZ Census statistics (Statistics New Zealand, 2013a). Purposive sampling was used to ensure an even split between males and females and to ensure roughly even spread across the age range. Participant age ranged from 16 to 90 years; and were grouped into seven age brackets; 16 to 20 years, 21 to 30 years, 31 to 40 years, 41 to 50 years, 51 to 60 years, 61 to 70 years, 71+. All participants were fluent speakers of English. Almost half (45.8%) had completed a tertiary qualification, and their mean annual income ($22,500) was similar to the 2013 NZ Census (Statistics New Zealand, 2013b). A summary of demographic information about the sample is presented in Table 1.

Measures

All participants completed the Multi-dimensional Model of Māori Identity and Cultural Engagement (MMM-ICE) to assess identity and cultural engagement as Māori (Houkamau & Sibley, 2010). Participants were also administered the TOPF (Wechsler, 2011) and the Australia and NZ adaptation of the WAIS-IV (Wechsler, 2008).

Multi-dimensional Model of Māori Identity and Cultural Engagement (MMM-ICE)

The MMM-ICE is a 47 item questionnaire which takes approximately 20-30 minutes to complete. Its 47 items are focussed on what it means to be Māori (e.g., "I stand up for Māori rights" and "I can sense when I am in a Tapu space").

Table 1. Participant Demographics

Characteristic	N	%
Gender		
Male	140	49.3
Female	144	50.7
Age (years)		
16-20	40	14.1
21-30	41	14.4
31-40	43	15.1
41-50	40	14.1
51-60	40	14.1
61-70	40	14.1
71+	40	14.1
Education (years completed)		
≤5 (primary school)	5	1.8
6-7 (intermediate school)	12	4.2
8-12 (high school)	137	48.2
≥ 13 (tertiary)	130	45.8
Household Income		
$0 - $10,000	32	11.3
$11,000 - $20,000	77	27.1
$21,000 - $30,000	46	16.2
$31,000 - $40,000	28	9.9
$41,000 - $50,000	33	11.6
$51,000 - $60,000	5	1.8
$61,000 - $70,000	23	8.1
$71,000 +	40	14.1

Participants indicate how much they agree or disagree with each statement using a 7-point scale, from 1 (strongly disagree) to 7 (strongly agree). The questionnaire is both a valid and reliable self-report measures of six dimensions of identity and cultural engagement, which include: group membership evaluation (e.g., "I love the fact that I am Māori"), socio-political consciousness ("I stand up for Māori rights"), cultural efficacy and active identity engagement (e.g., " I know how to act the right way when I am on the marae"), spirituality (e.g., "I can sense it when I am in a Tapu place"), interdependent self-concept (e.g., "My Māori identity is fundamentally about my relationships with other Māori"), and authenticity beliefs (e.g., "To be truly Māori you need to understand your whakapapa and the history of your people"); which show good internal reliability (Houkamau & Sibley, 2010; Sibley & Houkamau, 2013), and a reliable six factor structure (Houkamau & Sibley, 2010). As an additional indication of validity, self-reported fluency in Te Reo Māori and reported number of Marae visits within the last month, correlated highly with the cultural efficacy and active identity engagement sub-scale. The MMM-ICE is scored by calculating a participant's average score on each sub-scale (Houkamau & Sibley, 2010), with higher scores indicating stronger identification with that dimension of being Māori.

Test of Premorbid Functioning (TOPF)

The TOPF is a word reading test designed to estimate PF in adults which contains a list of 70 phonetically irregular words in order of increasing difficulty (e.g., 'eye', 'ceilidh'). The individual's pronunciation is scored as correct or incorrect based on North American English, with administration discontinued after 5 incorrect responses, and a total score given out of 70. In this study, participants attempted all 70 items generating two scores: a $TOPF_{discontinue\ raw}$ which is the score with discontinue criteria applied, and a $TOPF_{total\ raw}$ where the discontinue criteria is disregarded. Comparison of these two will allow determining if one provides a better PF estimate for this sample. Both raw scores were converted to standard scores ($TOPF_{discontinue\ SS}$, $TOPF_{total\ SS}$) which have a mean of 100 and SD of 15, using the age-corrected normative tables

from the test manual. The test takes approximately 5 to 10 minutes to administer and score, and has a very high degree of reliability (.96-.99; Holdnack & Whipple Drozdick, 2009), test-retest reliability (.89-.95; Holdnack & Whipple Drozdick, 2009) and concurrent validity with the WAIS-IV Full Scale IQ (*r*= .70, Holdnack & Whipple Drozdick, 2009).

Wechsler Adult Intelligence Scale (Fourth Edition)

The WAIS-IV is a neuropsychological test battery that measures global intellectual functioning (Wechsler, 2008). Scores from the 10 core subtests contribute to five index scores: Full Scale IQ (FSIQ), Verbal Comprehension IQ (VCI), Perceptual Reasoning (PSI), Working Memory (WMI), and Processing Speed (PSI). The index scores have a mean of 100 and a standard deviation of 15. Index scores are categorised into seven qualitative categories from extremely low (69 and below) to very superior (130 and above). The WAIS-IV takes approximately 1 ½ hours to administer. All subtests were administered in accordance with the standardised instructions. Reliability and validity of the WAIS-IV has been established for the American population on which it was normed with index reliability coefficients averaged across age groups ranging from .90 to .98 (Wechsler, 2008, average test-retest reliability coefficients ranging from .87 to .96 (Wechsler, 2008).

Procedure

This study was approved by the Auckland University of Technology Ethics Committee. Recruitment took place over a period of 18 months. Participants were recruited through flyers in Māori health clinics and universities, radio advertisements, presentations to Māori community groups and through the principal researcher's contacts as an individual of Māori descent. Once potential participants identified themselves to a member if the research team, they were contacted by phone and a time and date for a face to face meeting was arranged if they met eligibility criteria.

All face to face meetings were conducted by the main researcher or a Māori research assistant with a tertiary health background. The majority (76%) took place in a Māori friendly health clinic. Each participant was invited to have a support person accompany them. Sessions began with a review of the Participant Information Sheet which explained the purpose of the research and the participant's role should they take part, and participants were encouraged to ask questions. If the participant was agreeable, fully informed written consent was given. After consenting to participate, each participant then completed the MMM-ICE, the TOPF and WAIS-IV. The time taken to complete the administration of these was between 2 ½ to 4 hours. To minimise fatigue, participants were told to ask for a break whenever they needed to. All tests were administered in accordance with their respective manuals. The participant was given a small gift voucher at the conclusion of the session to thank them for their involvement.

Particular attention was paid to ensuring that the testing took place in a way that respected Māori cultural values and processes. This included observing tikanga (protocols) relevant to whakawhanaungatanga (building connections) such as mihi (introductions), karakia (prayers/incantations) and the offering of kai (food). Te Reo Māori (the Māori language) was also

spoken during the sessions where appropriate.

Results

Overall Performance

Means and standard deviations obtained by the sample across measures are presented in Table 2. The samples' mean test scores fell in the average range for all WAIS-IV index scores, as did all WAIS-IV subtest scores. The highest mean scores were for Symbol Search, Block Design and Visual Puzzles. The sample's mean TOPF standard scores also fell in the average range regardless of whether the discontinue rule was applied. In terms of the MMM-ICE, the sample's average scores were higher on items measuring group membership evaluation and lowest on items measuring authenticity beliefs.

Impact of Demographic Variables

Correlations were generated to examine the relationship between demographic characteristics (i.e., age, education) and performance on WAIS-IV index scores, TOPF, and MMM-ICE

Table 2 Means and SDs produced by the sample (*n*=284) across measures

Measures	Mean	SD
WAIS-IV		
Indices		
Verbal Comprehension Index	97.73	12.58
Perceptual Reasoning Index	102.30	13.15
Working Memory Index.	100.88	12.89
Processing Speed Index	100.57	15.36
Full Scacle Intelligence Quotient	99.95	12.51
Subtests (scaled scores)		
Similarities	9.80	2.55
Vocabulary	9.63	2.81
Information	9.52	2.89
Comprehension	9.98	3.26
Block Design	10.78	2.52
Matrix Reasoning	9.75	2.96
Visual Puzzles	10.81	2.96
Picture Completion	10.59	2.74
Figure Weights	10.19	2.56
Digit Span	10.69	2.57
Arithmetic	9.68	2.82
Letter-Number Sequencing	10.26	2.56
Symbol Search	10.90	3.27
Coding	9.26	2.88
Cancellation	9.16	3.16
TOPF		
TOPF$_{discontinue\ raw}$	42.88	13.63
TOPF$_{total\ raw}$	45.08	12.23
TOPF$_{discontinue\ SS}$	102.11	13.19
TOPF$_{total\ SS}$	104.29	11.82
MMM-ICE		
Group membership evaluation	6.19	1.42
Socio-political consciousness	5.57	1.59
Cultural efficacy & active identity engagement	5.65	1.43
Spirituality	5.77	1.61
Interdependent self-concept	4.63	1.33
Authenticity beliefs	3.98	1.30
Total Score	246.54	33.05

scores (see Table 3). Age was significantly related to the WAIS-IV PRI, and TOPF raw scores (with and without the discontinue rule applied). Years of education was significantly related to all WAIS-IV index scores, and all TOPF scores. There were some significant correlations between index scores and scores on the MMM-ICE. Scores on the socio-political consciousness subscale, for example, were significantly positively correlated with all TOPF scores.

Relationships between the TOPF and WAIS

Bivariate correlations were conducted to examine the relationships between scores on the TOPF and scores on the WAIS-IV (Table 4). Bivariate correlations can be used as

Table 3 Correlations between age, education, and MMM-ICE, WAIS-IV and TOPF scores

	WAIS-IV Indices					TOPF			
	VCI	PRI	WMI	PSI	FSIQ	TOPF$_{discontinue\ raw}$	TOPF$_{total\ raw}$	TOPF$_{discontinue\ SS}$	TOPF$_{total\ SS}$
Age	0.07	-0.17**	-0.09	-0.09	-0.09	0.20**	0.20**	0.10	0.07
Education	0.32**	0.19**	0.24**	0.15*	0.28**	0.33**	0.33**	0.30**	0.31**
MMM-ICE									
Total	-0.03	-0.10	-0.12*	-0.03	-0.07	0.05	0.06	0.04	0.04
Subscale1	-0.01	0.01	0.02	-0.05	0.001	0.06	0.06	0.04	0.04
Subscale2	0.15*	0.04	0.02	-0.02	0.07	0.16**	0.17**	0.13*	0.12*
Subscale3	-0.14*	-0.11	-0.12*	-0.11	-0.15*	-0.05	-0.05	-0.05	-0.06
Subscale4	-0.05	-0.02	-0.001	-0.11	-0.06	0.04	0.04	0.01	0.00
Subscale5	-0.05	-0.16**	-0.16**	-0.12*	-0.12*	-0.01	-0.02	-0.02	-0.04
Subscale6	-0.23**	-0.08	-0.06	-0.12*	-0.15*	-0.06	-0.08	-0.04	-0.05

* p<.05
** p<.01

measures of degree and direction of relationship between two variables and their function as regression coefficients (i.e., the squared value of the correlation) can be used to estimate proportion of variance in one measure for which another measure accounts. There were significant positive correlations between all TOPF scores and all WAIS-IV index scores. The strongest correlations were between TOPF scores and the VCI, with squared correlations indicating that the TOPF accounting for 40-45% of the variance. The weakest correlations were between all TOPF scores and the PSI. Not applying the discontinue rule generated stronger correlations between the TOPF and FSIQ. With no discontinue rule applied, both TOPF raw score and TOPF standard score each accounted for 36% of the variance in FSIQ. This is as compared to 32% and 34%, respectively, when the discontinue rule was applied"

Predictive accuracy of the TOPF in relation to WAIS-IV FSIQ categorisation was then examined (Table 5). As seen in Table 5, using TOPF standard scores with the discontinue rule accurately predicted FSIQ categorisation of 53% of the

Table 4 Bivariate correlations between the TOPF and the WAIS-IV Indices

	WAIS-IV Indices				
	VCI	PRI	WMI	PSI	FSIQ
TOPF					
Raw Score$_{discontinue}$	0.64**	0.42**	0.48**	0.30**	0.57**
Raw Score$_{total}$	0.67**	0.42**	0.49**	0.34**	0.60**
TOPF$_{discontinue}$	0.63**	0.43**	0.49**	0.31**	0.58**
TOPF$_{total}$	0.65**	0.43**	0.49**	0.36**	0.60**

* p<.05
** p<.01

sample. Similarly, using TOPF standard scores without the discontinue rule applied predicted the FSIQ categorisation of 53% of the sample.

Regression towards the mean was evident regardless of whether the discontinue rule was used or not, with none of the categorizations in the extremely low or very superior range being accurately predicted.

Table 5 WAIS-IV FSIQ categories accurately predicted by the TOPF IQ category (*n*=284)

		WAIS-IV FSIQ category						
		Extremely Low n= 1	Borderline n=13	Low Average n=45	Average n=159	High Average n=53	Superior n=8	Very Superior n=5
TOPF discontinue category	Extremely Low							
	Borderline	1	**6 (46%)**	1	6	1		
	Low Average		1	**18 (40%)**	20	1		
	Average		5	23	**93 (58%)**	14	2	2
	High Average		1	2	33	**29 (55%)**	2	1
	Superior			1	7	6	**4 (50%)**	2
	Very Superior				2	8		
	Extremely Low							
TOPF total category	Borderline	1	**3 (23%)**	1	4	1		
	Low Average		4	**9 (20%)**	10			
	Average		5	32	**102 (64%)**	13	1	2
	High Average		1	2	36	**30 (57%)**	3	1
	Superior			1	7	7	**4 (50%)**	2
	Very Superior					2		

Note: Bold print represents number and proportion of FSIQ categorisations accurately predicted.

Discussion

The results indicate that the TOPF is not appropriate for predicting current WAIS-IV performance amongst Māori. The percentage of variance in current IQ scores explained by the TOPF was low regardless of whether the discontinue rule was applied or not, accounting for only 32-36% of the variance in FSIQ scores. Similarly, Lichtwark (2011) reported that the TOPF accounted for 26% of the variance in FSIQ scores in a NZ sample. Previous studies have found that other word reading tests only account for a low percentage of the variance in FSIQ scores (Barker-Collo et al., 2008; Lichtwark et al., 2013; Starkey & Halliday, 2011).

Overseas studies of word reading tests typically report that at least 50-60% of the variance in FSIQ scores is explained (Crawford, Deary, Starr & Whalley, 2001; Crawford, Stewart, Cochrane, Parker, & Besson, 1989), and as much as 70% when applying Japanese and Spanish versions of the NART (Matsuoka, Masatake, Kasia, Koyama, & Kim, 2006; Schrauf, Weintraub, & Navarro, 2006).

Not applying the discontinue rule generated slightly stronger correlations between the TOPF and FSIQ, accounting for slightly more variance. This is likely due to differences in how familiar the TOPF words are in a NZ context. The TOPF words are intended to be listed in order of increasing difficulty, however what is considered difficult in the United States is likely to differ to what is considered difficult in NZ. One hundred and two participants in the current study, for example, mispronounced the word 'porpoise', though it is only number 28 of the 70 words. Porpoises are rare in NZ waters with only one known species found in the area (McKay, 2014). Fewer pronunciation mistakes were made on words considered more difficult (e.g., #42- 'plethora' and #37- 'umbrage'). There was little to no difference between the correlations produced by the TOPF raw scores and standard scores with the WAIS indices.

Overall, the TOPF accurately predicted IQ categorisation for only 52-53% of the sample; being most accurate for participants in the average range with regression to the mean being evident regardless of whether the discontinue rule was used or not. This is consistent with previous research into word reading tests which report under-estimation of IQs above average, and an over-estimation of IQs below average (Veiel & Koopman, 2001). In a previous New Zealand study (Barker-Collo et al 2008) the NART accurately predicted 41% of classifications for Europeans and 7% for Māori; whilst the Spot the Word test predicted 52% of classifications correctly for Europeans and for 93% amongst Māori. Unfortunately this was based on a very small sample of Māori (n = 14) and was also in relation to the WAIS-III rather the WAIS-IV so it is difficult to draw any conclusions.

It might be hypothesized that word reading tests do not correlate highly with IQ in NZ samples (despite doing so overseas; see Crawford et al [2001]; Matsuoka et al [2006]; and Schrauf, et al [2006]) because word familiarity is culturally dependent and these tests were developed and normed on overseas populations. The research to date however shows that word reading tests remain an inaccurate predictor of IQ even when the test is developed specifically for a NZ population (Lichtwark & Starkey, 2013). The NZART for example, was specifically developed in NZ to ensure that the test consisted of familiar and culturally appropriate words yet it too only accounts for a relatively low percentage of the variance in IQ scores (Lichtwark et al., 2013; Starkey & Halliday, 2011). Lichtwark et al. (2013) suggest that maybe the assumptions on which word reading tests are based are not valid for this population. They point to the changing nature of reading in an increasingly technology driven world, and suggest that individuals today read less and are exposed to fewer irregularly spelt words. While this may be true, it is difficult to see how these changes would be peculiar to NZ.

Another explanation is that the research in this area is only in its infancy in NZ and more time and work is needed to develop a word reading test that is valid for use. It is important to note that there have only been two published studies on the NZART to date (Lichtwark et al., 2013; Starkey & Halliday, 2011). In developing the NZART, for example, Starkey and Halliday (2011) noted many limitations: including that the test was developed on a sample unrepresentative of

the NZ population as a whole; being young, highly educated and predominantly Pākeha, impacting generalizability of the findings.

Sample's overall performance

The sample's mean test scores fell in the average range for all WAIS-IV indices (VCI, PRI, WMI, PSI, and FSIQ). Previous research has shown that Māori perform more poorly than Pākehā on tests reliant on Western education and content (Ogden & McFarlane-Nathan, 1997; Ogden et al., 2003). The fact that the highest mean scores were in Symbol Search, Block Design and Visual Puzzles is consistent with previous research which suggested Māori have particular aptitude for visuospatial tasks (Ogden & McFarlane-Nathan, 1997), though discrepancies between mean scores was small with all mean scores in the average range.

In reflecting upon this, in light of the very low levels of variance explained in IQ by the TOPF compared to that in other countries, it could be hypothesized that this is due to differences in the New Zealand lexicon as well as to differences in the underlying relationship between reading ability and overall intelligence; with New Zealanders IQ scores perhaps being more reflecting of performance based abilities.

It should be noted that the education level of the sample was relatively high with 45.8% having a tertiary qualification compared with only 10% of the general Māori population (Statistics New Zealand, 2013a). It is well documented that education impacts test performance (Ardila, 1995; Manly et al., 1998a; Manly et al., 2002), and indeed education was significantly correlated to all WAIS and TOPF scores in the sample, which is also consistent with prior research (Barona et al., 1984; Strauss et al., 2006). It is therefore possible that the data presented here represent the 'best' performance on the TOPF, and that in a more representative sample the variance explained could have been even lower; though alternatively a more varied education level could have resulted in greater variability in performance across the TOPF and the WAIS, with this greater variability allowing for the relationships to be more easily detected.

Alternatively, it is possible that having a Māori assessor conduct the testing in a manner that upheld relevant tikanga (protocols) may have reduced participant anxiety and enabled optimal performance. In previous research, Māori participants have stated that they would prefer to be assessed by a Māori clinician as they would have a better understanding of them and their worldview (Dudley et al., 2014).

The majority of scores of the MMM-ICE were not significantly correlated with any test scores. This is inconsistent with previous research suggesting a link between acculturation and performance on neuropsychological tests (Arnold, Montgomery, Castaneda, & Longoria, 1994; Manly et al., 1998b). It is possible that the MMM-ICE is not a good measure of acculturation. It was not designed with this purpose in mind, but as a tool to measure the heterogeneous nature of Māori identity (Houkamau & Sibley, 2010). The socio-political consciousness sub-test of the MMM-ICE most closely resembles the definitions given to acculturation in the literature. Houkamau and Sibley (2010) state that individuals

who score low on this sub-test are more likely to endorse dominant ideologies and attitudes, and identify as European while being of Māori ancestry, though this is not directly assessed.

The main limitation of the current study is that that the sample was not representative of the general Māori population in terms of education. Future research should endeavour to recruit a sample that more closely matches the general Māori population in this respect. Another more minor limitation of the current study is that it did not establish whether English or Te Reo Māori was the participants' first language. While most Māori speak English as their first language (Statistics New Zealand, 2013a), the findings may not be able to be generalised to Māori whose first language is not English. Thus, any future studies should include languages used as a factor. Future studies should also endeavour to examine the stability of WAIS-IV and estimators of premorbid ability in Māori over time, as well as determining if these scores are impacted by various diseases, as valid and reliable tests of premorbid ability should not only correlate highly with intelligence but also be resilient to the effects of brain damage (Crawford, et al, 1989; Crowell, et al., 2002).

The findings suggest that the TOPF is not a useful tool for neuropsychologists when estimating premorbid abilities of Māori clients. This begs the question of what approach should be adopted by neuropsychologists working with Māori instead. While single measures of premorbid ability are appealing to the neuropsychology profession, it may be unrealistic to expect a single test alone to accurately assess the premorbid functioning of an individual, with emphasis being made that the results from a premorbid measure only form part of the picture (Ogden et al., 2003; Starkey & Halliday, 2011). This fits with the best performance method advocated by Lezak et al. (2012) where the clinician looks not only at test scores, but other data obtained during the clinical interview such as level of education, employment history and previous achievements. All the information collected can then be used to construct a profile of the individual's level of functioning prior to brain injury or disease. An alternative approach which should be considered is the development of regression formulae, which combine performance on test of premorbid ability with demographic factors known to influence these abilities (e.g., age, education). Within the New Zealand context the factors to used require validation before such a formulae could be developed, further it is noted that these formulae typically perform better in research where premorbid ability for a group is considered, rather than that of an individual (Crawford et al., 1989; Veiel, & Koopman, 2001).

Conclusion

Overall the TOPF was not found an accurate means of estimating premorbid intelligence in this sample of 284 neurologically normal Māori. TOPF scores accounted for between 32-36% of the variance in FSIQ scores and accurately predicted IQ categorisation for only 52-53% of the sample. This is consistent with previous NZ research that has begun to question the continued use of word reading tests as a means of premorbid abilities. Future research is therefore needed to

ascertain whether a reliable and valid NZ specific word reading test can be developed. Alternate methods to premorbid estimation may also need to be considered in light of these findings and the research that has preceded it.

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Stories of survival and resilience: An enquiry into what helps tamariki and rangatahi through whānau violence

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Family violence is overrepresented amongst Māori and has significant consequences for children. Research on family violence and children, both internationally and locally, has been predominantly deficit-focused. This research focused instead on protective factors and resilience. Semi-structured interviews were conducted with professionals who work with Māori tamariki/rangatahi who have experienced whānau violence, with a focus on their views on resilience and interventions with Māori to enhance resilience. Thematic analysis of transcripts revealed the themes that resilience is complex, internal resources contribute to resilience, and the importance of having a significant supportive person, strong positive Māori identity and wairua connection. Interventions to assist the development of resilience included the importance of building a therapeutic relationship with whānau, early systemic interventions and using Māori guided interventions.

Key words: Māori, resilience, protective factors, family violence

Family or whānau violence has significant impacts on the mental and physical wellbeing of children as demonstated in New Zealand research (Fergusson, Horwood & Lynskey, 1997; Flett et al., 2012; Mullen, Martin, Anderson, Romans & Herbison, 1993). Impacts include increased vulnerability to psychological distress, depression, anxiety, suicidal behaviours, conduct disorder, substance abuse and criminal offending (Fergusson & Horwood, 1998; Mullen et al., 1993; Flett et al., 2012). However, there is little research which specifically focuses on or differentiates between the experience and impact of family violence for Māori tamariki and rangatahi.

In order to understand the current situation for Māori as the indigenous people of Aotearoa it is necessary to understand the broader context and history. A number of definitions of family violence have been critiqued for focusing on the nuclear family, a westernised approach that does not enable the recognition of the broader constructs of violence that impact on Māori whānau (Te Puni Kōkiri, 2010). The terms family and whānau are also used interchangeably which does not accommodate the varied ways in which Māori are located within whānau, hapū, iwi and whakapapa (Kruger et al., 2004; Pihama, 1993). A definition of family violence for Māori should engage the wider social, economic and cultural context and exist within a kaupapa Māori framework that is grounded upon tikanga Māori (Kruger et al., 2004; Te Puni Kōkiri, 2010). Furthermore, Jackson (1987) has explained how the current context does not exist within a vacuum and is influenced by the past. It is therefore important to understand the impact of colonisation on Māori and how within te ao Māori whānau violence was not acceptable nor common in traditional Māori society (Cooper, 2012a; Durie, 2001; Jenkins & Harte, 2011; Mikaere, 1994; Pihama, Jenkins, & Middleton, 2003; Rickard, 1997; Te Puni Kōkiri, 2010). The role of women and children was one of divinity and sanctity where the status of women, Mana Wāhine, was an essential part of spiritual, emotional and cultural wellbeing for whānau,

hapū and iwi. The mana of women was related to her place as te whare tangata, the carrier of future generations while children also had their own mana and were viewed as taonga (Te Puni Kōkiri, 2010). The term historical trauma has been used to encompass the profoundly negative and significantly harmful impacts of colonisation on Māori health including physical, emotional and spiritual, social, cultural and economic wellbeing through loss of land, language and access to culture as well as discrimination, marginalization and systemic and structural racism (Balzer, Haimona, Henare, & Matchitt, 1997; Cooper, 2012b; Durie, 1998; Pihama et al., 2003).

Although negative impacts of whānau violence are common, effects are not inevitable. Yet research both internationally and locally has focused on negative impacts of violence with comparative neglect of the exploration of resilience (Laing, 2000). The observation that not all children succumb to the effects of family violence has led some to advocate for a greater effort to understand resilience and protective factors (e.g., Rutter, 2000; van Heugten & Wilson, 2008).

Resilience has been defined as the maintenance of healthy and successful functioning or adaptation within the context of adversity or threat, as well as the ability to "bounce back" and do well against the odds, coping and recovering (Martinez-Torteya et al., 2009). Ungar (2011) provides a more ecological and culturally attuned definition: "In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural and physical resources that sustain their wellbeing, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways" (p.10).

Resilience has been recognised as applying in a cultural context (Hunter, 2001). Durie (2007) describes the importance of both reducing adversity and building resilience to ensure the ability for indigenous people to thrive and prosper. He

has also described how resilience involves the capacity for indigenous people to engage in their culture, networks and resources as well as with global societies and communities. Durie identified that while resilience literature has focused predominantly on individual factors relating to overcoming adversity, for indigenous people resilience also has strong links to cohesion, and the achievements and success of the collective. Furthermore, he asserts that while in western theories insight is believed to develop through looking inwards and examining thoughts and attitudes, for Māori insight is gained through relationships with whānau, marae, land and wider society. Resilience has therefore been considered to be fed and nourished by Māori language, traditional practices and oral traditions (Te Puni Kōkiri, 2010).

While there is some research on resilience relating to Māori, such as that done by Boulton (2013) with Māori in health care settings, research that specifically focuses on resilience in Māori who have experienced whānau violence is lacking. It is through developing an understanding of the factors that contribute to the development of resilience that coping can be enhanced in tamariki and rangatahi, preventing long term consequences. The current research aimed to explore and understand what helps build resilience in tamariki and rangatahi who have experienced whānau violence from the perspective of professionals working with Māori who experienced whānau violence. It is through accumulating this knowledge about factors that contribute to resilience and recommendations for effective interventions, that the wellbeing of Māori may be enhanced.

Method

Participants

Interviewees were professionals who had worked in community, social and mental health services with Māori who had experienced whānau violence as tamariki/rangatahi. Recruitment of participants involved meeting with various organisations and agencies and asking them to identify appropriate staff members. Recruitment also included the first author contacting professionals who she had worked with in the past and inviting them as well as others they may know to participate. Also, snowballing was used by providing participants who had participated in the research with information they could pass onto others who may be interested.

Of the 18 participants in this study, 11 identified as Māori. The remaining seven participants identified as Pākehā but had extensive experience working with Māori whānau. Thirteen were women and five were men. Participants were aged 31 to 80 years and had from four to 45 years of experience working in a range of areas including child protection, mental health, criminal justice, education and other social and community services. Roles included social work, counselling, psychotherapy, family therapy, teaching, clinical psychology, programme facilitatation and various other community support and child advocacy roles. Participants tended to have held various and multiple roles across these different areas.

Procedure

Ethical approval for this research was obtained from the University of Auckland Human Participants Ethics Committee.

A semi-structured interview schedule was used. The interview began with gaining an understanding of what the participants' experience had been in working with Māori who had experienced whānau violence and how they had become interested in this mahi (work). If participants disclosed their own personal experience of whānau/family violence they were invited to share what they had learnt through their own experience, how this had helped them in their mahi, and whether it had ever been problematic for them in their work. Participants were asked about their perspective of what helped Māori tamariki and rangatahi to survive through difficult experiences. Prompts were given for both internal and external factors and enquiries made about whether Māori had specific strengths or ways of coping that were culturally related. Participants were also asked about whether the way tamariki and rangatahi coped had changed over time as well as relevant changes to the role of professionals. There was a strong focus on how professionals could be most helpful to tamariki and rangatahi in their work. Finally, participants were asked to share where they thought the strength of tamariki and rangatahi came from to survive and any wisdom they would pass onto tamariki and rangatahi going through these experiences.

All interviews were conducted by the first author. Interviews were carried out kanohi-ki-te-kanohi (face-to-face) at a location chosen by the participant, which included homes, workplaces, and the University of Auckland. The interview often opened with karakia, according to participants' preference. Whakawhanaungatanga followed this and included sharing information about the interviewer's whakapapa and motivation for undertaking this research. Following this, the interview questions were usually asked as per the order indicated above, although there was flexibility in this regard. Participants were then thanked for their generosity in sharing their knowledge before closing with a karakia (if they wished). Time was also taken to share kai (food) provided by the interviewer. Where this was not possible kai was left with the participant. Koha (gift) was also given to recognise participants' contribution of time and their wisdom. Interviews lasted between 47 minutes and two hours.

Data Analysis

A digital recorder was used for the interviews and each recording was transcribed into a Microsoft Word document. Thematic analysis was used which involved identifying, analysing and reporting patterns within data to enable a detailed account of the interviews (Braun & Clarke, 2006). The steps followed were those recommended by Braun and Clarke. Data relevant to the research questions were first coded and entered into a spreadsheet by the first author. A code is an individual piece of data that is of relevance to the research question. The codes were then collated into broader themes. Then definitions and names of themes were developed that linked with the original research questions. In order to enhance the quality and trustworthiness of the data analysis consultation between the authors as well as with an external

Māori researcher with experience in area was carried out (Morrow, 2005). This included discussing codes and themes. When these discussions raised different views, these were considered and where appropriate revisions to the existing analysis were made.

Findings

Findings are reported separately in respect of the two main research questions: factors that contribute to an understanding of resilience and recommendations for effective interventions that may strengthen resilience so as to enhance the wellbeing of young Māori.

Resilience

Resilience is a complex concept

Generally, participants viewed resilience as a complex interplay between internal qualities relating to the individual, external qualities connected to the individual's environment and cultural factors associated with identity and spirituality. This included resilience being a combination of factors which is different for everyone:

> *I think every single young person's tale is different. And the reason why they might have made it through would be a bit different too.*

Caution was expressed by one participant in regard to identifying tamariki/rangatahi as resilient and that this not be taken to mean they did not need other help and support:

> *Yeah, well, there's a lot of talk about resilience. And I'm a little bit worried that resilience is kind of seen as, oh well, you know, kids are resilient, they'll get over it. Or we'll chuck a bit of something at them to make them more resilient and they'll get over it.*

This may be related to an idea that if one individual can survive and stay strong through whānau violence that there is an expectation that all individuals should be able to do the same.

Internal resources of the child contribute to resilience

This theme represents the idea that internal resources of the child are helpful for tamariki/rangatahi who experience whānau violence. Internal resources were considered to be strengths within themselves. This is also reflected in existing literature, which identifies intelligence, an easy temperament, avoidance of self-blame, problem solving skills, faith, hope and motivation for the future and self-belief and self-efficacy as helpful.

Inherent qualities

Several participants spoke about an inherent resilience that some tamariki/rangatahi have that helped them to survive through whānau violence. In general this was defined as an innate quality or temperament that tamariki/rangatahi were born with:

> *Something has definitely got to be said for an innate resilience and I think that in terms of temperament, I think resilience is not something that either exists or doesn't exist, but I think that there are intrinsic factors*

> *that we may have been born with that might lead you to be more resilient than other people.*

Nevertheless, internal resources were not considered by participants to be fixed at birth. It was considered tamariki/rangatahi could be born with qualities that could develop if the opportunity was provided:

> *But I do believe that we're all born with certain tendencies, personality tendencies and strengths. And they develop if they get the opportunity.*

Having an understanding of whānau violence

A few participants talked of the contribution that tamariki/rangatahi having an understanding of whānau violence would make to helping them survive through these difficult experiences. Participants emphasised the importance of tamariki/rangatahi developing an understanding of why the violence had happened and knowing the violence was not their fault and not taking responsibility for the violence:

> *What was really interesting for me was neither of them saw, saw it as their responsibility, they're really clear… somebody else's fault.*

Having dreams, hope for the future and goals

Many participants talked about goals, dreams and hope as being helpful for tamariki/rangatahi to survive through whānau violence. This seemed to help them see there is a future with different options and possibilities available to them. It was through these avenues that tamariki/rangatahi may see other possibilities and what they want for their life and future as well as others seeing and encouraging their potential. This was able to give them drive and motivation:

> *I think whenever there's other opportunities for young people then it helps them get through. So if somebody is, I guess playing rugby or sport or has hobbies and stuff that kind of take them away from the family environment, I mean it gives them a glimpse into another kind of world. Then that can be really, be a really big thing for them and for their drive, their motivation for their goals.*

Self-belief in their abilities

Many participants spoke about the importance of self-belief. A sense of self-efficacy, self-worth and self-esteem were believed to contribute to resilience in tamariki/rangatahi:

> *Being proud of accomplishments, and talents. And that's the other thing that helps to build resilience is, you know fostering a sense of identity, and pride, and achievements.*

Having a significant, supportive person in their life

All of the participants spoke about the importance of tamariki/rangatahi having a significant, supportive person in their life and how even just one significant person could make the difference. The significant, supportive person could be someone located within their whānau, which was seen as advantageous, such as a grandparent, aunt or uncle, sibling, parent, cousin. Other significant supportive people could be a staff member within a school such as a teacher or school counsellor, a counsellor/therapist in the community, or

caregivers, friends, neighbours, sports coaches and/or other mentor. Having a prosocial network of friends and a place that provided a sense of safety, free from violence was also seen to help tamariki/rangatahi to survive through whānau violence.

Participants identified a number of characteristics and qualities of such a person including there being someone with whom they could build a close relationship and who provided unconditional love and support, stability and guidance:

> *But again it comes back to that thing of being seen and heard...And I still maintain that that is the core...but her koro, her grandfather, was the one man that had believed in her. And I found it was incredible that she was able to continue on and survive just off the back of that... he was like her light, a light in the darkness really...he was like this treasure that she had. That's what kept her going. But it's being seen, heard, believed. That sense that somebody's got me. Somebody gets me. That's the core of resilience I think.*

A strong positive Māori identity helps

Almost all participants emphasised the importance of a strong positive cultural identity. This was described as the "prevailing factor", an "anchor" and the "essence" of what helps, and how if a positive Māori identity could be encouraged by whānau this was considered to have an amplifying effect in terms of resilience A positive Māori identity was seen to be knowing who you are and where you are from, including knowing your whakapapa and having a connection to whānau, hapū and iwi. It was also about knowing where you stand, your tūrangawaewae and tino rangatiratanga, which was related to integrity and being able to stand in one's own mana:

> *Where does it come from for Māori to get through it? Where we do get through it, and again it comes back to what I've said before, that identity, that culture, that knowing who you are, where you stand.*

It is important to note that the nature of a positive Māori identity was seen to be diverse and vary for tamariki/rangatahi. A few participants used the idea of a continuum to explain identity. This involved a tikanga related or traditional Māori identity sitting at one end of the continuum and integrated/assimilated (with the dominant Pākehā culture) identity sitting at the other, with the middle being bicultural. Placement on the continuum was seen as dynamic and changeable where tikanga or more westernised ideas may be drawn upon more or less across different situations. This demonstrated the complexity of identity, especially within the context of post-colonisation and the advantages that accrue from having access to identities in both worlds.

Wairua – "the heart of resilience"

Many participants spoke about the role of wairua in helping tamariki/rangatahi to survive through whānau violence. Wairua was referred to as "a spiritual depth", "the heart of resilience" and "true resilience". It was described by participants as a link with a universal wholeness, a reservoir of energy and power and a place to seek solace during these difficult experiences. Wairua was also seen as providing opportunities to reach back to tīpuna and bring their power of positivity and nurturing:

> *And also if they need to and believe in things Māori, reach back to their tīpuna and bring the power of that positively into the room with them and that's where I suppose the power of taha wairua for Māori really sits and that is to bring forth those that have been positive in your whakapapa who you may have never met but as you call them forth they will bring their wairua to you and provide you with nurturing.*

Interventions to Assist Development of Resilience

Participants described a range of interventions to assist tamariki/rangatahi in developing resilience. Building a relationship with tamariki/rangatahi was important and the qualities of this relationship were detailed. An early, systemic approach and using Māori guided interventions were also seen as helpful.

Building a relationship

Almost all participants spoke about essential qualities and processes when engaging with tamariki/rangatahi who had experienced whānau violence. Participants emphasised the importance of the relationship with the person involved in an intervention. The therapeutic qualities of these professionals working with tamariki/rangatahi included respect, trust, being non-judgemental, maintaining confidentiality, non-blaming, offering choice, collaboration, empathy, advocacy and connection. It was considered that these qualities were essential to being able to develop rapport and reach the "core issues" through enabling a "sense of holding" and for tamariki/rangatahi to feel they had been understood, seen and heard:

> *And it's all about the relationship. It's about building that sense of trust. And the sense of holding...you have to be able to build relationship. You can have all the modalities, you can have all the assessment tools you want. If you don't have the relationship with the client and their trust, you have nothing. And you won't be able to get to the core issues.*

Having a strengths focus was also identified by participants as important. This involved recognising what strengths tamariki/rangatahi already had which had helped them survive through whānau violence and building on these.

Early systemic interventions

Most participants emphasised the importance of tamariki/rangatahi having early and systemic interventions. Interventions were seen as needing to be multi-layered and holistic, consistent with ecological/systems theories. While not dismissing the importance of working with individual children, participants emphasised that working with whānau as a whole was usually required. These levels of intervention were also seen as crucial to build strength in whānau and prevent further whānau violence in the future:

> *So I suppose in te taha whānau it's about creating, building up the strength of biological whānau and if we need to do that through the surrogate organisations yes. However the long term goals are whānau ora because that whānau is going to be the kind of tīpuna of the next generations...te taha whānau is critical because it provides the infrastructure within which the context,*

within which the current and future and past is the whakatika, the healing the whakawātea, the healing process is then stopped at the current, healed from the past and prevented in the future. So we need to have that long-term view.

The role of the school was spoken about extensively by some participants. This included recognising that tamariki/rangatahi spent a significant amount of time at school which provided opportunities for intervention. A few participants spoke about the benefits of group programmes at school or within the community. These included education about violence not being okay as well as resiliency building programmes that taught relationship skills, emotion management and distress tolerance. Being with others who may be in the "same boat" was seen as helpful as well as encouraging a sense of belonging. It was also an opportunity to learn ways to talk about whānau violence and their feelings about what has happened:

> *Helping guys to kinda communicate stuff and say, you know what, this, this happened aye. And then because it's now words and not a memory it has some kind of form and so to be able to look at the form, now it's out, and we kind of inspect that and go, oh you know what, well that's not okay aye? That's, well that was difficult actually...You know, so, and be able to talk about it, you know, to be able to put, talk about feelings and stuff. What's that, what was that like then? And really explore that in a group.*

Other levels of intervention at the level of the community included positive natural networks such as community groups, iwi organisations, youth groups, positive peer groups, church, kapa haka as well as sports and hobbies.

Using Māori guided interventions

Many participants spoke about using Māori guided interventions for tamariki/rangatahi who experienced whānau violence. It was recognised that there are many principles within te ao Māori that can be used to guide interventions for tamariki/rangatahi. Participants spoke about these including karakia, whanaungatanga, manaakitanga, whakataukī, Māori legends and use of te reo. A few participants described the importance of whanaungatanga in building relationships with tamariki/rangatahi:

> *And it starts off, you know, I never assume that by going in, you know, single-handedly and saying oh so you're the ...... whānau, do you have links into this hapū? And I just start off very basically so where are your people from? You know because there's also that thing that Māori also carry quite a lot of, and I speak for myself here, you know up until recently. Because there are gaps in our knowledge so often, you know people will have either disconnected from their whānau or the whānau actually can, as is I regret to say sometimes the case is actually the seat of trauma...I just proceed very gently by saying oh where are you from. And then they'll say where are you from? And we do that whole. It's all about connecting.*

Cultural advisors were also seen as having a role in working with tamariki/rangatahi as well as having tikanga focused programmes. Models such as Te Whare Tapa Wha and Te Tuakiri o Te Tamaiti were seen as being able to be implemented into practice. Through this engagement and using tikanga practices tamariki/rangatahi had opportunities to learn more about te ao Māori however, caution was recommended in determining who may want a more Māori focused intervention giving recognition to the impact of colonisation and historical trauma and how this needed to be understood.

Discussion

This research provided insight into resilience for tamariki and rangatahi who have survived through whānau violence. Not surprisingly, the construct of resilience itself received attention. Participants' responses seemed to match the ecological and culturally sensitive definition provided by Ungar (2012) as provided above. Participants were clear that being identified as "resilient" did not mean they did not need help and support.

This research also supported the complex and dynamic interplay between a range of factors across different individuals and at multiple levels (individual, whānau, community, culture), clearly supporting an ecoligal approach similar to Bronfenbrenner's (1979) model which also emphasises the complexity of interactions between the person and their environment at different levels.

At the level of the individual, having self-belief which involves self-efficacy, self-esteem and a sense of mastery were identified as important as well as having hope and motivation to succeed in the future. These qualities are consistent with those identified in literature elsewhere (e.g., Daniel & Wassell, 2002; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008; Martin, 2002; Masten, 2014). However, the individual qualities of intelligence and cognitive abilities emphasised in the literature were not commonly identified in this research. While some inherent qualities were discussed, such as temperament, participants emphasised the role of dynamic factors which could be developed to help tamariki and rangatahi survive through whānau violence.

Participants considered it of relevance for tamariki and rangatahi to have the ability to locate responsibility for the problem with the perpetrator of the violence and have an understanding of why the violence had happened. While it is common for children and young people to attribute self-blame for violence that is inflicted upon them, being able to externally attribute blame and avoid self-blame is recognised as being important to recovery (Grych, Jouriles, Swank, McDonald, & Norwood, 2000; Martinez-Torteya et al., 2009). It is likely that for many children the appropriate attribution for violence is facilitated by having a significant supportive person who models an empathic and understanding relationship towards tamariki and rangatahi allowing them to feel accepted. This may also include telling them that it is not their fault that the violence happened.

Consistent with other research, the significance of having a significant supportive person in the life of tamariki and rangatahi was emphasised by participants. Masten (2014) has also identified the central significance of close relationships for resilience, noting that virtually every review of resilience

in child development over the past 50 years has recognised it. There is ample literature demonstrating the significance of an infant's bond with their primary caregiver and how a secure attachment serves the function of safety, emotional security and learning, including its contribution to resilience (Ainsworth & Bell, 1970; Bowlby, 1973; Fergusson & Horwood, 2003; Thompson, 2000). Masten (2014) used the term "enduring presence" to describe the ongoing nature and importance of the safe significant person.

Participants identified a range of characteristics or qualities of the significant supportive person and these correspond with those identified in other literature. These include unconditional love and support, affection, nurturance, understanding, acceptance, compassion, validation and being non-judgemental; these providing a context where tamariki and rangatahi could be seen and heard (Daniel & Wassell, 2002; Gewirtz & Edleson, 2007; Jaffe, Wolfe, & Campbell, 2012; Simcock & Duncan, 2010; Yates, 2013).

Participants identified advantages of a significant supportive person being someone within their whānau. This provides for greater opportunity to develop a positive Māori identity, connect with other whānau, hapū and iwi and develop a sense of belonging. This is consistent with Masten (2014) identifying how parents can be "cultural conduits" who transmit cultural practices that can foster resilience. Strengthening a positive Māori identity in tamariki and rangatahi was identified as helpful by almost all participants. This is consistent with existing opinion and research in Aotearoa where a strong and secure identity and connectedness have been identified as protective for Māori (Cooper, 2012a; Durie, 2006; Kruger et al., 2004; Te Puni Kōkiri, 2010). It is also consistent with international research with other indigenous populations where distinctive aspects of resilience have been identified including collective knowledge and identity and pride in one's heritage (Andersson & Ledogar, 2008; Ungar, 2012). Knowing who you are and where you are from, including knowing your whakapapa, having a connection with whānau, hapū and iwi as well as wairuatanga, and being able to draw on cultural beliefs and values has helped Māori to survive and respond to challenge and adversity in the past (Cooper, 2012a; Durie, 2006; Kruger et al., 2004; Te Puni Kōkiri, 2010). It has been suggested that it is the same resilience which enabled Māori to survive despite the devastating impact of colonisation that is present in the lives of tamariki and rangatahi that helps them survive through whānau violence (Te Puni Kōkiri, 2010).

Consistent with existing literature in Aotearoa, wairua was seen to be a significant (Douglas, 1998; Henderson, 2013). It was viewed as the "heart of resilience" and a "link with a universal wholeness", "reservoir of energy and power" and "place to seek solace". Wairua is significant for Māori. It is considered to be the spirit of the person and their sense of being and is one of four parts of Te Whare Tapa Wha (the four sided house), a Māori model of health which identifies the four important parts of a person which need to be balanced in order to achieve wellbeing (Durie, 1985). The ability to bring forth tīpuna and draw on their strength and develop a "wairua connection" with others appears to be a distinct strength, emphasised by Māori to contribute to resilience.

Participants spoke extensively about interventions to assist the development of resilience. Early, systemic, Māori guided interventions were identified as helpful for tamariki and rangatahi experiencing whānau violence. Of course, interventions for family violence need to be "coordinated community responses" given the systemic nature of whānau violence, in accordance with international best practice (Shepard, 2005). In line with a social, ecological theory, interventions need to be multi-layered and holistic according to participants in this research. This involves working with whānau as a whole, school interventions such as resiliency programmes, and programmes and therapy such as family therapy, parenting programmes and individual therapy. Networks including community groups, iwi organisations, youth groups, peer groups, church and activities such as kapa haka and other sports and hobbies were also seen as important. Intervention at a broader level was also seen as necessary, involving public education and government level intervention in areas such as education, housing, financial wellbeing and employment.

Many participants talked about how interventions needed to be guided by Māori or "Māori driven". This of course would take into account the importance of the factors identified in relation to resilience of having a positive Māori identity and a wairua connection. Principles within te ao Māori were identified to lead interventions such as karakia, whanaungatanga, manaakitanga, whakataukī, Māori legends and use of te reo. This could also include consideration of Māori models such as Te Whare Tapa Wha and Te Tuakiri o Te Tamaiti. However, given the complexity of Māori identity addressed earlier, caution needs to be exercised in determining who may want and/or benefit from a more Māori-focused intervention. Cultural advisors, kaumātua and kuia may be in a good position to identify some of these complexities. A core element of intervention was seen to be building a relationship. Research on the therapeutic alliance reveals there is a strong association between the therapeutic relationship and treatment outcome (Karver, Handelsman, Fields, & Bickman, 2006; Lambert & Barley, 2001).

This research suggests that a range of people can help tamariki and rangatahi who have experienced whānau violence, and that one person can make a big difference to tamariki and rangatahi surviving through these difficult experiences. Participants identified that tamariki and rangatahi often have significant strengths that they already use to help them survive, and that these provide a foundation or platform for other interventions. Given there is no "one size fits all" approach, beginning with identifying the strengths of tamariki and rangatahi appears paramount to building a meaningful intervention.

Further research should engage tamariki and rangatahi directly to gain their perspective on how they survived through whānau violence. Such research will give tamariki and rangatahi a voice in the literature as well as provide opportunities for them to help other tamariki and rangatahi going through similar experiences. Maintaining a kaupapa Māori approach should ensure that the relevance and utility for Māori communities is maximised.

Acknowledgements

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"What I reckon is, is that like the love you give to your kids they'll give to someone else and so on and so on": Whanaungatanga and mātauranga Māori in practice

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Mātauranga Māori (knowledge and wisdom pertaining to Māori, the Indigenous people of New Zealand) has long been suppressed and invalidated in psychological paradigms, and the practice of whanaungatanga (relationships, connection, and practices among a family collective) undermined in colonising practice. Utilising a mana wāhine methodology (an approach that privileges Māori women's perspectives and analyses) and semi-structured interviews with 43 participants, we explore contemporary mātauranga Māori pertaining to whānau (extended family) practices. Inter-related yet conceptually distinct aspects of whanaungatanga were elucidated from participant accounts: Diverse and rich networks; children as integral to everyday lives; aroha (love), tiakitanga (guardianship), wairua (capacity for spirituality); and whānau support. Women (and men) participants not deemed 'experts' in mātauranga Māori described a lived set of practices pertaining to raising children in a down to earth, pragmatic and humorous manner.

Key words: Māori, Indigenous psychologies, mātauranga Māori, whanaungatanga, mana wāhine

Mātauranga Māori (education, knowledge, wisdom, understanding, skill pertaining to Māori, the Indigenous people of New Zealand) has long been suppressed and invalidated in psychological theories and practice, at one stage, legally prohibited through the Tohunga Suppression Act, in 1907 (Cunningham & Stanley, 2003). From colonisation through to contemporary times, an assumed universality of Anglo-European (and American) notions of psychology, and reification of these culturally-bound ways of knowing as 'rational' and 'objective' has created new barriers to validating mātauranga Māori within psychological theory and practice (Levy, 2016). However, Indigenous psychology initiatives within New Zealand *have* taken up the task of developing locally derived psychological understandings (Nikora, 2007), creating unique solutions to promote wellbeing among Māori (Waitoki, 2016), and advance Māori development (Nikora, 2007). New Zealand's developments both align with and lead global Indigenous psychology developments (see Allwood & Berry, 2006; Dudgeon, 2017; Pe-Pua & Protacio-Marcelino, 2000).

Exploring how mātauranga Māori may be enacted within psychological theories and practices, first requires some articulation of how Māori approaches to knowledge are epistemologically different from Anglo-European approaches. Mātauranga Māori encompasses "theories, practices, protocols for being in the world" that are situated within relationships, bound to people and places, and aligned with Māori aspirations (L. Smith, Puke, & Temara, 2016, p. 2). Mātauranga Māori may, for instance, be identified within analyses of te reo Māori (Māori language), visible in pūrākau (personal and cultural narratives) (Lee, 2009), ceremonial, and everyday practices and skills (L. Smith et al., 2016). Mātauranga Māori not only resides among those considered experts in European and American contexts, but among community

elders, artists, and healers – those with practical experience and the values required to teach or administer this knowledge (L. Smith et al., 2016). Instantiations of mātauranga Māori are diverse, nuanced and localised to particular whānau, hapū (sub tribe, wider extended family) and iwi (tribe), within a particular historical social and generational context, dynamically infused with surrounding cultural influence.

In this article, we explore mātauranga Māori among contemporary Māori in everyday domestic settings. We focus on the domain of child rearing and reproduction, and explicitly explore practices of whanaungatanga (relationships, connection, and practices among a family collective) embedded in whānau (extended family) contexts. This allows us to prioritise *women's* voices and cultural knowledge. Since early colonial contact, dominant culture has tended to view and represent Māori men as the natural experts in cultural matters (Mikaere, 2010; Simmonds, 2011; L. Smith, 2013). As we will demonstrate, for both men and women, practices of whanaungatanga are vital and live, but reproduction and child rearing are arenas where women's voices feature particularly strong.

Relational processes are at the heart of whanaungatanga and directly inform the context of childrearing. Te reo Māori, for instance, offers whānau as a homonym for birth, hapū as a homonym for pregnancy and iwi as a homonym for bones, thus metaphorically stitching together reproduction with terms for kinship networks (Mead, 2003). Historically, greater numbers and wider networks signified strength among the collective (Glover & Rousseau, 2007). Whānau formed a protective support network around the parents who, in contrast to the contemporary nuclear family, were not isolated in the day to day activities of raising children (Mikaere, 2011) and gave children exposure to diversity of human relationships

and situations (Pere, 1994). This was crucially underpinned by aroha (affection, sympathy, charity, compassion, love, empathy) that provided the binding or attachment to the whānau, enabling these processes to occur, and ensuring stability, loyalty, and commitment to one another (Pere, 1994).

Within whanaungatanga, a primary relationship between (birth) mother and child was often significant (Cargo, 2016), but whāngai (to raise another child as your own) by whānau who were *not* the birth parents was also a relatively common practice (Mikaere, 1994). The term whāngai translates to 'nourish', 'feed', 'enrich', culturally, emotionally, spiritually, and physically (Moorfield, 2013). Differing from Anglo-European notions of adoption, these care arrangements were not necessarily permanent, nor were they stigmatised. Instead, the child remained part of the wider whānau. The whāngai process strengthened bonds between relations within a whānau (C. Smith, 2012), relieving stressed relations, and assisting relations who were unable to conceive children (C. & P. Jacobs, personal communication, 11th April 2011; Mikaere, 1994; C. Smith, 2012).

The practice of whanaungatanga was notably undermined by the impacts of warfare, land loss and confiscation characteristic of the early colonising period, reinforced by the imposition of government policies that cohered around an individual subject and restrictive regional planning regulations (Durie, 1997). Many whānau were not left with enough land to sustain them, necessitating movement to urban areas and to nuclear family configurations (Mikaere, 1994; Nikora, Guerin, Rua, & Te Awekotuku, 2004). The process of urban migration progressively shaped whānau-based practices towards a more nuclear model of family in the absence of intensive whānau support systems (Durie, 1985, 2001; Edwards, McCreanor, & Moewaka Barnes, 2007). The cumulative effect of these colonising acts led many Māori into challenging circumstances of poverty and socioeconomic disadvantage (Pihama, N/D).

In a cruel twist, most Māori who moved to urban areas experienced racism and were excluded from routine aspects of Pākehā cultural life (Barrington, 2005). Inculcated within a colonising frame of institutional racism, whanaungatanga practices have been incorrectly considered a contributor to Māori under achievement, a 'problem' or 'deficiency' in a child's environment (Pihama & Penehira, 2009), supported by media representations that bolster these colonial narratives (Edwards et al., 2007). At the time of writing this article, the New Zealand government has considered removing legislation to prioritise placing Māori children in care, with their whānau (see Kirk, 2017 for discussion), a proposition that is antithetical to mātauranga Māori pertaining to whanaungatanga. Despite colonising racism, urban migration, and institutional racism, the practices associated with whānau that are threaded into a holistic concept of whanaungatanga, remain relevant in the lives of contemporary Māori (Durie, 2001; Edwards et al., 2007; C. Smith, 2010; Tangohau, 2003).

In this paper we attend to a lived set of whanaungatanga practices, through Māori participants' articulations of their mātauranga in this domain, embedded in accounts of their everyday lives. While the notion that whanaungatanga is a source of resilience has been historically invisibilised in dominant Anglo-European discourse, and invalidated in

psychological theory and practice, we hope to support the validation and development of current (including locally Indigenous derived) understandings within psychological paradigms. With this overarching objective in mind, our research questions are broad - what does it means to have children in the context of contemporary whānau? How does this appear within everyday practices with relations, and whānau support? How does this relate to whanaungatanga as a cultural principle? We are interested in understanding Māori people of all genders' enactments, expressions, and articulations of mātauranga in this domain.

Methodology

The analysis reported here is part of a wider ethnographic study on Māori and reproduction, undertaken by the first author (Jade), from her standpoint as a Māori woman. This work was supported by the second and third authors (Ginny & Margie) who are Pākehā (of New Zealand European ancestries). The research draws upon mana wāhine research (an approach that privileges Māori women's perspectives and analyses) (Pihama, 2001). While the research has not solely focused on the cultural and social realities of women's lives, it has been conducted within a domain of knowledge where Māori women may have skill and expertise, but are not given recognition. In accordance with a mana wāhine research agenda, the research has aimed to legitimate mātauranga Māori while incorporating a critique of sexist and racist colonising forms, and employed a collaborative approach with research whānau (Le Grice, 2014; see personal communication references for research whānau contributions). Mana wāhine (Le Grice, 2014) and feminist qualitative methodologies (Clark & Braun, 2013) understand knowledge as contextual, and require researcher reflexivity to situate the study. To give some insight into my (Jade's) background, to contextualise how mātauranga Māori in this paper has been derived, and framed, I am from the hapū, Ngati Korokoro of Pakanae, Ngāpuhi iwi; and Ngai Tupoto of Motukaraka, Te Rarawa iwi, within the Hokianga region. I was raised in rural Horeke, Hokianga, until I was six, and then in urban Mairangi Bay, Auckland.

A qualitative interview design was most congruent for this project, due to the capacity of qualitative research to generate rich and detailed descriptions of meaning and experience (Denzin & Lincoln, 2005). Semi structured individual interviews allowed the exploration of participants' accounts of their everyday lives, ideals, values, challenges and aspirations, and how they were drawing on, or resisting, Māori and Anglo-European orientations. Interviews (conducted by Jade) focused on participants' reproductive histories, with questions designed to orient the interviewee to reflect on their experiences with babies, reproduction, sexual and reproductive health. Interviews lasted an average of one hour, and were hosted at the University, the interviewer's home, their home, workplace or community facility (marae). The audio recordings of these interviews were transcribed according to an orthographic style (Lapdat & Lindsay, 1999) and checked for accuracy. Pauses in participants' talk are denoted by their length in seconds, noted in brackets e.g. (1.0). Extra contextualising information is added to participant quotes in square brackets (e.g. [participants' friend]).

We sought views from participants who culturally identified as Māori. Forty three Māori participants (26 women; 17 men) were recruited through advertising, word of mouth within personal networks, and the assistance of two recruiters from my hapū. Participants were interviewed in Northland, Auckland, Hamilton, and London; and identified with a range of Māori tribal regions across the North Island, however no participants from the South Island responded to recruitment advertisements. While mātauranga Māori in this article was described by participants of a range of hapū and iwi, denoting tribal variation in colonisation histories, knowledge traditions and practice, there is a concentration of mātauranga pertinent to the Hokianga region, given the assistance from recruiters. The mean age of participants was 49 years; most were parents (35 parents, 8 child free/yet to have children), and heterosexual (40 heterosexual 3 non-heterosexual). We recruited participants from a range of occupational statuses (5 not in employment, 5 students, 5 stay at home parents, 26 working and 7 retired), and a mix of rural (13) and urban (30) residents. Participants' names, the names of people they spoke about, locations, workplaces, or further specific identity details have been removed and are referred to generically. Demographic information including the participants' gender, age range, and urban/rural location is reported alongside participant quotes in order to contextualise their responses, in square brackets. Ethical approval was obtained from The University of Auckland Human Participants Ethics Committee in 2007, and ethical guidelines for Indigenous research were engaged with throughout the study (L. Smith, 2006).

Utilising thematic analysis (Braun & Clarke, 2012), we examine how participants' everyday lives and practices were anchored in culturally shared understandings of the concept of whanaungatanga, while viewing participants' talk as a live organic practice that actively shapes and re-creates social worlds. This was done through a mix of inductive and deductive analytic approaches (Braun & Clarke, 2012). After Jade became familiar with the data, and generated initial codes, notions pertaining to whanaungatanga were systematically searched for, within the data. Jade drew together and interconnected ideas that were collapsed into broader themes and honed into distinctive sub-themes. While the first author initially conceptualised Māori practices of whanaungatanga alongside Anglo-European patterns of practice to emphasise the complicated assemblage of different cultural forms, the second and third authors encouraged a refinement of these notions to hone towards, and investigate, their location within mātauranga Māori. Ginny and Margie also assisted with this writing process, and refinement of themes and sub-themes.

Results

I Jade was humbled by the way participants in this study took the time to carefully explain the contexts of their reproductive lives – their everyday experiences with children and relations, and the broader purpose of these practices as it informed their approaches to raising children. A pattern of practices can be deduced from these accounts, interwoven to produce a coherent and conceptual understanding of whanaungatanga. Participants described inter-related yet conceptually distinct aspects of whanaungatanga, that we

assembled into four major themes: (i) the importance of diverse and rich networks; (ii) the central position of children in the whānau; (iii) aroha, tiakitanga (guardianship) and wairua (capacity for spirituality); and (iv) the experience of whānau support.

Diverse and rich networks

The importance of some level of whānau presence was noted across all participant accounts, whether rural or urban. Valuing whanaungatanga has persisted despite the urban migration that saw many Māori whānau shift to less intensive support networks (Durie, 2001; Edwards et al., 2007; Metge, 2001; Nikora et al., 2004; Nikora, Rua, Awekotuku, Guerin, & McCaughey, 2008). The opportunity for children to identify with diverse whānau and ordinary everyday interaction was valued, to build up an information pool for the child concerning how they might, in their turn, be a person in the world and part of a whānau. Responding to a question about whether her siblings had contributed to her children's upbringing, a participant who had two children describe their valued contribution.

> *My brothers – they, they're just to be around. My little brother to be funny and my older brother to be, you know, be a businessman that sort of thing just - just to have examples of of men mm... just to see what people are like, just to observe, just that background information you store away and think 'oh yes she's just like Aunty Ngahuia' you know the, the sort of family oriented... You know it doesn't have to be high morals it can be the, the good things in life, you know... show kids that you can have fun eating... [or] being serious and you know telling you... 'Don't touch that guy I wouldn't let him look after my dog'... just being ordinary and kind, and yeah, and considerate and funny and fun [woman, 50s, urban].*

In this participant's account, the presence of her siblings in the lives of her children gave examples of people who modelled a constellation of different possibilities and different ways of being, excelling, and enjoying life. Children's learning and behaviour were seen by participants as moulded by broader social environments and contextual influences, as well as the home (MacFarlane, 2016), and they actively sought exposure to relatives who could enrich children's lives (Pihama, N/D). Having bonds with relations was considered to strengthen whānau identity in contemporary lives (Edwards et al., 2007; Kingi & Waiti, 2011). Contrary to dominant deficit focused research and media narratives about Māori men, these whānau oriented narratives emphasised Māori men's value in childrearing, through nurturing, and educative qualities (Rua, 2015).

Many participants spoke about cherished memories with uncles and aunties: "*You know, you can't put a price tag on some of these, like uncle Wiremu. Those characters... And it it does rub off on you Jade you know... I bloody miss them dearly (M10) [man, 40s, urban].* The identities and characters who comprised a set of familiar whānau figures provided a memorable source of love and attachment for this participant, and others. A strong and meaningful interconnection between this participant's identity and the memory of his late Uncle is

evident, inscribed through a whānau relationship (Rua, 2015). Aunties and uncles were considered to play an important part in raising children - consistent with ancient proverbs that considered their contribution as sustaining and refining the work done by the parents (Metge, 2001), *and* contemporary narratives of affection from mātua rautia (multiple parents) (Pihama, 2014). *"[These relationships] get them to to really socialise and build their own bonds with (1.0) you know the family yeah... Just getting used to different people... know that they'll be safe with them" [woman, 50s, urban]*. Teaching her children about engaging with diverse people was seen as important to this mother of two, preparing her children for their future adult lives. Contemporary literature on whānau suggests connection in relationships functions to give children an important sense of belonging and ability to develop trust (Jenkins & Harte, 2011). The first and prior accounts articulated by Māori women extend this, demonstrating how they attend to the relational environment around children as a *learning* context. Tuākana and tēina dynamics (relationships between older and younger siblings) were a key part of this learning context, particularly in whānau with many children, in urban and rural settings.

> *Oh we had a wonderful childhood. Um I was ah the sixth, the sixth, fifth child... We were self-contained in our little family because we were all friends... But um I think we were well prepared for adult life by our older brothers and sisters and my Mum and Dad... You always had somebody to look out for you. You never really - we were very lucky because we never really knew any um hardships or we were never lonely or we we had um we were very resilient [woman, 70s, rural].*

This participant, who herself experienced infertility and adopted a child, spoke positively of her experience growing up in the context of many siblings who formed close friendship bonds; these strong whānau relationships brought about strength and resilience. Collaboration and lifelong relationships implicit in the contemporary practice of whanaungatanga translates to social capital, whereby connections among people who have strengths, skills, and resources can facilitate opportunities, growth and enterprise (G. Smith, 2011). This is a resource that becomes more enriched by the population of many whānau members.

In addition to the aforementioned rich networks of tuākana, tēina, aunties and uncles, close bonds and support between children and grandparents were ever present across participants' accounts. One participant who had two children described how her grandfather lived with her childhood whānau and cared for her as a child, illustrating the primacy of the relationship between tūpuna (grandparents, ancestors), and mokōpuna (grandchildren).

> *We had, oh my grandfather lived with us until he passed away. So, yeah he used to look after us a lot when we came home from school, always have something on the stove, something cooked for us, feed us [woman, 40s, rural].*

Traditionally, the relationship between a tūpuna and mokōpuna is a special one (Durie, 2001; Edwards et al., 2007; C. Smith, 2010), a haven and safe space (Pihama, 2014), with ongoing continuance and relevance in contemporary lives. Routine practices of *male* nurturing through whanaungatanga have also been noted in contemporary lives (Rua, 2015), extended in this instance, to an example of grandfathering, evidenced within an historical account in this participant's childhood memory. Levels of support provided by grandparents varied depending on the whānau circumstances. Sometimes grandparents took a greater role in raising the children than the parents, through whāngai, for short time frames, or permanently in their care (Durie, 1985; Metge, 2001; Pere, 1994). For instance:

> *My wife and I only had two children and we adopted two children... And um (2.0) ah four mokōpuna of our own but with um (2.0) with my... stepchildren you know we, we have ah two other mokōpuna too... Um (2.0) when we were growing up there was no distinction between whāngai... [and] the children of ah of the parents... My um my own family my mother and father had... us and they um brought up... [some] of their grandchildren as their own. So (1.0) you know we lived as [siblings]... But um you know that's how the whānau was brought up [man, 70s, rural].*

For this participant, whāngai was practiced in his experience *of* parenting, where he and his wife adopted two children, and his practice of grand parenting, where he had mokōpuna through his step children. Further studies have noted the contemporary practice of whāngai as a solution to assist stressed whānau or those who were not in a position to care for their children (C. & P. Jacobs, personal communication, 11th April 2011; Mikaere, 1994; C. Smith, 2012). Whanaungatanga in its inclusiveness and pragmatism rendered whāngai a common sense practice, oriented to the care of children and mokōpuna. The diversity of relationships, characteristic of whanaungatanga in everyday contemporary life, was an important rich resource that increased with greater numbers, and had direct positive bearing upon childhood development, attachment, belonging, trust; also yielding positive impacts for all, including social capital that could scaffold opportunities for growth, and facilitate resilience.

Children as integral to everyday lives

Consistent with the features of whanaungatanga that outline close involvement of extended whānau of various ages and generations in the context of raising children (Pihama, N/D), many participants described experiences of being around children as a continuous feature of their lives from childhood. One participant, who had three children, established familiarity with children through experience with her sisters' children.

> *Jade: And what do children mean to you?*
> *Participant: They mean everything, you know, because (1.0) because you know me being, looking after like millions of kids, well not millions I only brought up like thirteen of my sisters' kids but um yeah they mean everything eh. (2.0) They're the best thing you could have, a kid. The best thing you could have [woman, 20s, urban].*

Growing up as a sibling to older sisters who had children

gave this participant opportunities to contribute to raising a total of thirteen nieces and nephews, providing experiences that facilitated her positive evaluation of children. While having (some) children is a cultural norm in Australasia (Sha & Kirkman, 2009), it is especially so among Māori (Glover, McKree, & Dyall, 2008). Māori reproduction has long been considered 'excessive' in comparison to Pākehā reproduction (Glover & Rousseau, 2007; C. Smith, 2004; Turia, 2004), despite population statistics following relatively similar historical trends (see Le Grice, 2014). However, it is likely that 'family size', measured by an individual women's total fertility rate may be conflated with 'whānau size' that is defined in relation to the wider contribution a woman (or man) might make to their nieces and nephews, grand children/nieces/nephews. From this basis point, we can read this participants' account in context, and understand how a richer and wider whānau context can provide an immersive and educative experience supporting the norm, of bearing children. With greater children around in a whānau context, there is greater accessibility to learning about parenting through 'hands on' experience caring for younger siblings and those in the wider whānau (Tangohau, 2003). The potential visceral and affective pleasures associated with learning about babies, children, and parenting was explained by the following participant:

Because we were so young you know, [holding my younger brother] was fascinating (Jade: mm) and soft and lovely and we really loved them. Mm (Jade: Yeah, yep). Yeah we really did… We were allowed to hold and you know watch (Jade: yeah) that was enough… Oh it was lovely, it was, it made you happy - it made me happy to hold my little brother (Jade: yeah yeah) mm and he was a dear little boy with this, the happiest little face you could imagine (laughing) and we all thought he was lovely (laughing) [woman, 50s, urban].

For this participant with two children, her memory of being a child, holding her baby brother, and feeling aroha, reinforced the positive and special quality of babies and children. Contemporary literature suggests Māori view children favourably, as a gift (Hiroti, 2011), one that enhances a person's mana (a spiritually and socially contextualised notion of power) (Glover et al., 2008). Having these opportunities may be not be limited to Māori, however the connection of these experiences within a broader context of close extended family networks, and interconnection with further positive notions of whanaungatanga, may inform a mundane notion that children are a positive feature of everyday life. The norm of childbearing, and notion of children as integral to everyday lives, was illustrated by participants' descriptions of experiences learning to care for and raise children with wry humour and laughter, illustrating the specialness of it by emphasising how many children they had contributed to raising, or from an early age.

Aroha, tiakitanga, wairua

In addition to providing a system of support for children and a ready-made network of relationships to aid with developing identity and interactions, the dynamics of whanaungatanga ran deeper, providing a positive context for experiencing and teaching aroha, tiakitanga (guardianship,

protection), and wairua (capacity for spirituality).

[I've] been brought up in a family, whānau environment with aunties and uncles everywhere. It was good. I don't think I ever had a bad day. I don't think any of our family did. There was always food on the table, there was always love and care. It was choice (awesome). There were parties but they were singing parties [with] guitars and that. They were really good, we used to look forward to them [man, 50s, rural].

This participant, a parent of two children, spoke about the joy and fun of his childhood, growing up in the context of a closely connected whānau. Whānau provided aroha and manaakitanga (the process of respecting someone's mana by support, care, generosity, hospitality) marked by the sharing of food, love, care, and entertainment. Theories of attachment developed in European contexts emphasise the importance of the primary caregiver providing a stable and reliable template for children to understand themselves as loved and valued (see Bretherton, 1992 for a review of Bowlby and Ainsworth's work). In a New Zealand Māori context, my participants' accounts attest to a need for attachment patterns to be considered in a broader whānau context. With many people available and engaged in a whānau, circumstances that may be considered 'whānau wealthy' (Cargo, 2016), there may be greater resourcing to provide tiakitanga to ensure children are protected, kept safe (C. Jacobs, personal communication, 12th June 2013), nurtured and fed, to ensure they do not go hungry (Pihama, 2014). Effective tiakitanga is crucially underscored by the unconditional love and commitment (Jenkins & Harte, 2011) that is integral to binding whānau together (C. & P. Jacobs, personal communication, 11th April 2011; Pere, 1994). Speaking about growing up in a whānau context of strong relational bonds, another participant described what he wanted his three children to experience.

Jade: What experiences did you have as a child that you wanted your children to experience?

Participant: (3.0) Love (2.0) there was always a lot of that around especially growing up like we did. There was always people over so you always got someone to play with, yeah. Everything. I hope my kids have everything, get the best out of life that they possibly can… What I - what I reckon is, is that like the love you give to your kids they'll give to someone else and so on and so on [man, 20s, urban].

Contemporary accounts of whanaungatanga have noted its function in teaching children how to care for, and love, others (Jenkins & Harte, 2011; Tangohau, 2003). This participant constructs a continuous cycle of love reverberating across the generations, enacted through experiences being around, and spending time among, relatives. This man described the importance of being a recipient and bearer of love, congruent with contemporary understandings of Māori men's identities as relationally constructed, interdependent, and oriented to affection and intimacies (Rua, 2015). Another account, from a participant with many children, similarly presented aroha and wairua as infusing extended family relationships due to strong whānau bonds and connections.

[Speaking about his daughter's sense that something

was wrong with her sister overseas, going to visit her and finding her isolated and unhappy]: The wairua side was very strong. This one kept picking up vibes [about her sister overseas]. 'It's not good. I don't like it and I'm going.' (Laugh) Come hell or high water she put it in, her time at [work], off she went. Oh yeah those sorts of ah things we have and those sorts of things we fix up ourselves because of the strong ah thing from the whānau [man, 70s, urban].

This participant describes an acute sensitivity to wairua, a connectedness, that enabled his daughter to manaaki (respect someone's mana by support, care, generosity, hospitality) and tiaki (guard, keep, protect) her whānau. The approach taken within this participant's whānau to nurture and acknowledge the wairua of their children is consistent with contemporary Māori understandings that the development of children's wairua is important (Cargo, 2016; Jenkins & Harte, 2011). Wanting to recreate the nurturing emotional environments characterised by the love they had experienced as children was a central feature of these experiences of whanaungatanga. Contrary to popular Pākehā discourse and representations of Māori men as problematic, abusive and risky, within mātauranga Māori pertaining to whanaungatanga, the predominant articulated practices of these men centred on teaching children how to love and care. This is consistent with wider contemporary literature that situates whanaungatanga processes as central to men's identities as relationally interconnected beings (Rua, 2015). The theme, aroha, tiakitanga, and wairua illustrated some of the deeper dynamics associated with whanaungatanga among Māori whānau. Whānau is a learning context for unconditional love, attachments that bind people together through commitment and protection of one another, the development and strengthening of wairua sensitivity that reverberates across past, present, and future generations of kinship networks.

Whānau support

Among the diverse and rich networks that support the capacity for whānau to be a learning context, whānau support for parents was a normalised feature of everyday life. As this participant describes:

So I went straight from high school to uni[versity] because I thought well what else am I going to do? (Laughing)... so I had my son in the first semester and then I came back and... my mum had him at [Māori oriented workplace] with her which was you know which was great because he was in a whānau orientated environment and I'd feed him, express milk and go off to my class because Nanny would have him and then I'd come back and take him again... At the time it was just like mm didn't think anything of it [woman, 20s, urban].

For this participant, a woman who became a parent when she was at university and then had another child, having her mother's support to look after the baby while she attended university lectures meant her plans for education were not disrupted. The location of her mother in a whānau-oriented environment, where children were present and part of the routine context, made the introduction of her children a relatively unobtrusive possibility. In neoliberal discourse, unplanned, early childrearing is often considered to indicate 'poor reproductive choices', the ideal being to 'wait' until education is finished and a career established (Breheny & Stevens, 2007; Macleod, 2011; Wilson & Huntington, 2005). Contravening these neoliberal assumptions, this participant was supported by her whānau in her ambitions to be a mother and a student working towards a career. While Māori reproductive actions and choices are often pathologised (Le Grice, 2014), the mātauranga evident here supports the notion that community support for young childbearing functions to minimise/obliterate negative outcomes for mother and child (Macleod, 2011; Rawiri, 2007; Rimene, Hassan, & Broughton, 1998).

Whānau support can take many forms, and may include a more intensive level of support, known as atawhai (to show kindness to, raise, or adopt temporarily among relatives) (C. Jacobs, personal communication, 12th June 2013). One participant, a mother of four children, described: "*because she was working and then I felt that she wasn't capable of looking after her daughter... I brought her and my granddaughter up together and we stayed together. I nurtured her through... bringing her up with... her mother there [woman, 50s, rural].*" As grandmother to the child, this women described leading the care arrangement, her lived experience of atawhai. The practice of atawhai has been traditionally favoured to Anglo-European forms of adoption, as it provides an enriching environment for the child, who is able to maintain everyday contact with the parents alongside whānau who assist them to raise the child (C. Jacobs, personal communication, 12th June 2013). Resourced through mātauranga Māori, this woman articulated a solution to an issue of a child's wellbeing that did not require the involvement of courts or procedures to remove the child from the care of their parents.

The practice of whāngai offered an even more intensive level of whānau support for young Māori parents:

One was my um son's girlfriend... I actually went and pleaded with her to keep the baby and um (2.0) and when the baby's born I'll take it... I said 'all you have to do is carry this baby when the baby's born I'll come and take it off your hands. You don't have to see it, you don't have to do nothing. As soon as it's born I'll take it and bring it home and it can be our baby'. And um I was prepared to do that but she didn't want to have a bar of it... So even though I'm heartbroken and I often think about this child ... and I think well we'd have a mokōpūna that age, a teenager, and I I think of that and the lost child that we you know I believe that child's up in heaven somewhere, you know, and um I just think it's very sad. Very sad [woman, 50s, urban].

This mother, who was anticipating a first mokōpūna, described the tensions associated with an offer to whāngai the child and her son's girlfriend's decision to seek an abortion (see Jade Le Grice, 2014 for further discussion about tensions associated with individual choice, whanaungatanga, and protection of new life in relation to Māori and abortion). Describing the process of whāngai as an assumed pattern of practice, this participant articulates the mātauranga Māori

associated with child care practices as an everyday concept. Whāngai is broadly considered as a traditional framework for whānau wellbeing (Pihama, 2014), likened to a Māori process of adoption where the child is raised by another member of the whānau, and is often considered as a possible solution for people who are not in a position to care for a child (Jahnke, 2002; C. Smith, 2010). Demonstrated in this account, the practice of whāngai is situated within a broader cultural context where new life is considered in relation to the wellbeing of the wider whānau (Turia, 2007), and all generations take responsibility for ensuring that (Pihama, N/D). The mātauranga Māori associated with whānau support contravenes dominant colonising and racist deficit-focused assumptions about whanaungatanga *and* neoliberal imperatives to delay reproduction, premised on individualised, nuclear patterns of family life. Wider whānau support made possible within a flourishing whanaungatanga dynamic, allowed support for parents through assistance with childcare relief, living with the parents to provide more ensconced support (atawhai), or taking on greater guardianship responsibilities (whāngai). This facilitated whānau members, who had become parents in their accomplishments and aspirations, minimising negative outcomes for mother and child.

Discussion

Whanaungatanga is a concept that has long been invalidated through everyday colonising dynamics (see Le Grice, 2014 for a nuanced account of this), New Zealand psychological research, theory, practice and institutional policy (see Kirk, 2017). The present research sought Māori articulations and reflections of everyday domestic experiences among whānau, with a view to validate, deepen and develop psychological knowledge, mātauranga Māori, in this domain. Although this knowledge is holistic and interconnected, for ease of communication we focussed our analyses on four themes (i) diverse and rich networks; (ii) children as integral to everyday lives; (iii) aroha, tiakitanga and wairua; and (iv) whānau support. Māori participants in this study (women in particular), spoke about diverse and rich networks among their whānau that comprised a rich learning resource for their children's development. These articulated practices of whanaungatanga created a sophisticated tapestry that provided a resource for children's identity development, be supported to learn relational skills, and develop trust and a sense of belonging. This psychological context was premised upon, and facilitated by, enduring key early relationships that operated as a source of resilience, through tuākana and tēina, grandparents, and those related through whāngai. With children forming an integral part of everyday life, whanaungatanga provided a live context for gaining experience with children, allowing exposure to mātauranga Māori, the practices of raising and caring for children, and developing mastery in these skills within home spaces, with positive valence.

Specific mātauranga Māori pertaining to care and creating a nurturing environment – aroha, tiakitanga, and wairua - were implicitly and explicitly taught by men and women in the context of whanaungatanga, experienced and learned by children they nurtured, in cyclical fashion. In a process of cultural knowledge exchange, the mātauranga described by participants in the current study was also intergenerationally demonstrated, communicated within an environment of love and positive affect, and taught to the children in their lives. Teaching unconditional love (indicated in the title of this paper), was powerfully configured as enduring through relationships that last a lifetime through strong whānau bonds, opening sensitivity to one another's wairua, creating opportunities to support one another in difficult situations, and pass on to future generations. The normalcy of care for children beyond the biological parents through practices of everyday support, atawhai and whāngai, enabled intergenerational and flexibly oriented whānau support that could be tailored to suit the needs of individual parents and support them in their pursuits. Rather than being considered individuals, solely responsible for making their way in the world, participants described a relational nexus where they were supported in their goals for individual achievement in education and career by a background of whānau involvement and investment in theirs and their children's lives.

Mātauranga Māori pertaining to whanaungatanga was clearly evident in descriptions of the everyday lives and practices of Māori who are not deemed 'experts' in mātauranga or tikanga Māori. As the second quoted participant mentioned, these are not regarded as 'high morals'; nor complicated academic theories couched within inaccessible language. Participants in the current study, many of whom were not fluent in te reo Māori, demonstrated articulations of this mātauranga in English, that was connectable to cultural common sense understandings anchored in te reo Māori (see Le Grice & Braun, 2016 for the pūrākau study that assisted us in this understanding).

Participants in this study described and conveyed this mātauranga Māori in a down to earth, pragmatic, (and funny!), manner – making the interview interaction an enjoyable process. Participants overwhelmingly understated descriptions of their knowledge by the use of prefaces such as "*what I – what I reckon is,*" or finishing in a way that assumed mutual understanding "*but you know that's how the whānau was brought up.*" Participants also understated articulations of their lives that were divergent from dominant understandings about Māori "*so, yeah, he used to look after us a lot,*" and the central importance of children to their lives "*but um yeah they mean everything eh.*" The interviews were also filled with laughter, through delight in recollections "*we all thought he was lovely (laughing)*", explaining sheer determination "*'It's not good. I don't like it I'm going.' (Laugh) Come hell or high water…*" or outlining the pragmatics of a situation "*well what else am I going to do? (Laughing).*" Jokes conveying extremes were also made with a deadpan expression "*don't touch that guy I wouldn't let him look after my dog!*" These rhetorical strategies surrounding accounts of mātauranga Māori demonstrate how an understanding of this is not solely reserved for an elite few, excluding some or most Māori from a knowledgeable position. Mātauranga Māori is not a shiny silver tea set that only a few individuals with a royal bloodline are able to access from a locked cabinet that enables elites to maintain tradition and practices from a bygone golden era. Continuing this metaphor - mātauranga Māori is the much loved, dependable, robust

and diverse set of everyday kitchenware that can be found in Māori homes, drawn on in the context of love and laughter to feed and nourish people.

Developing Mātauranga Māori, as articulated from the vantage points and perspectives of Māori *women*, offers redress from historical misrepresentation of mātauranga Māori by western ethnographers who sought accounts from Māori men, considered to be the 'natural experts' on Māori society (Mikaere, 2010; Simmonds, 2011; L. Smith, 2013). This study contributes to mana wāhine objectives that seek to rectify the incorrect colonial notion that Māori women are less valued in cultural life (Pihama, 2001). Here, we have explored mātauranga Māori associated with whanaungatanga, a domain typically considered 'domestic' and thereby women's work. In doing so, we *also* show mātauranga Māori associated with whanaungatanga as firmly ensconced within the repertoire and practices of Māori men. The analysis has provided space to explore the everyday and ordinary practices of Māori men's and women's lives, their continuing richness, and considerations for raising children: how to produce an emotionally and socially enriching experience for children's development; how to resource within whānau to provide a supportive context that enables care for children, and conducive circumstances for their parents' success.

On the basis of this work, we would like to ask psychologists, researchers, and policy makers, previously unfamiliar with Indigenous psychologies to reflect on Māori they encounter, theorise, and make decisions about, in their work lives as potential bearers of mātauranga Māori. To reflect on how Māori men are cognisant of creating a nurturing environment for the children in their whānau, contrary to limited representations and expectations of Māori men as emotionally impoverished, deviant, and of risk to children (Rua, 2015). To reflect on how Māori women enact and practice a down to earth expertise and wisdom, handed down across generations, and characteristic of an inherent strength.

Raising children, as Māori, is a huge task within a colonising context, particularly when children are very likely exposed to individual, structural and institutional racism (Le Grice, 2014), presenting complex challenges and invalidations to be overcome. Indeed the current government proposal to de-prioritise the placement of Māori children in whānau care, in the wake of circumstances of violence and trauma, adds an institutional overlay to social issues wrought by colonisation – further marginalising, invalidating and imposing harm to Māori people whose lives are interpellated through mātauranga Māori. We need to reaffirm the significant undertaking Māori women (and men) are tasked with when raising children, attending to their developmental, social, and emotional needs. By attending to mātauranga Māori - our wisdom, strength and resilience within harsh colonising conditions (past and present) – we can challenge and resist deficit-focussed representations of Māori. Sourcing answers to the challenges faced by whānau and communities among ourselves allows us to reclaim the power, agency, will, and determination to guide our aspirations, claim our tino rangatiratanga (sovereignty), and control our own destinies.

Glossary

Aroha - affection, sympathy, charity, compassion, love, empathy

Atawhai - to show kindness to, raise, or adopt temporarily

Hapū/hapu - sub tribe, to be pregnant, conceived in the womb

Iwi - tribe, strength, bone

Mana - a spiritually and socially contextualised notion of power, associated with the concept of tapu

Mana wāhine - an approach that privileges Māori women's perspectives and analyses

Manaaki(tanga) – respect/the process of respecting someone's mana by support, care, generosity, hospitality

Māori – Indigenous people/person of New Zealand

Mātauranga Māori - education, knowledge, wisdom, understanding, skill pertaining to Māori

Mātua rautia - multiple parents

Mokōpūna - grandchild, descendant - child or grandchild of a son, daughter, nephew, niece

Pākehā – New Zealand European people/person

Pūrākau – Personal and cultural narratives that are encoded with a rich resource of mātauranga Māori

Tapu - the restricted and controlled access to other human beings (Tate, 2010)

Te reo Māori - Māori language

Teina/tēina - younger sibling/s of the same gender.

Tiaki(tanga) – to guard, keep, protect/guardianship, protection

Tino rangatiratanga – sovereignty

Tuakana/tuākana - elder sibling/s of the same gender

Tūpuna - ancestors, grandparents

Wairua – capacity for spirituality, soul, the spirit of a person which exists beyond death

Whānau - extended family, also means to be born or give birth

Whanaungatanga – relationships, connection, and practices among a (family) collective

Whāngai – to raise another child as your own, also means to nourish or feed.

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Overview of assessment and treatment of non-suicidal self-injury among adolescents

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Non-Suicidal Self-Injury (NSSI) is the direct deliberate destruction of bodily tissue, which is not socially sanctioned, and occurs without suicidal intent. NSSI is a common behaviour among young people within Aotearoa New Zealand, and internationally. About one-third to half of secondary school students have engaged in NSSI (Wilson et al., 2016; Garisch & Wilson, 2010), and whilst the figure among adolescents who attend mental health services in New Zealand remains unknown it is likely to be considerably higher. In spite of being a common behavioural concern among mental health clients, there is little empirical research on effective treatment. In particular, there is a paucity of research into effective treatment of adolescent NSSI; a gap that requires remedy given the high prevalence of NSSI and its association with many subsequent maladaptive outcomes, including suicide. The current paper provides background information on NSSI, information on the assessment of NSSI such as what to include in an assessment interview and possible psychometric instruments, and outlines common strategies and challenges in treatment with adolescents.

Keywords: NSSI, Self-Injury, Assessment, Treatment

Non-suicidal self-injury (NSSI) is the direct, purposeful damage to body tissue, without suicidal intent. These behaviours are of low-lethality (e.g., cutting), and are not condoned by a person's cultural group. This article is intended as a summary of adolescent NSSI assessment and treatment, and is specifically written for a New Zealand audience, although other readers are likely to find the content useful. This article is intended for a broad range of readers, including school nurses, pastoral care staff, doctors, crisis workers, and mental health clinicians.

Background to NSSI

Prevalence

Historically, there has been little data on the prevalence of NSSI, with larger data sets only becoming available in the late 1990's. Prevalence data prior to this time regarding self-injurious behaviour primarily drew from adult hospital admission rates (where only specific cases will present, as most people do not seek medical attention for their self-injury (Baetens, Claes, Muehlenkamp, Grietens & Onghena, 2011)) and specific samples (i.e., the military). These prevalence rates were usually based on self-harm behaviour, rather than NSSI. Self-harm is a broader term inclusive of suicidal and non-suicidal self-harm behaviours, including self-poisoning. In this paper we discuss NSSI specifically. We use the term 'NSSI' and 'self-injury' interchangeably, for ease of readership.

Adolescents appear at greatest risk of engaging in NSSI. This behaviour typically begins in early adolescence, with prevalence rates dropping sharply in early adulthood (Plener, Schumacher, Munz, & Groschwitz, 2015). Research indicates that a significant proportion of young people in New Zealand and internationally engage in NSSI. Self-report survey studies conducted within the Wellington region indicate that between one fifth and one quarter of community sample adolescents aged 12 – 15 have engaged in self-injury at some point (Wilson et al., 2016), with this figure increasing to up to 50% of adolescents by school leaving age (Garisch & Wilson, 2015).

As may be expected, adolescents accessing mental health care appear to have higher prevalence rates of NSSI. International rates of NSSI among clinical adolescent samples indicate a prevalence of 40% or higher (DiClemente, Ponton, & Hartley, 1991). Within New Zealand clinical settings, analysis of file information of clients within an Auckland-based Child and Adolescent Mental Health Service found that 48% of presenting adolescents reported lifetime engagement in deliberate self-harm (a broader term encapsulating both suicidal and non-suicidal self-harm; Fortune, Seymour & Lambie, 2005). However, it is important to bear in mind that as Fortune and colleagues' (2005) study was based on analysis of file information, self-harm was not necessarily the presenting problem and therefore likely underestimates prevalence in this group. As such, rates of NSSI among adolescents in New Zealand mental health services remains unknown, however the prevalence is likely to be significantly higher than in community samples. Given this, many youth who present to services are likely to either have a history of NSSI or currently engage in the behaviour, making it an important part of assessment and treatment planning.

NSSI and comorbid difficulties

NSSI is associated with many mental health problems including mood disorders, anxiety disorders, eating disorders, trichotillomania, and personality disorders (Jacobson & Gould, 2007; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006), most notably borderline personality disorder (Brickman, Ammerman, Look, Berman & McCloskey, 2014). Some individuals who engage in NSSI will not have a diagnosable mental health disorder, whilst others will have multiple diagnoses (Wilkinson, 2013); presentations of NSSI are highly heterogeneous.

Research indicates that NSSI is associated with increased

risk of suicidal behaviours, and this risk increases with having engaged in a greater number of different types of NSSI (Nock et al., 2006; Turner, Layden, Butler, & Chapman, 2013). One of the functions of NSSI identified in the Inventory of Statements about Self-Injury (ISAS; Klonsky & Glenn, 2009) is 'Anti-Suicide'. This refers to when NSSI is used to manage and avoid urges to suicide. NSSI may provide a mechanism for managing intolerable emotional distress in the moment, including suicidal ideation. Paradoxically, NSSI may lessen barriers to suicidal behaviour over time, by habituating individuals to the mechanisms that may operate to dissuade someone from suicidal behaviours, such as pain and the sight of blood. Hence whilst NSSI may be utilised as a means of avoiding suicidal behaviours *in the moment*, it increases *subsequent* suicide risk. More research is required to better understand the relationship between NSSI and suicidality.

NSSI is also linked to worsening emotion regulation over time (Wilson et al., 2016), suggesting that there is something about engaging in NSSI that is likely to lead to poorer ability to manage emotional distress. Although research in this area is in its early stages, this is likely due to several reasons. Ongoing engagement in NSSI means that the person has less practice at utilising other alternative, healthier coping strategies (e.g. , seeking social support). Additionally, engaging in NSSI may reduce an individual's tolerance of emotional distress as they have begun to avoid the scenarios that trigger their NSSI (which are likely to be scenarios that illicit strong emotions). Through avoidance of emotion-evoking stimuli, the individual becomes more sensitive to these stimuli (i.e., dishabituation). NSSI is also linked to loss of social connectedness over time (Burke, Hamilton, Abramson, & Alloy, 2015). It is within close social relationships that adolescents develop and engage in emotion regulation strategies such as seeking social support, and expressing their distress to others (Morris, Silk, Steinberg, Myers, & Robinson, 2007). These factors indicate that NSSI impacts negatively on an individual's social and emotional functioning.

NSSI disorder: Area for further study

Prior to the DSM-5, NSSI featured primarily as a diagnostic criterion for borderline personality disorder. However, there is good reason to think that NSSI may occur in the absence of this particular personality disorder (see Brickman, Ammerman, Look, Berman & McCloskey, 2014; Glenn & Klonsky, 2013). A non-suicidal self-injury diagnosis was proposed in the development of the most recent Diagnostic and Statistical Manual of Mental Disorders, the DSM-5 (American Psychiatric Association, 2013). The proposed diagnostic criteria includes having engaged in five or more episodes of NSSI in the past year, where NSSI functions to provide relief from interpersonal difficulties or unwanted thoughts or emotions, and the behaviour negatively impacts on life. However, it currently falls under an area for further study. Research investigating the utility of this diagnosis suggests that it would have merit in distinguishing a group of clients with more severe psychopathology as compared to clients who engage in NSSI but do not meet the NSSI diagnosis, and that the proposed diagnosis identifies a subset of clients distinct from borderline personality disorder (e.g. see Zetterqvist, 2015).

Theoretical models of NSSI

While NSSI can serve a variety of interpersonal and intrapersonal functions (Klonsky & Glenn, 2009), it is predominantly considered a disorder of poor emotion regulation. The most widely-used model of NSSI is the Experiential Avoidance Modal (EAM) developed by Chapman, Gratz and Brown (2006). The EAM views NSSI (and self-harm; a more inclusive term that does not distinguish between suicidal and non-suicidal self-injury) as an emotional avoidance behaviour that occurs in response to strong emotions evoked by a stimulus. The stimulus can be internal (e.g., a painful memory or negative automatic thought) or external (e.g., an argument with a loved one), and the emotional response can be widely varied (e.g., anger, sadness, shame). The individual is made vulnerable to using NSSI as an emotional avoidance strategy due to one or more factors; 1. Experiencing emotions at a high intensity, 2. Underlying difficulty in self-regulation when experiencing intense emotions, 3. Paucity of skills to regulate their emotions, and/or 4. Poor ability or low threshold for tolerating distress. NSSI becomes negatively reinforced as it quickly and effectively provides an escape from unwanted emotional distress. Over time the strong link between NSSI and emotional relief leads to this behaviour becoming the preferred method of regulating emotional distress, potentially to the exclusion of other coping strategies. This means that the individual may become increasingly reliant on NSSI over time, and any other coping strategies they have may fall into disuse and become less effectively implemented and/or forgotten (see Chapman et al., 2006). The EAM is useful to consider in assessment and treatment, as it identifies areas for building client skills to off-set risk off NSSI, and highlights the fact that NSSI is reinforced and can become habitual over time making early identification and treatment of the behaviour especially important.

Nock and Prinstein (2004) have developed a functional model of NSSI, whereby NSSI is seen as being reinforced via positive or negative stimuli in the interpersonal or intrapersonal environment. Specifically, NSSI is seen as reinforced (and maintained) via one of four contingencies; automatic-negative reinforcement, automatic-positive reinforcement, social-negative reinforcement, or social-positive reinforcement. Automatic-negative reinforcement is when self-injury is functioning to take away a negative internal state (e.g., to reduce a negative emotion). Automatic-positive reinforcement is when self-injury functions to create an internal state (e.g., providing an internal experience when the person otherwise feels numb). Social-negative reinforcement is when NSSI serves to remove an unwanted social stimuli (e.g., allows the person to avoid an unwanted social interaction). Social-positive reinforcement is when NSSI functions to create a desirable social response (e.g., encourages care and attention from others). Empirical data from adolescent inpatients receiving assessment and treatment for NSSI indicates that NSSI indeed does serve these various functions, most commonly automatic-negative reinforcement (Nock & Prinstein, 2004). These various types of functions are useful to bear in mind in assessment and treatment. An individual is more likely to overcome NSSI if the functions of their NSSI are readily understood, and they

are supported to finding alternative healthy ways to get these functional needs met.

Assessment of NSSI

There are several factors to bear in mind when conducting assessment of NSSI. Early identification of NSSI would be supported by having screening of NSSI at all intake assessments. If a self-report survey is utilised for this purpose (e.g. within a screening questionnaire given to clients prior to engaging in a service), it is more effective to ask about multiple methods of NSSI, rather than a single item question. The former strategy yields much higher prevalence rates than the later single-item question (see Muehlenkamp, Claes, Havertape, & Plener, 2012, for a discussion of prevalence associated with different measures). When a referral letter indicates NSSI is a presenting problem, then utilising a self-report measure for screening purposes may be worthwhile. However, bear in mind that NSSI is often a very secretive behaviour, and can be associated with shame, embarrassment, and/or a fear of being stereotyped as manipulative or attention seeking. Given these constraints, self-report measures may not be completed honestly, or may be seen as invasive by some clients.

There are several self-report measures available (see Klonsky & Lewis, 2014, for a review of assessment instruments). The Deliberate Self-Harm Inventory (DSHI; Gratz 2001) has been extensively used in research, and asks respondents how frequently they have engaged in 17 different forms of NSSI, and several additional questions (e.g. whether they required medical attention for any episode of NSSI). The Functional Assessment of Self-Mutilation (FASM; Lloyd, Kelley & Hope, 1997) and the Inventory of Statements About Self-Injury (ISAS; Klonsky & Glenn, 2009) both include a checklist of 'common' types of self-injury, as well as a list of functions for self-injury and respondents indicate how much each function applies to them. Both include several other clinically useful questions, such as the length of time between contemplating NSSI/urge to self-injure and engaging in the behaviour, which provides information on impulsivity. The Ottawa Self-injury Inventory (OTI; Cloutier & Nixon, 2003; available free: http://insync-group.ca/~insyncgr/csi2/wp-content/uploads/publications/OSI-2015-v3.1-Functions.pdf) is a thorough measure of NSSI, and includes items on historical and current NSSI behaviour, functions of NSSI, addictive features of NSSI, motivation to change the behaviour, and items on suicidality. A screening measure is likely to provide guidance for an assessment interview, but certainly does not provide all the information needed for a client formulation and treatment planning. A face-to-face assessment interview will yield more nuanced information, and provide non-verbal cues regarding any hesitancy to discuss NSSI.

A thorough assessment requires asking a breadth of questions during an assessment interview. These include:

- Gaining a clear history of when the NSSI began and under what context (i.e., common antecedents);
- Whether there has been a period of abstinence from NSSI behaviour (and whether urges to engage in NSSI continued during this period and how they were managed);

- What kinds of NSSI the client engages in (and whether the different types have distinct antecedents and/or functions) as well as implements commonly used to do so (including access to these);
- The location and time of day when a client typically engages in NSSI;
- Where a client chooses to engage in NSSI on their body, and what this means; e.g., in places that are easy to conceal so as to avoid questions;
- Whether clients engage in NSSI in private where they are unlikely to be caught or when there are people around who may witness the NSSI;
- Whether alcohol or substance use accompanies the self-injury;
- Whether the NSSI occurs in a dissociative state;
- How wounds are managed, and what this means; e.g. treating wounds to provide self-care;
- Whether the client discloses their NSSI to a confidante after the episode;
- The emotions, thoughts and behaviours that occur after the NSSI; e.g., intense feelings of shame; negative self-talk, and
- The consequences associated with NSSI

Given that NSSI is most commonly reported among clinical populations, an assessment interview also needs to assess for comorbid psychopathology.

A functional behavioural analysis will provide very useful, and potentially essential, information, and it is helpful to orient clients to this mode of information gathering early on (Linehan, 1993; see also Rizvi & Ritschel, 2014). This involves the following:

- Inviting the client to detail a recent episode of NSSI. It is helpful to outline a 24 hour period, beginning with the day before the episode of NSSI and ending several hours after the episode of NSSI. This allows for distal and proximal antecedents to be identified, as well as immediate and more distal consequences.
- Identifying and exploring the physical (e.g., low energy; sleepless night), behavioural (e.g., choosing to skip a meal, not taking medication), interpersonal (e.g., an argument with a loved one), intrapersonal (e.g., particular memories), emotional (e.g., loneliness) and cognitive (e.g., negative automatic thoughts) antecedents of the self-injury.
- Identifying the frequency, duration and intensity of the self-injury behaviour.
- Identifying the interpersonal and intrapersonal, short term and long term, consequences of the self-injury.

A functional behavioural analysis not only provides the clinician with invaluable information towards a formulation, treatment and ongoing change, it also provides the client with insights into their own behaviour that they may otherwise not have considered. Hence the functional analysis provides an avenue for the client to make changes by eliminating or reducing risk factors for an episode of NSSI, changing their responses to antecedents of their NSSI behaviour, and

identifies opportunities to practice new skills learnt in therapy. A functional analysis also provides opportunity for the therapist and client to explore emotion in session, as the process often elicits strong emotion through the detailed discussion of the client's memory of the NSSI episode. This heightened emotion offers the opportunity to practice emotion regulation skills, whereby the therapist coaches the client to respond to their distress in a healthy and adaptive way. This in-session coaching in emotion regulation is commonly practiced in individual Dialectical Behaviour Therapy (DBT; Linehan, 1993) sessions with clients who self-injure.

Linehan (1993) identifies three critical requirements for utility of the behavioural analysis process: collaboration between client and practitioner involving concurrent use of strategies such as validation; sufficient detail to inform understanding of the life course of the entire NSSI episode; and appreciation that decisions based on the outcome of the analysis may be flexibly updated as necessary.

Assessment and treatment requires sensitivity to the client's experience of particular emotions, especially guilt and shame. Guilt is potentially a useful emotion, as it can motivate people to act in a way that repairs a relationship or transgression. In contrast, shame is often not a useful emotion, and rather than spurring on functional behaviour, can lead people to turn inward in their self-deprecation and self-criticism. Shame can lead to over-arching evaluations of the self as bad and immoral, and is linked to self-hatred (Gilbert, 1998). Brown, Linehan, Comtois, Marray and Chapman (2009) found that non-verbal shame behaviours among participants in a clinical research trial for woman with borderline personality disorder predicted subsequent suicidal and non-suicidal self-injurious behaviour. These non-verbal shame behaviours were described as participants moving their eyes or head downwards, and were assessed by an observer during an interview where participants were asked about past self-harm. Participants who displayed more of these non-verbal shame behaviours were more likely to engage in later self-injurious behaviour, and to do so sooner (Brown et al., 2009).

Shame is particularly pertinent to NSSI for several reasons. First, NSSI can function to enact self-punishment, expressing/releasing shame and self-hatred. Second, self-injury is often a secretive behaviour to avoid negative reactions and rejection from others (Fortune, Sinclair, & Hawton, 2008). This secrecy can be linked to feelings of shame and wrongdoing. Acts of self-injury can be triggered by experiences of rejection or failure, which can be linked to shame (see Brown et al., 2009 for an overview of the relationship between shame and self-harm). Models of treatment for NSSI (see below), including DBT (Linehan, 1993) and Emotion Regulation Group Therapy (ERGT; Gratz et al., 2014), make specific mention of shame. Specifically, clients are encouraged to consider whether their shame is functional, and whether their shame may originate from unhelpful judgement regarding themselves and their emotions. Shame may be an important trigger for an individual's self-injury, and should be considered when conducting a functional behavioural analysis of self-injury (either as an antecedent to the behaviour and/or a consequence of self-injury that perpetuates the behaviour).

Treatment of NSSI

Importance of the therapeutic relationship

The therapeutic relationship is a very significant facilitator of change in intervention for NSSI (and indeed all psychological treatment; Walsh, 2006; Levitt, Butler, & Hill, 2006). Validation is an important, and consistent, part of treatment for NSSI. Through validation the clinician acknowledges the client's experience as understandable within the context of their experience (Linehan, 1997), making disclosure and self-acceptance (the antithesis of shame and embarrassment) more attainable. As well as validation, the clinician utilises other strategies within the relationship such as a non-judgemental stance (demonstrating acceptance of the client, and creating a space for full disclosure), and radical genuineness (taken from DBT, this involves the clinician stating their emotional reaction to the client's experience as they would to a colleague or family or whānau member, where appropriate, to emphasise the clinician's belief in the client's worth).

Models of treatment

There is a paucity of empirical research into the treatment of adolescent NSSI. In fact, Washburn and colleagues (2012 p1) state that "few psychotherapeutic treatments have been designed specifically for NSSI, and no treatments have been evaluated specifically for the treatment of NSSI among adolescents." A recent review of available treatments concluded that there is presently no well-established treatment for adolescent NSSI (Glenn, Franklin, & Nock, 2015). Within New Zealand mental health services, NSSI is typically treated using DBT (Dialectical Behaviour Therapy; Linehan, 1993) techniques, CBT (Cognitive Behavioural Therapy) and/or family therapy. Full DBT (Linehan; 1993) includes (at least) weekly individual therapy, participating in a weekly skills group for a minimum of six months (for an adolescent group), family therapy (usually fortnightly), and a clinician consult group. Hence it is a large commitment from mental health services and clients and their families, and is usually reserved for more severe clients.

Treatment outcome data from DBT clinical trials indicates that DBT is effective in reducing adult self-injurious behaviour, particularly for clients with borderline personality disorder. However, trials with adolescents are limited by small sample sizes, and a paucity of randomised control trials. Although there is preliminary evidence to suggest that DBT for adolescents (DBT-A; Rathus & Miller, 2002) reduces NSSI behaviour, this is based on small samples (e.g., *N*=12; Fleischhaker et al., 2011). Other studies of DBT-A are quasi-experimental and focus on reduced suicidality and hospital admissions rather than reduction in NSSI (e.g., Rathus & Miller, 2002).

Many New Zealand mental health services have conducted their own variant of an emotion regulation skills group which incorporates components of third wave therapies, including DBT and mindfulness. Internationally, Gratz and Tull (see Gratz, Dixon-Gordon, & Tull, 2014) have developed a 14-week skills group programme for adults who self-injure, Emotion Regulation Group Therapy (ERGT), which draws on DBT, Acceptance and Commitment Therapy (ACT) and elements of Emotion Focussed Therapy. ERGT delivers skills in increasing

emotional awareness (through psychoeducation), changing a client's relationship with their emotions (by encouraging emotional acceptance rather than fighting to change emotional experience), increasing willingness to experience strong emotion rather than avoid it so as to lead a fulfilling life, and having clients be mindful of responding to emotional stimuli in a way that is in accordance with their values. ERGT has demonstrated effectiveness with adults (Gratz et al., 2014, Gratz, Levy & Tull, 2012).

Family therapy for adolescent NSSI may be indicated, depending on a client's formulation and the willingness of the client and family or whānau members to engage in family work. Family therapy for NSSI typically includes psychoeducation regarding NSSI (e.g., the emotion regulation function of NSSI and the negative reinforcement cycle; related to the EAM (Chapman et al., 2006) discussed earlier), identifying antecedents to NSSI within family and whānau interactions and how these can be managed to reduce NSSI behaviour, re-aligning family or whānau roles into an appropriate structure (e.g., where a parent and child have become aligned and enmeshed to the exclusion of the other parent), fostering appropriate emotional expression within family or whānau interactions and improving communication (e.g., see Hollander, 2012). It may be particularly important to provide concurrent education and skills training for the families of adolescent clients, as adolescents will by and large return to their family or whānau environments during and after therapy.

Common treatment techniques

In spite of the current lack of consensus concerning well-established models of treatment for adolescent NSSI, Glenn and colleagues (2015) note that common elements found across promising treatments include family and parent education and skills training, and provision of skills training to individual clients (e.g., problem solving, emotion regulation). As with all psychological intervention, the treatment plan needs to be informed by a thorough assessment and a working formulation of the presenting problems. Below is a list of common treatment strategies. However, this is not an exhaustive list and other treatment strategies may need to be incorporated into a treatment plan for co-morbid difficulties.

Recording Log

It is common practice in treatment of NSSI (see for example, Gratz & Tull, 2010) for clients to keep a record of their NSSI behaviour and associated (risk) factors (e.g., alcohol and/or drug use). This is useful for several reasons including facilitating discussion in session of NSSI behaviour that otherwise may not be remembered in any useful detail, to develop client insight into their NSSI behaviour, and to normalise the discussion of client's NSSI. A skills log is also very useful (see below).

Replacement behaviours.

Many clinicians use negative replacement behaviours with adolescents who self-injure (e.g., applying ice to the area where the client would usually self-injure; drawing on the intended area of self-injury with a red pen or warmed red food colouring). These are used to varying effectiveness, depending on the client. Some clients find replacement behaviours very

helpful (or intermittently helpful), whilst others find the idea ludicrous. It is often helpful to have the young person come up with their own preferred replacement behaviour, to increase ownership and engagement with this concept. Replacement behaviours have been criticised for not addressing the underlying need, and in some cases for replacing one form of self-injury with another (e.g., in the case of using an elastic band to cause pain in place of NSSI); however this needs to be weighed up with the possible harm-reduction replacement behaviours may offer.

Safety contracts.

"Contracts for safety" and "no harm agreements" (where the clinician and client engage in a (signed) contract stating that the client will stop self-injuring) have no research support (Lewis, 2007), and in the case of 'no-suicide' contacts, are ineffective (Rudd, Mandrusiak, & Joiner, 2006). Garvey, Penn, Campbell, Esposito-Smythers and Spirito (2009) conducted a literature review of the use of these contracts to manage suicidal patients and concluded "empirically based evidence to support the use of the contract for safety in any population is very limited, particularly in adolescent populations" (Garvey et al., 2009; p. 363). Indeed, these contracts could potentially be harmful as they may alienate the young person, contribute to feelings of being misunderstood, and are likely more about clinician (and possibly family and whānau) anxiety than creating therapeutic change. Safety plans are more therapeutic, and are about a collaborative attempt between clinician and client to establish steps towards harm reduction, use of alternative skills, and engaging support networks to reduce risk (Klonsky et al., 2001).

Contingency management

Contingency management, whereby the clinician and client work towards reducing the reinforcing factors that maintain self-injury, can also be very useful. This may involve changing the environmental factors that are reinforcing the NSSI. For example, the young person may be able to avoid certain things as a result of their self-injury and contingency management would mean that the adolescent does not get to avoid this undesirable task based on their self-injury. Alternatively, contingency management may involve changing the behavioural response of others that may be inadvertently reinforcing the behaviour. For example, having adults respond to the NSSI in a low-key, dispassionate demeanour, rather than with high emotional reactivity which the young person may find reinforcing (see Walsh, 2006).

NSSI cognitions.

Identifying and evaluating cognitions is typically a key component of NSSI treatment, and involves identifying cognitions that are maintaining NSSI behaviour (e.g., core beliefs of being deserving of punishment). A functional behavioural analysis may identify common cognitions that occur prior to an episode of NSSI (or following an episode of NSSI which perpetuate the behaviour), and which contribute to the urge to self-injure. The client and therapist may then engage in information gathering to ascertain and evaluate the utility of these cognitions, and the evidence behind them, to enable the client to challenge unhelpful thoughts and

preferably replace them with more balanced, helpful ones.

Emotion regulation skills.

Treatment of NSSI also routinely includes developing skills to manage emotional distress (e.g., emotion regulation strategies such as relaxation techniques, mindfulness, etc.). Facilitating clients to respond to emotionally distressing stimuli skilfully is a key component of therapy, and having a client keep a skills log is useful in this regard. A skills log typically includes a record of the antecedent for the urge to self-injure, the skill the client chose to implement, and consequence(s) of using the skill including perceived effectiveness. Skills can be administered via skills groups (e.g., DBT or ERGT), rather than exclusively in individual therapy.

Common difficulties when working with clients who self-injure

Several common issues may arise in the assessment and treatment of NSSI. These include (but are not limited to) the following:

1. Client hesitancy to disclose episodes of NSSI for fear of being misunderstood and/or judged negatively. This makes validation, and a non-judgemental stance throughout all phases of assessment and intervention, particularly important.

2. The client may not be able to describe the reason(s) why they self-injure, particularly where a young person experiences difficulties understanding and communicating their emotional experience (for example, Alexithymia: Garisch & Wilson, 2010). This may require further assessment, and a functional behavioural assessment can be particularly helpful in this regard.

3. The client may not see their NSSI as a problem and may not be motivated to change the behaviour. Hence early stages of treatment may largely focus on developing or creating ambivalence, and employing techniques to encourage self-directed change (e.g., through motivational interviewing techniques). Creating a long-term and short-term pros and cons quadrant of NSSI behaviour with clients early on in treatment may facilitate this process. Adopting the stance of naïve enquirer when asking questions about the benefits and consequences of NSSI can be useful, and acknowledges the client as the expert in their own experience and the director of their own decision-making. This stance, along with Socratic questioning, can help prevent conflict between client and clinician (particularly when the client may be resistant to change). Clients continue using NSSI because it has served a useful purpose (albeit ultimately dysfunctional; Klonsky & Glenn, 2009); to disregard this would alienate the client and contribute to feelings of being misunderstood (this is a tenant of ERGT, discussed above; Gratz et al., 2014). It may be helpful to focus on the underlying need or function that NSSI serves, and develop other strategies for a client to achieve this end and bolster any areas of deficit, rather than directly focus on NSSI, particularly if this is leading to the client and therapist butting heads. Working against the client's stance, rather than alongside, can derail the relationship and treatment.

4. Clinicians' concerns around safety. Assessment and ongoing treatment requires a clear safety plan, particularly given the relationship between NSSI and risk of suicidal behaviours (Nock et al., 2006). A safety plan may include a clear agreement between clinician and client in terms of when to disclose NSSI to family or whānau, and/or agreement on how the client will utilise their support system.

5. Confidentiality; specifically the client may not wish anyone to know about their self-injury whereas the therapist may consider it necessary for client safety. Clinical judgement is needed to determine whether the clients' wish for autonomy is upheld. This will depend on numerous factors including severity of NSSI, age of the client, client's willingness to utilise other coping strategies and engage in a self-directed safety plan, client's ability to resist urges to self-injure, and client's ability and willingness to utilise a therapeutic service in times of crisis.

6. Family and whānau anxiety around how to respond to and manage NSSI. Common issues here include family and whānau uncertainly of how regularly to ask their young person about the self-injury, whether to remove access to means, and how to respond to NSSI behaviour. For instance, punitive responses are not uncommon, however these can increase a client's sense of being misunderstood as well as negative emotions such as shame (which can precede an episode of NSSI). Providing family and whānau with information about self-injury and its functions may be useful to address kneejerk responses to a stigmatised behaviour. In other cases, parents or whānau may withdraw from their parenting role and not set boundaries around behaviour, for fear of triggering an NSSI episode. Psychoeducation regarding the benefits of setting firm and consistent limits and consequences may assist in this regard.

Conclusion

NSSI is a complex and heterogeneous behaviour. Early identification of NSSI can allow for more successful treatment, and may stop the behaviour from becoming entrenched over time as the go-to means of managing distress to the detriment of other coping skills. A thorough assessment is necessary to create an individualised formulation to inform treatment, and to identify the functions of NSSI for a particular client. Assessment may be facilitated by the use of a screening instrument (and such psychometrics are also useful for assessing change during therapy). A functional behavioural assessment is pivotal for identifying the antecedents, behavioural characteristics, and consequences of NSSI, and is a useful tool both during assessment and in therapy. NSSI is commonly treated through CBT and DBT techniques, however there is little empirical evidence regarding what treatment strategies effectively reduce adolescent NSSI behaviour. Research and clinical experience suggests that adolescents who self-injure benefit from cognitive and behavioural techniques, emotion regulation and problem solving skills, and a family or whānau component to treatment. More research is needed to assess the effectiveness of different therapies for reducing adolescent NSSI behaviour. Lack of funding in mental health services and lack of clinician time make intensive treatments such as DBT untenable for the majority of clients and service providers; and the level of therapeutic intervention needs to be matched to client need. A briefer, skills based intervention

would be useful in this regard. Emotion Regulation Group Therapy (ERGT; Gratz et al., 2014) offers a brief intervention as an adjunct to treatment as usual, and holds promise. Future research is needed to assess the effectiveness of ERGT with adolescents. We are in the process of establishing a pilot study of an amended form of ERGT for adolescents in Aotearoa New Zealand.

Additional information

The following websites have resources for individuals who self-injure, their family and whānau, friends and professionals:

The Cornell Research Program on Self-Injury and Recovery has a host of resources available for individuals who engage in NSSI, their families and whānau, friends and schools. See http://www.selfinjury.bctr.cornell.edu/

The Youth Wellbeing Study website has numerous resources available, as well as Wellington-based research summaries relating to the risk and protective factors for NSSI. See http://www.victoria.ac.nz/psyc/research/youth-and-wellbeing-study

Self-Injury Outreach and Support (SIOS) is a website providing resources for people who self-injure, their loved ones, and professionals, and includes resources to resist the urge to self-injure. See http://sioutreach.org

The Interdisciplinary National Self-Injury in Youth Network, Canada, has a website that includes a range of resources for youth, their family and whānau, friends and professionals, with links to further information, see http://insync-group.ca/

The Mental Health Foundation of New Zealand has a webpage on self-harm, with links to support agencies, resources for youth and families, and practice guidelines. See https://www.mentalhealth.org.nz/get-help/a-z/resource/49/self-harm

Hasking and colleagues at the University of Queensland have developed guidelines for parents and families, and young people seeking solutions to end their self-injury. These guidelines are available for a small fee:

Applicable to families: http://www.familyconcernpublishing.com.au/product/seeking-solutions-to-self-injury-the-parents-and-families-guide-2nd-edition/

Applicable to youth: http://www.familyconcernpublishing.com.au/product/seeking-solutions-to-self-injury-the-young-peoples-guide/

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Non-suicidal self-injury: Suicide risk or social activity?

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Deliberate self-harm (DSH) has been conceptualised as indicative of mental illness, on a continuum ending with suicide. Recently our understanding of DSH has become more nuanced, with distinctions made between suicidal behaviour and non-suicidal self-injury (NSSI). Indeed, there is some evidence that NSSI may be consciously counter-suicidal. Moreover, NSSI appears to have recently increased markedly among young women. This research explores the motivations, meanings and functions of NSSI in young New Zealand women through 19 in-depth interviews. The results show that precursors range from serious anguish including suicidality, to purely social, with functions from the alleviation of distress to participation in a social activity. Often minimal physical or psychological harm is involved, either preceding NSSI, or as a result. Previous beliefs about the dynamics and the social contexts in which NSSI occurs are thus problematic, as are assumptions about the appropriate support. Though a potential indicator of mental ill-health, NSSI may be a harm-reduction technique, or a relatively normalised teenage activity within the peer group.

Key words: NSSI; self-harm; suicide

Deliberate self-harm (DSH) has been conceptualised as indicative of mental illness, often as a result of psychological trauma resulting from abuse, and on a continuum ending with suicide. Recently our understanding of DSH has become more nuanced, with distinctions made between suicidal behaviour and non-suicidal self-injury[1] (NSSI; for example, Curtis, 2016). Some literature continues to combine the two, arguing that risk factors, trajectories, and treatments are very similar (see Kapur, Cooper, O'Connor, & Hawton, 2013, for a brief overview and discussion of implications). Nonetheless, differences between those who engage in suicidal behaviour and NSSI exist; indeed there is some evidence that NSSI may be consciously counter-suicidal in some cases (e.g. Lang & Sharma-Patel, 2011; Wester & McKibben, 2016).

DSH in general is a significant issue in New Zealand, accounting for 3,031 hospital admissions in 2012 (Ministry of Health, 2015) – though it must be noted that the intention of these acts is not known. Aside from these hospitalisation rates, which are fairly stable, there is some evidence that NSSI and DSH is increasing (for an international discussion, see Nock, 2009). Locally, for example, findings from a community-based study of twenty-six year old New Zealanders indicated that approximately thirteen percent had ever engaged in self-harm behaviour (Nada-Raja, Skegg, Langley, Morrison, & Sowerby, 2004); a decade later, forty-eight percent of secondary school students surveyed in the Wellington region reported that they had engaged in NSSI at least once (Garisch & Wilson, 2015). While these studies are not directly comparable, one would expect the earlier study, conducted with an older age group and a broader definition (self-harm without consideration of intent), to have found a higher prevalence rate than the more recent one.

Arguably, DSH and NSSI are more common among young women; in New Zealand, women are hospitalised at nearly twice the rate of men (Ministry of Health, 2015). NSSI has been strongly linked to suicide in young women, such that it was seen as a precursor, and linked to serious mental illness and trauma (recent examples include Kim et al., 2015; Ougrin et al., 2012; Webermann, Myrick, Taylor, Chasson, & Brand, 2016), especially sexual abuse (Curtis, 2006; Nada-Raja & Skegg, 2011). However, as it has become relatively common there is a possibility of normalisation, such that it is engaged in by a broader range of people. Therefore assumptions about mental illness, abuse and other trauma may no longer hold true to the same extent. Further, as hospitalisation rates have not increased significantly, it would appear that the increase in DSH may be at the lower end of (physical) severity. The over-arching aim of the current study is to explore these assumptions and changes from the experiences of young women who engage in NSSI.

The following literature review will briefly discuss pertinent issues, focusing on material relevant to the findings of the current research. This includes links between suicide and NSSI; NSSI as a means of dealing with suicidality; links to abuse; and the normalisation of NSSI. Subsequent to this overview the current study will be discussed, commencing with the methods employed.

Links between suicide and NSSI

Many researchers have found that self-injury is a predictor of later suicide attempts (e.g. Andover, Morris, Wren, & Bruzzese, 2012; Asarnow et al., 2011; Hamza, Stewart, & Willoughby, 2012; Tang et al., 2011; Whitlock et al., 2013; Wilkinson, Kelvin, Roberts, Dubicka, & Goodyer, 2011). NSSI and suicide have many of the same risk factors. These factors include depression, hopelessness, impulsivity, diagnosed mental disorder, suicidal ideation, anhedonia, negative self-evaluations (Hamza et al., 2012; Kapur et al., 2013). A review

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1 NSSI is usually defined as 'deliberately injuring oneself without suicidal intent'.

Sometimes 'and for purposes not socially sanctioned' is added.

of the literature by Hamza and colleagues (2012) focused on the link between NSSI and suicidal behaviours, including both longitudinal and cross-sectional studies, and found that NSSI is a robust predictor of suicidal ideation and behaviours. These links existed even after controlling for factors including age, gender, ethnicity and socioeconomic factors.

It has been argued that the highest correlating risk factor for suicide is suicidal ideation with NSSI, mediated by the frequency of NSSI and use of multiple types of NSSI (Grandclerc et al. 2016). Similarly, in a meta-analysis examining which risk factors for suicide are more predictive among self-harming individuals Victor and Klonsky (2014) found that frequency of NSSI behaviour and using various methods of NSSI were both moderate predictors of suicide, behind that of suicidal ideation.

In order to explain the link between NSSI and suicidality several models have been suggested. These include the gateway theory, the third variable theory, Joiner's theory of pain tolerance and capability for suicide (see Grandclerc, Labrouhe, Spodenkiewicz, Lachal, & Moro, 2016; and Hamza et al., 2012 for reviews) the experiential avoidance model (EAM; Chapman, Gratz, & Brown, 2006) and Curtis' (2016) cyclical model. The gateway theory is that NSSI and suicidal behaviour occur on a spectrum as different degrees of the same self-injurious behaviour (Brausch & Boone, 2015), and that NSSI may precede suicidal behaviour, with escalating NSSI behaviours leading to eventual suicidal behaviours. The third variable theory argues that a third variable links both NSSI and suicidal behaviour. This is based on evidence that NSSI and suicide have many of the same risk factors such as higher levels of psychosocial maladaptivity including depression, suicidal ideation and low self-esteem (Andover et al., 2012; Brausch & Boone, 2015). Joiner's theory of capability for suicide (Cooper et al., 2005) argues that individuals may become desensitised to pain and fear, and thus acquire the capability to commit suicide. This could occur through NSSI (or through other behaviours such as substance abuse; Van Orden, Witte, Gordon, Bender, & Joiner, 2008). The EAM proposes that NSSI functions primarily as a strategy to manage (through avoidance) unwanted emotions. Engaging in NSSI provides temporary relief from severe emotional distress and is self-reinforcing. Over time, NSSI becomes a conditioned response to negative emotions, in turn impeding the use of other means of emotion regulation (Chapman et al., 2006). Curtis' cyclical model includes aspects of all of these, arguing that NSSI is used as a means of dealing with severe emotional distress, typically depression or anxiety (accompanied by suicidal ideation in some cases), is found to be extremely effective initially and in some cases is consciously counter-suicidal. However, over time efficacy reduces and in some cases hopelessness sets in, resulting in a suicide attempt. A further cycle of self-harm may then occur.

Despite this linkage, a recent review of 172 longitudinal studies of self-injurious thoughts and behaviours (SITBs, including ideation, suicide attempts, NSSI and DSH in general), found that engagement in SITBs are significant risk factors for later engagement in suicidal thoughts and behaviours but that this risk was weaker than anticipated, only providing marginal improvement in diagnostic accuracy above chance.

Both history of NSSI and prior attempts at suicide showed the most risk for later suicide attempt, but NSSI only increased odds to 0.013 (Ribeiro et al., 2016). Granclerc and colleagues' recent systematic review of the literature on the link between NSSI and suicidality in adolescents found that adolescents with a history of NSSI have fewer psychiatric symptoms and psychosocial dysfunctions than those who have engaged in suicidal behaviour (Grandclerc et al., 2016). Thus the argument for a self-harm continuum is not as strong as had been thought.

In addition, the function of NSSI frequently appears to be to deal with intense emotions, and therefore it may be counter-suicidal. Grandclerc et al. (2016), among others, describe NSSI as a way to relieve unbearable emotions, through seeking to modify rather than eliminate the state of consciousness. Although those who engage in NSSI may be more likely to engage in suicidal behaviour, Lang and Sharma-Patel (2011), Taylor and Ibañez (2015), Curtis (2016) and others argue that the assumption that self-injury is a *precursor* to suicidal behaviour has begun to be called into question, with evidence that many of those who self-injure do so in an effort to cope; therefore it may *delay* suicidality. That is, NSSI is 'non-suicidal' insofar as there is no suicidal intent at the time the injury occurs. However, the individual may be experiencing suicidal ideation.

NSSI as counter-suicidal

As mentioned, NSSI may be used as a way of dealing with suicidality. For example, Wester and McKibben's (2016) qualitative survey of experiences of self-injury among adults found that NSSI was described as a protective factor against suicide by many participant responses, as they used NSSI to deal with suicidal ideation. Thus NSSI could be considered counter-suicidal, as the intent is to relieve distress.

However, this link between NSSI and the deliberate alleviation of suicidal feelings is unclear, as in a qualitative study of adolescents who had either never self-harmed, had self-harmed once, or had engaged in self-harm multiple times, no clear link to suicidality could be determined (Klineberg, Kelly, Stansfeld, & Bhui, 2013). Of course, this could in part be attributable to the small sample size; 30.

Links between NSSI and sexual abuse and other trauma

In the current author's own research (Curtis, 2006, 2010, 2016) most participants spoke passionately about the key role that sexual abuse had played in their DSH. As discussed in a review of the research by Lang and Sharma-Patel (2011) there is support for a relationship between NSSI and abuse history. These authors argue that associations have been found between NSSI and maltreatment, with consistent associations found for child sexual abuse and NSSI, and NSSI and child physical abuse, though findings for NSSI and neglect are less conclusive. However, many of the studies were cross-sectional making determining causality difficult.

A meta-analysis of correlates among those engaging in NSSI found that a history of sexual and physical abuse displayed small or negligible associations, despite being frequently cited in the literature as a risk factor (Victor & Klonsky, 2014). In a

more recent review, Smith, Kouros and Meuret (2014) assert that the research on the link between trauma and NSSI is inconsistent and inconclusive, and that trauma symptoms, such as on-going depression, intrusive thoughts and memories, rather than the experience of a traumatic event per se, underlie the relationship wherein NSSI is a coping mechanism to deal with such symptoms. Thus, it appears that abuse alone will not necessarily result in NSSI, but rather the *impact* that the experience of abuse has on the individual is of primary importance.

Logically, it may also be the case that abuse was once a precipitating factor for the majority, but as the prevalence of NSSI has increased, this relationship has weakened. That is, one explanation for the lack of conclusive evidence of a relationship, especially in more recent studies, is that abuse history is no longer as common as it was among those who self-injure.

The normalisation of NSSI

Many adolescents know what NSSI is, and a majority will know of someone who has engaged in it (Purington & Whitlock, 2010). Taylor and Ibañez (2015) argue that self-injury may "gain some acceptance as a transitional coping strategy for those experiencing difficulties" (p.1007). Indeed, in some qualitative studies some participants who self-harm normalised the behaviour and thus did not want help (Curtis, 2010; Klineberg et al., 2013).

NSSI has been described as a social contagion (Jarvi, Jackson, Swenson, & Crawford, 2013; Wilkinson et al., 2011) and likened to a spreading disease; "like bacteria that result in disease, behaviours and attitudes are transmissible" (Purington & Whitlock, 2010, p. 11). Jarvi et al. (2013) conducted a review of the evidence for the social contagion of NSSI and cite evidence for individuals' affiliation with peers who also self-injure; that friend's NSSI preceded one's own, similar methods of self-injury used amongst friends, and of exposure to self-injurious behaviour and a subsequent increase in prevalence of NSSI.

NSSI appears to be normalised and more prevalent among some youth subcultures. Young, Sproeber, Groschwitz, Preiss and Plener (2014) found that those youths affiliated with an alternative subculture, such as emo, goth or punk were four to eight times more likely to self-harm than their peers, with around 50 percent engaging in NSSI and 20 per cent attempting suicide. This effect remained after adjusting for other confounders and risk factors such as socioeconomic status, substance use and victimisation. These youth endorsed many reasons to self-injure including regulating their emotions, as well as social reasons such as wanting to 'belong'. Le Cloux (2013) also argues that in some groups of adolescents self-injury may become 'normative because it is deviant' and used as a way to rebel.

Jarvi and colleagues (2013) also argue that behaviours including NSSI are disseminated and normalised in the media and note that reference to NSSI in media was rare before the 1980's, while Purington and Whitlock (2010) argue that NSSI behaviours are now common in the media, with many references to self-injury on the internet and in film and music.

They further argue that the nature of the portrayals of NSSI also appear to have evolved, as prior to the1980's NSSI was "most commonly depicted as an indicator of mental illness and a harbinger of suicidality" (p.12), yet more recent portrayals of NSSI involve situations that are more common, such as the usual challenges of growing up, and using NSSI as a coping strategy.

Research aims

It appears that NSSI has evolved quite rapidly and has become increasingly common and to some extent normalised; therefore the relevance of previous associations with severe psychological distress and suicidality may be reduced. The aims of the current research included the exploration of NSSI from the point of view of young women who have engaged in it, in order to understand the context in which NSSI currently occurs and the functions and meanings they attribute to it. This exploratory research examines links to suicidality and severe distress at one extreme, and possible normalisation at the other.

Methods

This section details the methods used to recruit participants, describes their relevant demographic features and discusses the data collection methods and analysis. The research was approved by the School of Psychology Research and Ethics Committee, University of Waikato.

Recruitment

Participants were recruited using three methods:

1. through postings on relevant Facebook pages, which included a flyer advertising the research

2. flyers circulated electronically to psychology students

3. through the provision of flyers to social service agencies that work with young women.

The same flyer was used for all, briefly introducing the research. It included text numbers and an email address for interested people to make contact with the research team. Once contact was made, a more detailed information sheet was provided, with an invitation to make contact again to either have a discussion about the research (if that was the potential participant's preference) or to arrange an interview time, at a place and time convenient to both the researcher and participant. The information sheet also included a list of support services and urged participants to carefully consider their involvement due to the potential for distress in discussing what may be a sensitive topic. These points were reiterated before interviews commenced as part of the informed consent process.

Participants

The participants were 19 women aged 16 to 25 years (inclusive); the most common age was 19 (six participants). They were all resident in either Auckland, Hamilton or Whangarei at the time of the interview. Twelve of the participants were of European descent or described their ethnicity as 'kiwi', New Zealander or Pakeha; three identified as Maori, two middle-Eastern and one each identified as Indian

and African[2] .

 With regard to education, employment and socio-economic status, three had secondary education only, twelve were current undergraduate students, three had completed an undergraduate degree (and all of these were currently engaged in postgraduate study) and one had completed a polytechnic qualification. Eleven described themselves as full-time students, six were employed (though some of these were also studying), one was a full-time mother, one unemployed, and one neither working nor studying due to pregnancy. Socio-economic status was mixed and in some cases had changed. For example, one described a privileged background but now being "poor" while studying, another described a childhood in which there was sometimes not enough to eat and in comparison considers herself to be well-off, working as a retail assistant.

Most considered that they had been diagnosed with a mental illness (though exactly what that entailed varied; some had had medication such as anti-depressants prescribed by a general practitioner, others had been described as depressed by a counsellor; a few had been formally diagnosed by a psychiatrist or psychologist). Nine had not had a diagnosis applied to them, although most used the term 'depressed' or 'anxious' to describe themselves[3] . Seven discussed a history of depression, five referred to anxiety, two described an eating disorder, one had experienced post-natal depression although her self-injury had initially been linked to anxiety, and one discussed substance addiction. Several had experienced more than one of these.

Most had ceased engaging in NSSI, but two had recently had what they termed a 'relapse' after an extended period without NSSI and one did not consider it necessary to cease NSSI.

Data Collection

Data collection was conducted via in-depth interviews. Although participants were offered the opportunity to take part in a follow-up interview if they wished to elaborate, as it happened every participant took part in one interview only. The amount of time involved varied from three-quarters of an hour to one and a half hours; the average was a little over one hour. The interviews were largely unstructured. As noted above, participants volunteered as a result of having seen recruitment information which gave an overview of the research, and were then provided with a more comprehensive information sheet. The aims of the research were reiterated verbally before interviews began and the participants were given the opportunity to ask questions. Interviews began with an open question such as, 'When you saw the research flyer, what made you volunteer?' or 'As you know, this research is about self-injury. Perhaps we could begin with what you know about that?'. From this point, with some variation, participants usually commenced talking about their experiences, with the researchers' role largely being one of seeking clarification as

necessary, ensuring that key sub-topics such as precipitating factors and suicidality were addressed, and checking that the participant felt that everything relevant had been covered.

Data Analysis

Thematic analysis of the transcribed interviews was undertaken (Labouliere, Kleinman, & Gould, 2015; Michelmore & Hindley, 2012). Initial coding of the data took place as interviews were completed, and concept diagrams were developed alongside preliminary notes. Theories were developed by an iterative process of re-reading transcripts and subsequent modification of concept diagrams and notes.

Findings

In this section the key findings of the research are discussed. These include material on the links between NSSI and suicide in general; the evidence for and against the existence of a self-harm continuum; the deliberate engagement in NSSI as a counter-suicidal measure; the relationship between abuse and NSSI; and the normalisation of SSI, including in friendship groups and via the media.

Links between NSSI and Suicide

As discussed above, a large amount of research has found a link between NSSI and suicide, with NSSI being a possible precursor (e.g. Nock, Joiner Jr, Gordon, Lloyd-Richardson, & Prinstein, 2006, found that 70% of adolescents who engaged in NSSI reported a suicide attempt and 55% reported multiple attempts). Recent research has queried this, asserting that this link is not as strong as had been believed. The current research may support the latter argument, as although all had engaged in NSSI many participants had not been suicidal, and only four of the 19 had made a suicide attempt and describe NSSI as a way of coping with suicidal ideation. These four clearly articulated the links and differences. For example, Aroha[4] discussed NSSI as both a means of coping with distress and a 'cry for help' when suicidal:

> "After my mother died, I would think about suicide all the time... [NSSI] was a coping mechanism. And it's a way of saying 'Yeah I'm harming myself. Are you going to help me?'".

Claire also described NSSI as a form of emotional regulation (a common finding in recent literature, though precise functions require clarification. See, e.g. McKenzie & Gross, 2014):

> "In my first year of high school I made my first suicide attempt. I made three attempts all together, though what I really wanted was to get rid of the [emotional] pain. I got into self-harm[5] when I moved schools at 14; a couple of friends did it. Cutting provides a physical pain to deal with the emotional, the suicidal – it takes your full attention".

Participants who had been suicidal and engaged in NSSI were able to clearly differentiate between the behaviours, in contrast to research that suggests that most people who

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2 Despite being asked about their ethnicity, apart from the three Maori participants almost all volunteered their nationality, at least at first.

3 This willingness to use such terms was somewhat surprising given earlier research about the stigma of mental illness.

4 The names given are pseudonyms.

5 Although it was made clear before commencing interviews that a key area of interest was non-suicidal self-injury, all participants used the term 'self-harm' rather than NSSI. The context usually indicated that they were discussing NSSI and this was clarified if there was any doubt.

engage in DSH are unclear about the intended outcome. For example, Anna had this to say:

> "In terms of doctors and stuff, they take it [NSSI] out of proportion quite quickly and fly to 'Are you gonna kill yourself?' and it's like 'Whoa! No, not there!'.

Anna had engaged in NSSI and made suicide attempts, and was easily able to differentiate between the forms of self-harm that she engaged in. This also reflects the data provided by other participants who had engaged in both suicidal and non-suicidal behaviours (discussed further with regard to NSSI as a counter-suicidal act).

As discussed above, NSSI has often been conceptualised as a point on a self-harm continuum, but current evidence is mixed. Although only four of the participants in the current study had engaged in suicidal behaviour, several others discussed suicidal ideation.

Evidence for and against a self-harm continuum

Some participants spoke about NSSI as part of a continuum that has been considered typical. For example:

> At 14 I would get very on edge, very anxious and it just got worse to self-harm, suicidal thoughts and … my first suicide attempt…There was another girl who used to self-harm…having seen how she coped I kind of experimented with things …then it was cutting, it kind of progressed and it just became a need to feel physical pain instead of emotional pain and it was a slight relief for a short period of time and then of course you are left with both [emotional pain and a need for physical pain].
>
> Linda

This extract illustrates a progressive pattern of self-harm, commencing with NSSI to reduce anxiety, followed by suicidal ideation and behaviour. Further discussion revealed a pattern of increasingly severe NSSI, as it became less effective over time, culminating in a suicide attempt. Social transmission is also seen in the form of copying the NSSI of another.

In contrast, Kate spoke about suicidal ideation, and used NSSI as a way to cope with this; her self-harm never progressed to suicidal behaviour:

> "There would be times where I thought 'if things get really bad I could always off myself and then I wouldn't have to deal with it' but it was just kinda in the back of my mind. I never made a plan or anything."

Sandra initially identified self-injury as a step toward suicide, but found that it helped her to deal with her emotions (discussed further below):

> "I was super-suicidal at the time [of the first instance of NSSI] and I thought you had to build up to the point where you finally killed yourself, so self-harming was the step up into doing that. Like you do self-harm then you plan and then you kill yourself".

Thus, NSSI served as a means of retreating from suicidality, rather than a step towards it.

Natalie, an immigrant, adds a cultural dimension to her discussion of DSH:

> "I've thought about it but never gotten a plan together… People make the jump that if you self-harm you're automatically going to be suicidal and make an attempt …you can live with the idea for years and never make that attempt… I have a close friend who attempted suicide and I've talked to him about it. We are similar [African] cultures and the cultural thing about, you don't commit suicide if you're a migrant person. That's the thing kiwis do. It's their way, not ours".

Thus the relationship between NSSI and suicidality appears complex and evolving. While some participants did experience suicidal ideation, and a small number made suicide attempts, they were clearly in the minority. Less than a quarter had engaged in suicidal behaviour, and less than half the participants (seven, including those who made suicide attempts, of a total of 19) discussed suicidal ideation, adding further evidence to research that suggests that the notion of a continuum is not (or no longer) fully justified. Of the small number who had engaged in suicidal and non-suicidal behaviour, there largely appeared to be movement between the two types of behaviour rather than a linear trajectory. Further, all the participants who had experienced suicidal ideation considered NSSI to be a way of dealing with this. This provides some support for the EAM (Chapman et al., 2006) and Curtis' (2016) cyclical model of self-harm.

NSSI as counter-suicidal

As mentioned in the quote from Claire above, engaging in NSSI was sometimes a conscious decision to deal with suicidal ideation. She elaborated:

> "Initially after cutting I'd just feel blank, nothing. It was therapeutic, and stopped me thinking about suicide, for a while. But I'd need to do it more often, I'd still be feeling suicidal, and would plan it, quite detailed plans, but there'd always be a reason to put it off. So when self-harm wasn't working so well I stopped eating to get an extra feeling, of being hungry. Another distraction".

Linda and Anna expressed similar views:

> "[Parents] don't see how self-harm was beneficial to me or to other people, didn't see how that was a coping mechanism at all. [Stopping NSSI] was incredibly difficult. I did still have suicidal thoughts and tendencies. It's almost like an itch, it's like 'this is helping me. You are stopping something that's helping me from being self-destructive even more'".

> "It was a coping mechanism…It kept me in control; instead of committing suicide I'm gonna hurt myself… I've had [suicidal thoughts] quite a lot, [NSSI] was always to do something else to not get to that point [of making a suicide attempt]…I've definitely sat there and worked out how many of which pills I should take…"

However, many participants did not see a suicidal element to their NSSI at all. Kelly was shocked by the assumed link to suicidality:

> "I remember my Mum seeing my arms and saying 'just go outside and slit ya fucking wrists if you think life is that bad'. I was horrified because that was not what I was doing at all. Why would you say that?".

As will be discussed below, Kelly's attitude is that NSSI is a useful coping mechanism for dealing with normal anxiety

and depression and may be unrelated to suicidality. However, where there is a history of abuse, it may be the case that NSSI is more severe and therefore raises the question of whether suicide risk is increased for this group.

Links to abuse and trauma

In contrast to some earlier research, as discussed above, relatively few participants mentioned a history of abuse (a few more did refer to bullying at school). Aroha discussed her abuse history and also considered that abuse was a factor for friends:

> "Quite a few friends did self-harm. A lot of my friends had problems with people that had touched them. They hated themselves, [NSSI] was their way of coping… I hated that I couldn't stop things from happening [to me]. And I thought if I can't get rid of him, I might as well get rid of myself because otherwise it's gonna continue happening".

Aroha found that NSSI was a way of coping with ongoing sexual abuse and also linked abuse to suicidal thoughts. Jane's description, with themes of sexual abuse leading to suicidal ideation, dealt with by NSSI in order to gain a sense of control, fits perfectly with some earlier models of NSSI (such as that of Curtis 2006):

> [My father] would end up lashing out and the other major factor was sexual abuse when I was seven. …. after moving out of home I started having very strong intrusive thoughts about killing myself, hurting myself. It wasn't too long after that that I started cutting. I'd had friends who'd self-harmed; I think that's what really popped the idea into my head… As it goes on it gets deeper and deeper because it's never quite enough… it's going 'I just want to feel better…I want to feel like I can fix something'. Having that control to be able to go, I can put a bandage and feel like I'm fixing.

In this account, Jane also reiterated the theme of NSSI as counter-suicidal. Gail discussed a similar trajectory:

> I was abused by my uncle when I was 10 and I went through this really hard stage. I was cutting, I was suicidal, I was taking pills…I don't know where I got the idea [to cut] from… I guess I just tried it one time to calm down and it worked…I couldn't manage what was happening…somehow watching the blood was calming and I guess it made me feel good to know that I could manage that, that I'm strong because I can handle that pain.

For these young women sexual abuse was an important factor in their DSH. However, the majority did not indicate that they had a history of abuse.

The normalisation of NSSI

Most participants were aware of NSSI by others, usually school-mates (as is included in some of the quotes above), though some mentioned 'stumbling across' NSSI on the internet. The degree to which NSSI was considered normal varied. Kelly and Sandra saw NSSI to generally be unproblematic:

> "I think people should be allowed to do it…I don't think healthcare, psychologists, should be deterring people away from it if they can honestly say it helps them. Maybe they could just be taught ways of keeping safe [harm reduction such as ensuring knives are clean]. It's not a bad thing to have something for yourself that helps. Let's try and accept everything".

> "I haven't self-harmed in a really long time because it doesn't work anymore. It's really hard because clinicians have a very strong 'no self-harm' bias, but I personally think that it's useful. I don't *like* seeing other people self-harm but I know it's useful".

Although Kelly and Sandra were in the minority with their pro-NSSI stance, several other participants felt that the abhorrence parents, teachers and health professionals express is excessive. While they acknowledged that it was preferable not to self-injure (e.g. due to potential scarring and the distress evoked in others), it was generally considered a useful coping mechanism and that others' reactions were due to a lack of understanding.

NSSI within social groups

Many participants knew of people who engaged in NSSI, especially at school, although the age, form and function did vary. For example, Kate discusses a low-level form of causing oneself pain as part of a game:

> "I remember at intermediate people where they would get the prickly side of Velcro, it was like a game to see who had the highest pain tolerance as you scraped it along your arm and whoever lasted the longest would win. And they did it to me and I lasted for ages. I think I liked doing it because I felt like I had some level of control. And I just took that idea and ran with it…"

Whether this qualifies as NSSI is debatable. However, for Kate, it was the starting point for more serious injury. Behaviour that would be considered NSSI was also common at her secondary school:

> "[Cutting] was very normal. I went to an all-girls school, it was quite widespread and people would kinda talk about it a lot…It was really casual. I was doing it because I was anxious, I think they would do it so – I dunno – they would do tiny wee scratches on their arm and show everyone and I thought that was really weird. I didn't want anyone to know but they were really open about it".

Many participants spoke about minor NSSI that was clearly 'the thing to do' rather than a signifier of distress, as further illustrated by the following quotes from Laura, Nicola and Catherine:

> "In my year there was a group, they would cut themselves on their arms and they'd just be like 'Mine is better than your's'. I don't think they understood that there is something [psychologically] deeper than that".

> "[At intermediate] with your friends you'd carve their initials into your hand and that sort of thing was really, really normal and it was cool… it was only when our parents noticed that we realised that this wasn't something that everybody did".

Catherine: I cut myself once when I was twelve. All my friends were doing it. I don't know why they were... maybe because everyone else was. They were just depressed I think, not sure what about though. We all just cut ourselves a bit, but it wasn't even that deep...It's just silly things you do when you're a kid. It was a phase, real big for a while...I think maybe emo culture got big".

The relationship between NSSI and 'emo culture' was a common theme:

"It was something that everyone spoke about and it was like the whole emo phase...all the emo stuff everywhere...I regret it because it wasn't really a true reflection of me, it was just kind of the culture at my school and just being an impulsive dumb teenager"Delia

Carla also discussed NSSI as part of the emo sub-culture, but also affecting others whom she met as part of a support group:

"Most of the girls were the popular girls – I was so surprised - as well as the emo girls".

The level of distress participants experienced was varied and sometimes, at least initially, seemed to be little more than the normal stresses and conflicts of adolescence.

Alice: It was year seven, my friends did it, that's what gave me the idea. I didn't know anything about self-harm. The girls in my class had these big cuts on their arms and I was thinking 'What does it mean'? I asked one, and she said 'That's for pain, if you feel pain you cut yourself and you don't feel it any more'...So I tried it ...and it was very much to belong. It just becomes normal. All sit there at lunchtime and cut your thighs and talk about how your life sucks...like 'My problem is this'. 'Oh well, mine is this and it's worse than your's'. It just turned into this big competition ... We were so wrapped up in our weird little issues.

Caitlyn also discussed the transmission of NSSI in a competitive manner:

I had this friend, Angela, she had severe depression. I tried to get help [for her], but I ended up getting depressed too, it escalated really quickly. She tried to commit suicide a few times and I'd always been, I guess, an anxious person and it got much worse and that also made me depressed. So Ange was self-harming, she got it from an old friend who sent her snapchats of her cutting and challenged her to do better. Ange thought it might help. So I tried it too.

However, this social element was certainly not a consistent theme. Other participants spoke about a desire for secrecy:

"A few of my friends in high school, I knew they self-harmed but we didn't talk about it. We all knew who did it but it wasn't accepted [that you mentioned it]... Even now [with current friends], I'm like 'I don't actually need to know this. If you want to get help go get help, or don't'. They know I self-harm or have self-harmed but we don't really talk about it because it tends to dramatise it". Anna

Some participants felt that NSSI was unhelpful and potentially problematic:

"I started realising that it wasn't quite normal and I sort of distanced myself from that group. Because they've got unhealthy behaviours and it doesn't help me get better when I'm around people who think of it as normal and casual and ok". Kate

Laura engaged in an insightful discussion about the differences in social groups and the potential ramifications of associating with them:

I had some friends that did it and in their group it was normal. They glorified it, the way they talked about it and I didn't feel it was this great, this cool thing ... I didn't spend a lot of time with them. But my normal group of friends, when they talked about kids that cut I'd be like 'yeah that's weird'. Even with the group of friends that did cut, I didn't talk to them about my cutting. I knew it was a maladaptive way of coping. ...I didn't want to be put into that box of 'She is one of those kids who has issues'...and I didn't know how to explain. I also didn't want to be in with kids that thought it was cool. So best not to tell anyone.

Overall, NSSI was quite common during the secondary school years and often seen as normal at the time, especially within some sub-cultures. However, attitudes were mixed across groups, and even within participants, with some discussing their internal conflicts around identification with groups engaging in NSSI, yet feeling uncomfortable about this and finding it necessary to hide their NSSI from other social groups. The transmission or dissemination of NSSI was not confined to 'real life' groups, as touched on above.

The transmission of NSSI via social media

Though not as common as via groups of friends, several participants spoke about learning of NSSI through the media, such as in these quotes:

I went online ... [and] I found other people who were talking about how I was feeling. I wouldn't say depression, but ... And they were talking about cutting and how this helps and I thought that was a strange thing. But then one day I was so down, I figured anything would be better than how I'm feeling... it made me feel a part of that community. Natalie

"Social media has made more things acceptable in sharing stuff about yourself you normally wouldn't. Some people like to air everything...". Linda

Dinah discussed a group of friends who were proud of their NSSI and transmitted images via social media, although other friends did not approve:

"They'd roll up their sleeves and walk around...I had some friends who thought it was stupid but I had the few who thought it was cool and they'd post photos of it..."

Thus (in accordance with recent research by Jarvi et al., 2013; Klineberg et al., 2013; Taylor & Ibañez, 2015), NSSI had a social element for many.

Overall, a range of attitudes towards and functions of NSSI was in evidence, ranging from a perception of it as a socially acceptable thing to do – indeed, an element of peer pressure was apparent – with little, if any, relationship to distress, through to an indication of suicidality.

Conclusion

It appears that NSSI has evolved over the last decade and has become increasingly common and to some extent normalised. That is, whereas NSSI used to be strongly linked to suicide in young women, such that it was seen as a precursor, and linked to serious mental illness and/or trauma, especially sexual abuse, it has become prevalent to the extent that those assumptions no longer hold true to the same degree.

The range of attitudes to NSSI held by the young women who took part in this research were wide-ranging, from it being a "cool" or "normal" thing to do, displayed in person and online, to a "weird" thing, to be kept hidden. Similarly, the functions of NSSI varied, from it being a means to fit in with a peer group to a way of dealing with suicidal ideation. Some participants discussed tensions in crossing boundaries between groups, where their peer community had groups with opposing views of the acceptability of NSSI, and tensions within themselves when they felt uncomfortable with their own NSSI yet had friends who considered it acceptable, even desirable.

Links to severe distress remain, as do links to abuse; however, they appear considerably weaker than had previously been thought. In addition, these findings suggest that assumptions about NSSI as a precursor to suicidal behaviour are inaccurate in many cases. As the prevalence of NSSI has increased, so have the range of motivations and precipitating factors, and subsequently the psychological severity appears to have lessened. Further, participants experiencing suicidality considered NSSI to be counter-suicidal and they expressed concern at being urged to cease this behaviour. Clearly this has implications for treatment.

While further research is required to confirm these findings, this study suggests a need to reframe current understandings of NSSI. In the (minority) of cases in which NSSI was linked to suicidality, it appeared to play a counter-suicidal role. For many, NSSI was of relatively minor import, denoting little in the way of psychological distress beyond the usual stresses of adolescence. Nonetheless, the development of other coping mechanisms and/or means of emotion regulation is likely to be useful, including to reduce the concern of others, the possible need for medical treatment and subsequent regret over scarring. However, the social element present in some cases may act as a barrier to help-seeking and treatment.

Limitations

The main limitation of this research is the relatively small sample size, which means that no claims about representation can be made. However, given the depth of the data – such as many lengthy and complex discussions of a social element, and relatively few links to suicidality - plus some similar initial results in other recent research (as discussed above), these areas certainly seem worthy of further investigation. This research does provide an in-depth understanding of some specific aspects of the NSSI phenomenon, and the aims of the current research - the exploration of NSSI from the point of view of young women who have engaged in it - were realised.

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Conceptualisations of deliberate self-harm as it occurs within the context of Pacific populations living in New Zealand

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This study explored Pasifika peoples' understandings of Deliberate Self-Harm (DSH) based on the perspective of Pacific health professionals in New Zealand. A total of 20 informants were interviewed using semi-structured Talanoa methods. Informants held professional roles in the mental health, social and addiction sectors in Auckland, (female, *n* = 10, male, *n* = 10). DSH was defined as an intentional act of inflicting harm to the physical, mental or spiritual self, and served separate functions from suicidal intent. DSH was defined to include both direct self-harm, as well as indirect forms of self-harm over time including, alcohol and drug misuse, gambling, self-starvation and risk taking behaviours. Intentional harm to the spiritual or the mental self included deliberate disconnection from spiritual faith and holding adverse perspectives and worldviews.

Conclusion: Based on the findings it is recommended that a) DSH may be acknowledged as a behaviour that can be separated from suicide in terms of functionality, b) the present clinical DSH diagnosis criteria should include Pacific definitions of DSH, c) best-practice clinical treatment guidelines should accordingly be reviewed to incorporate treatment that encapsulate DSH behaviours relevant to Pacific people, and finally, d) researchers need to adopt operational definitions that reflects Pacific conceptualisations of DSH when conducting studies with Pacific communities in New Zealand.

Keywords: Deliberate Self Harm, DSH, Non-suicidal self-injury, Self-harm, Pacific peoples, Ethnic minorities, and Indigenous peoples

Introduction

Deliberate self-harm (DSH) is the strongest predictor for eventual death by suicide with recent figures indicating that associated costs to the health system are approximately $25 million (Ministry of Health, MOH: 2014). While the adverse impacts of DSH on Pacific populations are notable (MOH, 2014; Hatcher, Sharon, & Collins, 2009), clinical definitions of DSH do not consider Pacific perspectives. This reflects the wider gap in the existing body of knowledge around DSH in Pacific populations, pointing to the need to consider conceptualisations that more closely reflect their unique cultural perspectives. The inclusion of an official Pacific definition of DSH would better inform research, risk assessments, symptomatology documentation, clinical diagnosis and consistent communications between professionals, regarding Pacific clients (De Leo, Burgis, Bertolote, Kerkof, & Bille-Brahe, 2006; Muehrer, 1995). The aims of the present study were to a) explore Pacific mental health and addiction professionals' (working in New Zealand) understandings and perceptions of DSH, and b) to identify a Pacific- relevant definition of DSH based on these health professionals' perspectives and understandings.

Literature definition(s) of DSH

The literature presents differing views on whether DSH and suicide are different levels of the same behavior continuum or are separate behaviours entirely (Farrelly & Francis, 2009; De Leo et al., 2006). The two dominant DSH paradigms that are widely adopted by researchers and clinicians include:

a) DSH irrespective of intent (commonly referred to as 'self-harm')

b) DSH without suicidal intent (referred to as 'non-suicidal self-injury' or NSSI) (Latimer, Meade & Tennant, 2013).

Both paradigms consider DSH as a subtype of self-destructive behaviour(s) that are self-initiated, intentional, and causes direct or immediate injuries to the self, with non-fatal outcomes (Associate MOH, 2006; Latimer, Meade, & Tennant, 2013; Lundh, Karim, & Quilisch, 2007; Fortune, 2006). Both paradigms exclude self-destructive behaviours considered indirect, that cause physical harm over time such as, substance abuse or eating disorders; those associated with cognitive disability, episodes of psychosis, and acts of self-harm that are considered culturally or religiously sanctioned (Gratz, 2006; Fortune, Seymour, & Lambie, 2005; Lundh et al., 2007; De Leo et al., 2006).

Diagnostic Statistical Manual of Mental Disorders and DSH

Efforts to promote more accurate comparisons across clinical diagnoses and between studies, had seen the inclusion of NSSI and suicidal behaviour in section III of the most recently released Diagnostic Statistical Manual of Mental Health Disorders-5 (DSM5) (Muehlenkamp et al.,2012). Previously, DSH (encompassing of NSSI and self-harm) was only

considered as a symptom of Borderline Personality Disorder (BPD) in earlier versions of the DSM and in the International Statistical Classification of Diseases and Related Health Problems Manual (Fox, 2004). Subsequently, the inclusion of NSSI and suicidal behaviour as proposed distinctive disorders in the DSM-5, therefore reflects an attempt to classify DSH as being either with or without the intent to die (Muehlenkamp et al., 2012).

The merit for the inclusion of DSH, more specifically, NSSI and suicidal behaviour in the DSM-5 was also in part based on recent evidence that suggests that the methods of DSH most associated with NSSI may form a distinct grouping of behaviour on a DSH continuum (Ougrin & Zundel, 2009, Latimer et al., 2013). Findings have shown that multiple incidents of NSSI were reported more frequently than attempted suicide or completed suicides indicating a need for a 'new' category (Muehlenkamp, 2005; Jacobson & Gould, 2007). For these reasons, the DSM-5 now includes NSSI and Suicidal behaviour in section III, 'Emerging Measures and Models of the DSM-5' manual under the heading 'Condition for Further Studies' among other disorders including internet gaming disorder (APA, 2013).

The inclusion of NSSI and Suicidal behaviour and other proposed disorders in section III and not in section II (diagnostic criteria and codes) acknowledges that at the point of publication there was insufficient evidence to warrant the inclusion of these disorders as official mental disorder diagnoses in Section II. It is for this reason that the proposed criteria are not to be used for making diagnosis in clinical practice, instead it is hoped it will encourage further research and to make available a shared language for researchers and clinicians investigating these disorders (APA, 2013). It is expected that future research would allow the field to better understand these conditions and will inform decisions about possible placement of these conditions in forthcoming editions of DSM (APA, 2013). The present study aims to contribute to this 'emergent' research by drawing on understandings of NSSI from the perspectives of clinicians working with the Pacific Island population in New Zealand.

According to the DSM-5, the diagnostic difference between NSSI from suicidal behaviour disorder is based on the stated goal to experience relief from tension, anxiety, and self-reproach (APA, 2013). To meet the DSM-5 criteria for NSSI disorders, an individual has to have deliberately inflicted injury to the surface of their body without suicidal intent, on five or more occasions within the past year (APA, 2013). This relatively recent movement in the field also reflects the growing body of empirical evidence that states that NSSI serves multiple non-suicidal functions, which are interrelated, and more than one may apply to a given person (Claes & Vandereyckan, 2007).

DSH of Pacific people in New Zealand (NZ)

According to the annual NZ Ministry of Health (MOH) Suicide Facts publication, '*Deaths and Intentional Self-harm Hospitalisations*' (MOH, 2014) there were 2,647 intentional self-harm hospitalisations equating to a total of 61.1 hospitalisations per 100,000 population (age standardised) in 2011 (MOH, 2014). For Maori, there were a total of 463 intentional self-harm hospitalisations, a total of 92 for

Pacific, and a total of 2013 for non-Maori/non-PI (MOH, 2014). Official prevalence rates in New Zealand are however an underestimation as the official data accounts only for incidents when hospital admission was greater than two days (MOH, 2014; Hatcher et al., 2009). These rates exclude DSH presentations to general practices, private clinics, and those treated by traditional healers; or DSH presentations to school and tertiary counselling health centers, NGOs and other community based social services (Tiatia & Coggan, 2001; Hatcher et al., 2009).

Various community data further indicates that DSH among Pacific youth are relatively common. Approximately 29 percent of Pacific female students and 17 percent of Pacific male students reported having deliberately harmed themselves in the last 12 months (Helu et al., 2009). DSH is more common among youth with a mean age of onset varying between 10 years and 17 years old with the behaviour peaking in the 15 to 19 age group (MOH, 2014). Furthermore, rates are highest among the psychiatric patients. Community studies investigating adolescents suggests that rates of DSH for this cohort have been stable, and has not increased, although the rates are high (MOH, 2014).

Western versus Non-Western paradigms of DSH

Presently, there is no documented literature about DSH (NSSI & Self Harm) behaviours specific to the Pacific population living in NZ with literature being dominated by Western paradigms and/or a focus on attempted and completed suicide (Hatcher et al., 2009; Tiatia & Coggan, 2001; Tiatia, 2003). In relation however, suicide ideations and attempts are higher in Pacific peoples compared to all other ethnicities, with New Zealand-born Pacific people showing the highest rate (Brown et al., 2006). This gives a strong reasoning to investigate DSH from a Pacific perspective. Furthermore, there are some studies indicating that there are cultural nuances in defining what constitutes suicidal and self-harming behaviour, as well as cultural differences in attitudes toward suicide and self-harm (De Leo et al., 2006; Farrelly & Francis, 2009).

Studies outside of New Zealand and the Pacific Islands have found differences in what is considered as self-harming behaviour between indigenous and non-indigenous populations. In Australia for example, differences related to risk factors, beliefs and understandings of suicidal behavior, and responses to interventions were found to differ between Aboriginal and non-Aboriginal communities (Tatz, 1999; Tatz 2001; Farrelly, 2004; Farrelly & Francis, 2009). Some aspects of how Aboriginal communities defined DSH paralleled Western definitions, in that they similarly include behaviours that are self-initiated, intentional, and cause direct or immediate injuries to the self. Other aspects however included gradual methods of DSH including; hitting of the head with or on something, burning, cutting of hair, and self-destructive behaviours (Farrelly et al,. 2009).

Further, Tatz (1999) and Hunter, Reser, Baird and Reser (2001) found that Aboriginal DSH behaviours included cases of self-tattooing and "slashing up" or cutting with broken bottles, knives, or razor blades. Aboriginal communities in Shoalhaven and Illawarra identified haircutting as self-harming behaviour, despite its integral part of traditional cultural rituals.

When the individual's intention was identified as wanting to achieve adverse alterations to their physical appearance it was viewed as a form of self-harming. Farrelly & Francis (2009) consequently recommended that mental health service provision and training institutions need to incorporate cultural aspects related to Aboriginal understanding of, and attitudes towards suicide and self-harm to minimise the risk of misdiagnoses (Farrelly et al., 2009). With relevance to the present study, these studies' findings give strong support for the need to also explore Pacific understandings of DSH which (when they have been identified as suicidal behaviour) have also shown unique differences compared to the non-Pacific perspectives (Farrelly et al., 2009).

Moreover, support for exploring the possibility that there are differing views on DSH between Pacific and non-Pacific peoples are suggested by the fact that there are fundamental paradigm differences between Pacific and non-Pacific people's views on health and wellbeing. Many Pacific people view mental health holistically as represented in the Fonofale model of health. This incorporates Pacific people's beliefs and values regarding family, culture and spirituality as components of health (Pulotu-Endemann, Annandale, & Instone. 2004; Pulotu-Endemann, 2001; MOH, 1995). Mental illness is perceived in a broader context, as an imbalance derived from key relationships between the individual, family, nature and spiritual realms (Pulotu-endemann et al., 2004). For many Pacific people, mental illness is understood as a manifestation of an external spiritual force or ancestral spirits who have taken possession of the person (MoH, 2008; Tamasese, Peteru, & Waldergrave, 2005). As such, the present study documents Pacific understandings of DSH that reflects the unique cultural perspectives of DSH as it occurs within a pacific context in New Zealand. A Pacific definition of DSH will assist researchers and clinicians in reaching more accurate conceptualisation of issues that are affecting Pacific clients.

Methods

Talanoa methods were applied given the sensitive nature of DSH and applicability to Pacific populations as a way to explore ideas. Talanoa is as face-to-face dialogue and the exchange of formal or informal truths that is rooted in the oral tradition of Pacific societies and is aligned with the inherent way of engaging in social conversations for Pacific people (Vaioleti, 2006). It is considered as a phenomenological approach in that its' processes are explorative, interpretive and centered on understanding the meaning and experiences of the phenomenon under investigation, and assigned to it by the participants (Vaioleti, 2006). Talanoa yields interrelated information that surfaces, while recognising the importance of people's experiences, within their cultural contexts. The concept is suited to all distinct nations that make up the Pacific Islands, although there may be some local variations (Vaioleti, 2006).

To extend Talanoa into a cultural research methodology, Vaioleti (2006) weaves into the research process Kakala. This is a Pacific learning and teaching concept (Helu-Thaman, 1997), together with Pacific research protocols, or ethics. The integration of Kakala within the research process is comparable to qualitative research approach of grounded theory. Talanoa

connects the researcher and the participants' theorisation of the research topic or issue. The knowledge derived from the process of Talanoa is what tui kakala will integrate and weave to make authentic knowledge, of which valid solutions for Pacific issues can be found (Vaioleti, 2006).

Tui kakala involves three different stages, Toli, Tui, and Luva. First, the researcher must toli (picking or collecting). During this stage the issue to be researched and the information that will be generated by Talanoa will determine the knowledge or solution sought and the community that the research is to benefit (Vaioleti, 2006). Tui is the second stage in the research process in which the stories, spirits and emotions from the deep Talanoa encounters are arranged and woven further. This is the point in which the knowledge yielded from Talanoa with participants, is integrated and synthesised. The cultural and technical skills of the researcher are important in determining the type and amount of information used. During Tui, the data is arranged in relation to each other and how they are presented will determine the authenticity, relevance and usefulness of the research findings (Vaioleti, 2006). Luva is the final stage of the research process where the knowledge is shared for the benefit of the community. The researcher and respective institutions are expected to pass on the knowledge so that others, particularly the participants and their respective Pacific communities, can benefit from it (Vaioleti, 2006).

Talanoa emphasises the importance of participants and researchers sharing their personal experiences and knowledge about the issue being explored. Through Talanoa, this develops and maintains ethical research relationships with Pacific participants which creates valid and authentic knowledge. Talanoa requires that the researchers reflect on personal, historical and cultural experiences which may shape the interpretation of the findings (Vaioleti, 2006). It is acknowledged that the principal investigator (and also first author's) personal experiences and awareness of theoretical understandings of DSH in the literature, may influence the way in which she collected and interpreted the data (Health Research Council, 2014, 2005; Vaioleti, 2006).

Participants

Purposive sampling was employed to select suitable participants (Tongco, 2007). Participants were recruited specifically from Pacific services within the Waitemata and Counties Manukau District Health Boards, Pacific and Mainstream Mental Health, Alcohol and Drug Services, Non-Government Social Work and Addiction Treatment Services, Pacific Disability, and the Mental Health and Welfare to Work Charitable Organisations in the Auckland Region. The eligibility criteria were as follows, participants needed to be: 1) of Pacific descent, 2) have current or previous experience working in the mental health or related sector, 3) over the age of 18 years and 4), English-speaking (proficient enough to not require a translator), 5) have worked with Pacific clients and their families, within their respective roles.

Nineteen face to-face semi-structured *Talanoa* interviews (one was a combined interview with two key informants) were completed. Semi- structured interviews allowed for the exploration of predetermined subject areas, with the flexibility for any new areas to be followed if they arose (Buetow, 2007).

The sample size of twenty key informants (50% female) was deemed to have produced data saturation in that no new information emerged.

Procedure

The Toli Stage in which the Kakala process is extends the Talanoa process informed the data collection procedure for this study. In line with the Pacific research protocol of "Faka'apa'apa (respectful, humble and considerate)" (Vaioleti, 2006), Talanoa with key informants were undertaken at times and venues most suitable for participants. These included, meeting rooms and offices of key informant's workplaces, home, cafes, and event centres. Before the Talanoa were carried out, the researcher and key informant took the time to connect through sharing and catching-up. This initial stage of the Talanoa process allowed the opportunity for the researcher and key informant to reconnect or get to know each-other, build trust and set the appropriate context for the Talanoa that is to follow (Vaioleti, 2006). Once the time felt right and the context was set, the research was explained to participants including their rights and how their confidentiality and privacy would be protected. Key informants completed and signed consent forms. The interviews were digitally recorded lasting

on average between 110 and 130 minutes.

The principle of reciprocity is an important component to incorporate within the data collection process when carrying out research with Pacific cultures. Accordingly, participants were compensated for their time and support of the research project with a $20 petrol voucher plus a small gift valued at $10 dollars at the end of the Talanoa. This protocol is considered an essential principle in developing and maintaining ethical research relationships with Pacific peoples when carrying out research studies with Pacific populations groups (Health Research Council, 2014, 2005; Tamasese, Sullivan & Waldergrave, 2010; Vaioleti, 2006). Light refreshments were also provided during the Talanoa. Additionally, ongoing demonstration of reciprocity by the researcher was shown in her sharing of general public and mental health information if asked by the informant. Where appropriate, the researcher supported participant's work related projects, events and/ or study endeavours, upon request and through initiation of participant's and/or their organisation.

Analysis

An inductive approach was utilised for analysis of the interview information (Thomas, 2006). The computer

Table 1. Informants Demographics

ID	Designation	Ethnicity	Gender	Organisation
P1	Social Worker (School)	Samoan/Chinese	Male	NGO
P2	Youth Development Coordinator	Fijian/European	Female	NGO
P3	Psychotherapist	Pacific Island	Male	PMHS/DHB
P4	*Matua* Leader	Samoan	Male	PMHS/DHB
P5	Psychologist/ Social Worker	Samoan	Female	PMHS/NGO
P6	Service Co-coordinator	Tokelauan	Male	PMHS/NGO
P7	Youth Practitioner	Tokelauan/ Tuvaluan	Female	ADS/NGO
P8	Community Support Worker	Tongan	Female	PMHS/NGO
P9	Community Support Worker	Samoan	Male	PMHS/NGO
P10	Clinical Psychologist	Tongan	Female	Pacific/NGO
P11	Community Support Worker	Cook Island	Male	PMHS/NGO
P12	Alcohol & Other Drug (AOD) Clinician	Niuean/ Samoan	Male	PADS
P13	Mental Health Nurse	Niuean	Female	PMHS/DHB
P14	AOD Clinician	Fijian	Female	ADS
P15	AOD Clinician /Mental Health Nurse	Fijian	Female	ADS
P16	Community Support Worker	Tongan	Male	PMHS/DHB
P17	Counsellor/ Community Support Worker	Niuean	Female	PMHS/NGO
P18	Senior Practitioner	Tuvaluan	Male	PMHS/DHB
P19	Social Worker/Clinician	Cook Island	Female	PMHS/DHB
P20	Occupational Therapist	Niuean/Samoan	Male	CYMHS/DHB

software 'Nvivo' was used to store, code and analyse the data. Consistency checking of themes involved two additional independent coders who reviewed whether samples of the text were appropriately themed by the researcher. It was found that there was a consistent agreement of themes. Where there were minor differences in judgement, an agreement was made on the most appropriate allocation of data to themes.

Findings and discussion

There was a general consensus by the informants that a definition of DSH based on experiences, ideologies, worldviews and beliefs specific to Pacific populations is needed. Existing dominant Western definitions were thought to not be fully representative of Pacific peoples' understandings of DSH. It was felt that this posed the risk of invalidating Pacific experiences and failed to accurately identify the service and support needs of Pacific clients and their families.

Based on the findings from the study, the following definition has emerged that incorporates the differences identified by informants in how Pacific health professionals understand DSH as well as the similarities also identified by informants from the Western perspective:

Deliberate Self-Harm (DSH) is an intentional act of inflicting harm to the physical, mental or spiritual self that serves separate functions from suicidal intent. DSH behaviours can include both direct and immediate self-injury as well as indirect forms of self-harm causing long-term negative consequences. These behaviours include alcohol and drug misuse, gambling, self-starvation and risk taking behaviours. Additionally, DSH includes intentional harm to the spiritual or the mental self, including deliberate disconnection from spiritual faith and holding negative self, cultural and life perspectives.

Informants' conceptualisations of DSH behaviours

Conceptualisations were contingent upon personal and professional understandings of DSH behaviour. This included experiences with supporting Pacific clients, families and communities affected by DSH. All informants' identified DSH to comprise of physical, non-physical and indirect forms. DSH included all deliberate infliction of physical injury to the self, resulting in superficial injuries and non-fatal outcomes. Cutting was the most common DSH method described. Cutting was predominantly superficial and commonly inflicted on certain areas of the body. Other examples of DSH methods that emerged from informants' definition of physical DSH behaviours included; overdosing, scratching, excessive biting of the nails, punching the wall, pulling out your own hair and tattooing to harm and alter one's appearance.

Most DSH methods that appeared from informants' responses, were aligned with methods framed by Pattison and Kahan (1983); Simeon and Favazza (2001) and the DSM-5 (APA, 2013). The physical dimension of DSH that emerged largely aligned with the category of superficial moderate, low lethality, multiple episodes and direct forms of self-destructive behaviours, as outlined in Pattison and Kahan's (1983) system for the classification of self-destructive behaviours. This system categorises DSH behaviours based on the directness of the methods used, frequency of episodes and level of lethality of the behaviour (Pattison & Kahan, 1983; Favazza & Conterio,

1998). Informants' definition of the physical dimension of DSH, also aligned with Favazza & Rosenthal's (1993) category of 'Impulsive Self-Mutilation Behaviours'. This category is characterised by skin cutting, burning, severe scratching, needle sticking, and interference with wound healing (Simeon & Favazza, 2011).

Informant's noted that some DSH methods that were used by Pacific clients reflected behaviours defined in existing Western-based DSH literature, while other DSH methods were behaviours suggested as unique to Pacific cultures. These behaviours included; punching of the wall and overdosing. Favazza (2001) argues that overdosing and swallowing of objects are excluded from the category of 'superficial moderate impulsive self-mutilation' as these types of DSH behaviours do not necessarily involve direct methods of effecting body tissues. Klonsky (2007), indicates on the other hand, that the parameters of DSH categorisation are not clear-cut because behaviours that usually fall-outside the boundaries of self-injury may in fact represent self-injury, if it is carried out with the conscious and explicit intent to cause tissue damage.

One participant identified self-tattooing for the purpose of changing one's appearance as DSH. Tattooing is not typically considered self-injury because it is generally seen as culturally sanctioned forms of behaviour (Favazza, 1993, Simeon & Favazza, 2001). While tattooing holds a traditional place in Pacific cultures, when performed for self-injury or to change one's appearance, without the traditional protocols or permissions, then it also may be considered as DSH. This form of DSH needs to be explored in future studies to ascertain how common it may be.

Emotional and Spiritual DSH behaviours

A number of informants felt that unlike existing Western-based literature, DSH extended beyond merely inflicting intentional harm to the physical self, but also comprised of harm to the mental or spiritual self. Examples included, deliberate disconnection from spiritual faith, feeling spiritually dead or useless, feeling hopeless, being teary, having a negative perspective of everything, and "the thoughts of doing it" (self-harming). This finding specifically reflected the concept of 'holistic health' which embodies Pacific Island people's understandings of health, whereby the mental, spiritual and the physical are seen as all interrelated and interdependent, rather than separate and distinct entities (MOH, 2014; Mental Health Commission, 2001). The wider literature however does not include this cultural perspective and instead identifies such behaviours as atypical symptoms of mental disorders, more specifically, affect disorders. The DSM-5 criteria for major depressive disorder and depressive episodes for example, includes, loss of interest or pleasure in daily activities, feels sad or empty, appears tearful and feelings of worthlessness (APA, 2013). At the same time, affect disorders such as depression were connected to DSH as it was commonly reported in research findings as major psychological features that are strongly associated with increased risk of engaging in DSH behaviours (Brunner, Kaess, Parzer, Fischer, Carli, Hoven, & Apter., 2014; McCarthy-Hoffbauer, 2006).

Indirect DSH Behaviours

Typically, informants' accounts of the motives or function of DSH behaviours identified DSH as non-suicidal in intent, and aligned with those presented in the NSSI literature and the DSM-5. DSH was commonly viewed by informants as a means for individuals to express, cope and relieve overwhelming emotional distress. Responses also suggested that DSH served other non-suicidal functions, including; to seek attention or influence others, as a cry for help, to feel alive, to stop suicidal thoughts and plans, they were influenced by others, to punish the self, and to stop oneself from hurting another person. These perceptions are consistent with the NSSI Paradigm of DSH, which is largely adopted by researchers and clinicians in North America and Canada. This paradigm defines DSH as the direct, deliberate destruction of one's own body tissue without conscious suicidal intent but performed for emotion regulation functions or other non-suicidal motivations (Favazza, 1998; Gratz, 2001; Skegg, 2005; Martin, Swannell, Hazell, Harrison, Taylor., 2010; Halstead, Pavkov, Hecker, & Seliner., 2012).

A Cry for Help or to Seek Attention

Many participants expressed DSH may be a signal for help without being overt, or driven by attention seeking motivations to get attention. Informants indicated that some Pacific families believed their family member was motivated to use self-harming "as bait" to obtain sympathy or material possessions.

To feel "alive"

DSH was perceived by some informants as a way for the individual "to feel alive" or to "feel reality" or "something". These sensations were sought to diminish other feelings of emotional numbness. This functional explanation echoes the 'sensation seeking model' of DSH presented in the literature (Klonsky, 2007; Himber, 1994). DSH is said to stimulate a sense of reality from a state of emotional and experiential numbness (Himber, 1994) or to generate feelings of acceleration or excitement (Klonsky, 2007). One participant theorised that this function could result in a reinforcement cycle, whereby the individual becomes dependent on the perceived benefits. Consequently, the DSH behaviour could increase and be maintained in such a manner. This theory can be explained by way of the 'environmental model' which posits that NSSI creates environmental responses that are reinforcing to the individual, while simultaneously serving the needs of the environment, by sublimating and expressing inexpressible and threatening conflicts and taking responsibilities for them (Suyemoto, 1998).

To stop suicidal thoughts and plan

One participant indicated that DSH sometimes served to manage suicidal ideations and plans. The informant explained that some of her clients would talk about how they would cut themselves to find relief from the suicidal thoughts they were having to stop themselves from following through with the plan. Kolinsky (2007) and Suyemoto (1998) identifies this function of DSH behaviour as the 'anti-suicide' model. According to this model, DSH serves a function of inhibiting suicidal thoughts and planning, it serves to replace, compromise with, or avoid the impulse to commit suicide.

The DSH act represents a suicide replacement, and, as a compromise between life and death drives.

DSH influenced by others

According to the informants, DSH may be due to the influence of others. It was reported that some Pacific clients shared that they copied, or were encouraged by their friends to engage in DSH behaviours to "get rid of the pain". This function of DSH is supported by findings from previous studies that examined the association of DSH and social, peer and media influence (Mendiola, 2011; Beautrais, 2000a; De Leo et al., 2004). Literature shows there may be a social clustering of NSSI due to genetic and/or social learning factors, whereby the self- harming individual may have learnt poor coping strategies from significant others (Fortune et al., 2005; Muehlenkamp, Claes, Havertape, & Plener., 2012). However, one participant in the present study was uncertain about the notion of DSH as a learnt behaviour or copycat behaviour. They felt that it was "not that simple" and decisions to engage in DSH may be more motivated by other underlying reasons.

To Punish the Self

Self-punishment was explained as the act of inflicting physical injury in attempt to punish themselves or hurt their appearance and alter depressive feelings, low self-image or low self-esteem. Self-punishment was a salient function of DSH identified in the literature. Klonsky (2007) theorises that for some individuals, DSH is performed as a way to express anger towards oneself. This function of DSH aligns with evidence from psychiatric patients whereby DSH was carried out as a form of punishment (Himber, 1994).

To Stop Oneself from Hurting another Person and Domestic Violence

Instances were described by one informant in which the victim or the perpetrator would engage in DSH behaviours as a result of family violence. For example' one Pacific male partner resorted to DSH (e.g. punching the wall) to prevent themselves from physically hurting their female partner or wife. It was reasoned that this was seen as an alternative to engaging in full-blown family violence, as they were aware it is considered a crime in New Zealand. This particular function of DSH was not identified in the literature, however there are studies that suggesting family violence is an associated risk and precipitating factor for DSH behaviours (Chowdhury, Brahma; Banerjee, & Biswas, 2009; Vivekananda, 2000; Faleafa et al., 2007). Relatedly, it emerged from several informants that for some Pacific women experiencing domestic violence, self-harm was a coping mechanism. This finding provides support for the association of DSH and experiences of domestic violence experienced by women in other countries (Chowhury et al., 2009).

Suicide vs. DSH

The majority of the informants differentiated DSH from suicidal behaviour based on the perceived function or motive of the behaviour. DSH was understood as non-suicidal in intent, whereas suicidal behaviour was identified as the point whereby the individual contemplated, attempted or succeeded in ending their own life. While the two behaviours

serve different functions, they were perceived as intrinsically related on the same behaviour continuum. This finding reflects previous research that identified DSH and suicide behaviours as different levels of the same behaviour on a continuum (Gair & Camilleri, 2000; Winchel, Molcho, Simeon, & Standley, 1992).

DSH a Precursor to Suicide Behaviour

While informants recognised that DSH serves non-suicidal functions and should be distinguished from suicidal behaviour based on function, they concurrently referred to both behaviours to illustrate the issues surrounding DSH. It was acknowledged by informants that it was not always easy to determine with certainty the motivation of the DSH act (with intent or without intent to suicide). This ambiguity related to intention of some DSH incidents meant that all presentations were dealt with very seriously and most informants considered DSH behaviour as a potential precursor to suicidal behaviour. DSH was seen as a leading point on the continuum, the beginning of a behaviour repertoire that may lead to suicide if not addressed. The evidence supports health professionals caution that DSH is one of the strongest predictors and the most important risk factor for eventual death by suicide (Ougrin & Boege, 2013; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein., 2006; Sornberger et al., 2012).

DSH may increase risk for suicide, because those who engage in DSH may habituate themselves to the pain and fear associated with DSH and therefore they attain the capability to attempt or complete suicide (Nock et al., 2006). On the other hand, some informants shared that the continuum did not always represent a linear pathway to suicide, as some people may self-harm for the rest of their lives and do not move onto suicidal behaviour, whereas others do not engage with DSH but go straight to attempting or completing suicide.

Families and Communities' Understandings of DSH

Accounts revealed an agreement by informants that self-harming behaviours were generally difficult for Pacific people to understand, particularly for the Island born older generations. This may have been due to their religious beliefs and values. A few informants explained that as Christians the body is perceived as a gift from God, something that is sacred and 'tapu' and therefore should not be subjected to such treatments. As a consequence DSH is generally seen as an unacceptable behaviour that goes against their Christian values and beliefs.

Despite this struggle by Pacific people to understand DSH behaviours, many of the informants reported that they have had Pacific families that, in a similar way they view other mental illnesses, have associated the DSH behaviour of their person as being cultural and spiritual. Families of some clients attribute the DSH of their young person to an intergenerational "curse" in the family, inherited or passed down through family bloodlines. This finding supports the holistic view of mental illness that is best represented by the Fonofale model of health previously discussed whereby mental illness is understood as an imbalance that may be occurring as a result of breaches of certain customs or sacred relationships between an individual and their family and the natural and spirit realms (Pulotu-

Endemann et al., 2004, Tamasese et al., 2005; MoH, 2008).

Further, a few of the informants spoke of how some Pacific families would view DSH behaviours as a form of attention seeking. It was thought that this perceived understanding may be a result of the way that Pacific people are socialised and brought up to tolerate and be resilient in the face of hardship. Thus, it was felt by these informants that the notion of resilience held by Pacific Island people contributed to the difficulty in understanding DSH behaviour by some of the older generation.

It was explained by many informants that Pacific people were more able to identify with completed suicide and suicide attempts rather than DSH. It was felt that this may be because such behaviours were not always possible to be concealed and thus most incidents of suicide and suicide attempt such as hanging and shooting oneself were widely known about and affects everyone. In contrast, it was felt that the struggle for Pacific people to understand DSH behaviour such as cutting and other superficial methods may be because incidents of DSH were not frequently known about as they are typically concealed. Moreover, one informant spoke of how DSH was understood by some of Pacific families as a way to prepare for suicide, as their child's lead up to attempting suicide.

These aforementioned findings supports claims that Pacific peoples' views of DSH or suicidal behaviour tended to be different to those of Western views, specifically, that this behaviour may be understood in relation to spiritual and cultural factors (Beautrais, 2005). This is supported by De Leo et al (2006) and Farrelly and Francis (2009) who found cultural differences in how DSH and suicidal behaviour is understood by indigenous populations.

DSH in the Islands or a Western Influenced Behaviour

Mixed opinions were shared on whether DSH was a Western-influenced behaviour, which has been indicated by some Pacific Island people, particularly, older cohorts. While some informants could not identify with DSH behaviours such as 'cutting' in respective motherlands, other informants felt that it was definitely a behaviour that does in fact happen in the Islands. Informants indicated that DSH behaviours of Pacific peoples in New Zealand were thought of to be determined to an extent by Western influences, it was noted that other factors also contributed such as, media influences, relationship issues and acculturation. Available Pacific Island-based research is limited in that it focuses on reports primarily on prevalence of completed suicide and non-fatal suicidal behaviour (NFSB: De Leo et al., 2013; Aghanwa, 2004; 2000; 2001). On the other hand, there is evidence to suggest that the stresses of acculturation are associated with increased risk for DSH behaviours for migrants (Escobar, Constanza, Hoyos, Nervi, & Gara, 2000).

DSH and demography (age and gender)

For informants that have supported older Pacific clients with DSH behaviours, these clients' ages were estimated to range between 30 and 50. One participant shared that the number of young people presenting with DSH at their Pacific mental health service has stabilised. Conversely, informants observed that it was the older age cohort that were showing

an increase in presenting with self-harming behaviours.

According to informants' DSH behaviours among Pacific occurred across genders. One participant on the other hand felt that DSH was increasing among Pacific young girls here in NZ compared to those in the Islands. She also indicated that official rates may not be as high as were occurring in NZ-European girls, but she believed that the rate was climbing. In addition, a few participants spoke of a gender and age difference in the methods of DSH that their Pacific clients were presenting with. For instance, it was reported that it was the young girls that were mostly presenting with cutting behaviours. The Pacific boys on the other hand were mostly engaging in indirect types of self-harming behaviours such as substance misuse and risk-taking behaviours. One participant suggested that Pacific boys were engaging in more subtle methods of self-harming with the intent to take their own life compared to girls.

Study Limitations

Due to the sensitive nature of DSH it was decided that Pacific mental health, addiction and social service professionals were the most appropriate cohort to address the research objectives, thus informants were selected from a professional cohort of Pacific community in New Zealand. Therefore, it is acknowledged that informants' perspectives on how they may think Pacific clients, families and communities understand DSH, may or may not accurately reflect the views of Pacific people in New Zealand. Additionally, the informants in the present study may have only been restricted to treating a subset of clients. Specfically, those who are accessing support. This experience may exclude those who do not disclose their illness. The participants may mainly be treating those clients whose self-injuring may be severe, or long term, compared to a wider scope of individuals who may engage in DSH less frequently. This may have affected participants' conceptualisations of DSH. Another limitation is that, while the informants were all of Pacific descent and identified strongly with their Pacific culture, they were all based in the Auckland region. Therefore, some findings may be subject to regional differences, such as the informants' perception on prevalence of DSH and associated risk factors. Finally, this study was not informed by Pacific clients and their families, thus it may not provide a true insight into clients and families actual experiences of DSH.

Recommendations

The present study indicates that overarching, existing mainstream mental health, addiction, social clinicians and researchers, need to incorporate more inclusive definitions into clinical practice, research, and prevention programmes. Inclusion criteria specific to Pacific, for the behaviours and functionality of DSH, were identified in the present study that can be utilised for this purpose. Professionals and researchers are therefore recommended to consider behaviours that may incorporate cultural understandings of what it means to have overall health and wellbeing in Pacific cultures that could be viewed from the Fonofale model of health perspective. These behaviours include those that adversely impacted an individual's family and social relationships, as well as affecting spiritual, physical and emotional balance. While

some physical factors of DSH such as cutting and overdosing parallel Western concepts, others such as attempting to alter physical appearance, drinking, drug taking, smoking and putting oneself in harm's way were outside of this. Harm to the emotional and spiritual self were identified in the present study as non-compliance with important family events, rejecting the church and negative self-talk. Engaging in these self-destructive physical, emotional and spiritual forms of DSH would most likely lead to upsetting of the valued state of relational harmony as is integral to traditional Pacific identity.

An important finding from this study was that clients often engaged in DSH behaviours without any suicidal intention (NSSI). The inclusion of NSSI in a large epidemiological DSH community study in NZ is recommended to capture an accurate prevalence of NSSI in non-clinical populations. This would gather vital information on the scope, motivation and maintenance of the issues among Pacific people and inform the planning and development of successful intervention and prevention.

In terms of recommendations for prevention, the supporting of continued development of community and church-based initiatives that promote the cohesion of families, culture and spirituality of Pacific people was identified by informants. It further highlights *Aiga*, or family as a core part of wellbeing for Pacific, as demonstrated in the Fonofale model. This would entail investment in the development of more Pacific tailored psychoeducation, DSH and suicide awareness programmes, and media campaigns across the diverse Pacific ethnic communities. Importantly, consultation, engagement and collaboration with respective elders, church ministers, youth leaders, community spokesperson, parents, and young people is needed to identify and inform these programmes and to ensure that they are culturally appropriate, relevant and safe for Pacific communities.

The participants in this study advocated the need to increase Pacific NGO mental health, addiction and social services, and other resources. These included increased clinical supervision for peer support, community support workers in NGO services, Pacific respite care, rehabilitation services, follow-up services for discharged self-harm clients, and Pacific after-hours support services and networks. Furthermore, the need to address the socioeconomic and acculturation factors associated with increased risk of Pacific people engaging in DSH was suggested. This would require specialised immigration support services for Pacific people migrating to New Zealand from the Pacific Islands, and the establishment of more, and continued, funding of existing youth development and social development programmes.

Conclusion

Based on the findings from the study, a definition was synthesised that incorporates the differences identified by informants in how Pacific health professionals understand DSH as well as the similarities also identified by informants from the Western perspective: Deliberate Self-Harm (DSH) is an intentional act of inflicting harm to the physical, mental or spiritual self that serves separate functions from suicidal intent. DSH behaviours can include both direct and immediate

self-injury as well as indirect forms of self-harm causing long-term negative consequences. These behaviours include alcohol and drug misuse, gambling, self-starvation and risk taking behaviours. Additionally, DSH includes intentional harm to the spiritual or the mental self, including deliberate disconnection from spiritual faith and holding negative self, cultural and life perspectives. The availability of this revised definition of DSH that is inclusive of Pacific conceptualisations of culture, health and wellbeing will assist best-practice clinical treatment guidelines to accordingly develop relevant treatment for concepts of DSH behaviours relevant to Pacific people. It will enable more accurate data collection in the healthcare context, and finally, it will give researchers a culturally appropriate definition to refer to when conducting studies with Pacific communities in New Zealand.

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Socioeconomic deprivation and non-suicidal self-injury in New Zealand adolescents: The mediating role of depression and anxiety

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Socioeconomic deprivation has been associated with self-injury, however little is known about the psychological mechanisms underlying this relationship. We assessed how young adolescents' (*N* = 797) experiences of deprivation were associated with Non-Suicidal Self-Injury (NSSI), and tested whether depression and anxiety independently mediated this relationship. Girls reported greater depression, anxiety and NSSI severity than did boys, as well as stronger associations between NSSI and both depression and anxiety. Deprivation was positively associated with NSSI. Among girls, this relationship was fully mediated by both depression and anxiety, whereas for boys depression was the only independent mediator. These findings suggest that psychological distress may be the mechanism by which socioeconomic deprivation predicts NSSI. Moreover, the current study suggests that this process may operate in a different manner among girls and boys.

Keywords: NSSI, Self-Injury, Socioeconomic Deprivation, Depression, Anxiety

Within recent decades, research on Non-Suicidal Self-Injury (NSSI) has been a burgeoning field of study. NSSI includes deliberate behaviours such as cutting and scratching the skin, which occur without suicidal intent and for purposes which are not culturally sanctioned (Nock & Prinstein, 2004), typically as strategies to manage overwhelming emotions or to punish the self (Klonsky, 2007; Nock & Prinstein, 2004). Compared to 6% of community adults (Klonsky, 2011), approximately 17% of adolescents report having deliberately engaged in NSSI (Muehlenkamp, Claes, Havertape, & Plener, 2012; Swannell, Martin, Page, Hasking, & St John, 2014). The high international prevalence of adolescent NSSI is mirrored in Aotearoa New Zealand, where almost 50% of secondary school students report having engaged in NSSI at least once (Garisch & Wilson, 2015). Given the high individual, social, and economic costs associated with NSSI (see for example, Garisch & Wilson, 2015; Guan, Fox, & Prinstein, 2012; O'Dea & Wren, 2010), understanding the complex array of factors which contribute to the development and maintenance of self-injury is critical.

An individual's wellbeing is dynamically created by both psychological factors as well as the socioeconomic environment in which they live (see World Health Organisation, 2012). Prior research has identified a range of psychological characteristics that increase risk of NSSI, such as high levels of emotional dysregulation and in-expressivity (Garisch & Wilson, 2015; Gratz & Chapman, 2007), hopelessness (Wilkinson, Kelvin, Roberts, Dubicka, Goodyer, 2011), identity confusion (Gandhi et al., 2017), and mental illnesses such as depression (Cox et al., 2012; Duggan, Heath & Hu, 2015) and anxiety (Wilkinson et al., 2011). Investigation of environmental factors has mainly focused on poor social supports systems (Andrews, Martin, Hasking & Page, 2014; Hankin & Abela, 2011) and life

stressors (Guerry & Prinstein, 2009; Hankin & Abela, 2011). Although wider health research has demonstrated a robust relationship between socioeconomic deprivation and poorer mental health outcomes (see for example, Braveman & Barclay, 2009; Kuh, Hardy, Langenberg, Richards, & Wadsworth, 2002; Reiss, 2013; Twenge & Campbell, 2016; Wilkinson, 1992), the specific relationship between socioeconomic deprivation and NSSI has received much less investigation.

Socioeconomic deprivation in Aotearoa New Zealand

Socioeconomic deprivation is defined as falling below the adequate standard of living according to the majority of a particular society (Herbert, 1975; Townsend, Phillimore & Beattie, 1988). Those who are identified as 'deprived' experience more hardships than their peers and have insufficient access to resources, such as food, education and health care (Pearce, Witten, Hiscock & Blakely, 2008). Due to the complexity of the construct, previous research has operationalised socioeconomic deprivation in a number of different ways.

Denny and colleagues (2016) measured household deprivation in 2012 within a nationally representative sample of 8,500 Aotearoa New Zealand adolescents by asking about nine non-income indicators, such as family, car, and computer ownership, and if participants' parents ever worry about not having enough money for food. Latent class analysis revealed three groups; 80% of participants were classified as not experiencing deprivation, 15% as experiencing moderate deprivation, and 5% of participants were classified as experiencing high deprivation. Using more recent data from the 2014 New Zealand Economic Survey, the Child Poverty Monitor Technical Report (Perry,

2015) used a relative threshold measure, whereby a child (0-17 years old) was considered to be living in poverty if, taking into account housing costs, their family income fell below 60% of the median income. In 2014, 29% of Aotearoa New Zealand children and adolescents were classified as living in socioeconomic deprivation, an increase from 24% in 2013. Although these studies used different methods of operationalising socioeconomic deprivation, they provide converging evidence that a substantial proportion of young New Zealanders live in moderate to severe deprivation. It is therefore critical to understand the impact of socioeconomic deprivation on psychological wellbeing.

Socioeconomic deprivation and self-injury

Socioeconomic position has robustly been associated with poorer mental health outcomes (see for example, Jacobi et al., 2004; Muntaner, Eaton, Miech, & O'Campo, 2004). Originally the relationship between socioeconomic deprivation and self-injury was assessed using hospital presentation records for deliberate self-harm (a broader class of behaviours that often conflates suicidal with non-suicidal self-injury). Hawton, Harriss, Hodder, Simkin, and Gunnell (2001) assessed 5,899 hospital records of deliberate self-harm presentations and found that the rate of presentations from each electoral ward was positively correlated with the extent of deprivation and social fragmentation within that ward. In particular, this relationship was stronger for males than for females. Focusing on an adolescent sample Ayton, Rasool, and Cotterell (2003) analysed the records of 730 adolescents presenting to a United Kingdom emergency department for deliberate self-harm. Again, the deprivation of each electoral ward was positively associated with presentation rates of deliberate self-harm. Looking beyond geographic variance in self-injury, Jablonska, Lindberg, Lindblad, and Hjern (2009) analysed hospital admissions in a national 1973-1982 birth cohort of young people and found that self-harm was positively related to poorer family socioeconomic status. However, a major limitation of hospital presentation data is that this method captures only the most severe instances of self-harm; in a large-scale sample of university students only 6.5% of young people who self-injure had ever sought medical treatment for their self-inflicted injures (Whitlock, Eckenrode & Silverman, 2006). Therefore hospital presentation data represents only the tip of the iceberg in regard to total self-injurious behaviour across community samples (Rowe et al., 2014).

At present, evidence for the relationship between socioeconomic deprivation and NSSI within community samples is mixed. Within an adult sample, Klonsky (2011) found household income to be unrelated to NSSI. Among adolescents, low parental income has been found to be both associated with engagement in NSSI (Baetens et al., 2013; Page et al., 2014) and to be unrelated to NSSI (Cox et al., 2012; Liang et al., 2014). When utilising non-income related measures of deprivation, compared to their peers, adolescents were more likely to report engaging in NSSI if their parents received socio-welfare benefits (Mossige, Huang, Straiton, & Roen, 2016), were unemployed (Baetens et al., 2013; Brunner et al., 2014; Zetterqvist, Lundh, Dahlström, & Svedin, 2013, but see Mossige et al., 2016) or had a lower educational level

(Baetens et al., 2013; Giletta, Scholte, Engels, Rutger, Ciairano, & Prinstein, 2012).

Assessing more subjective experiences of deprivation, a number of samples have demonstrated that young people who report that their family experiences financial problems are more likely to self-injure than their peers whose families do not experience financial difficulty (Hurtig, Taanila, Moilanen, Nordström, & Ebeling, 2012; Mossige et al., 2016; Nixon, Cloutier, & Jansson, 2008). Extending to investigate NSSI severity, Zetterqvist and colleagues (2013) found that Swedish adolescents who reported high NSSI severity were more likely to report that their family experienced financial difficulties, compared to their peers reporting no NSSI, or low NSSI severity. Given the mixed evidence for a relationship between socioeconomic deprivation and self-injury, further work with community adolescent samples is necessary.

Personal narratives of young people living in socioeconomic deprivation suggest that deprivation causes subjective distress to the individual in the form of feelings of worthlessness, experiences of bullying, and social exclusion from having to miss out on school trips and seeming different (Egan-Bitran, 2010). Some young people may then manage this distress using self-injury (Chapman, Gratz, & Brown, 2006). Deprivation may also create the context which prevents an individual from developing resiliencies which buffer against psychological ill health and NSSI. For example, the financial cost of out of school activities may prevent a young person from joining a sports team (see Sutton, Smith, Dearden & Middleton, 2007), consequently potentially impairing the development of close friendships and peer support networks. Financially deprived individuals also have less access to community health and wellbeing support services (Newacheck, Hung, Park, Brindis, & Irwin, 2003), resulting in fewer opportunities for health care. Therefore, it is probable that deprivation contributes to a variety of social experiences and psychological distress that may subsequently increase risk for self-injury. Taken together, this line of research suggests that understanding the role that psychological wellbeing plays in the relationship between deprivation and self-injury is critical.

Depression and anxiety as potential mediators

However at present, the specific psychological mechanisms underlying the relationship between socioeconomic deprivation and NSSI remain unclear. Two potential psychological factors which have been the target of investigation are depression and anxiety. A meta-analysis of 51 studies assessing the prevalence of depression found that participants with low socioeconomic status (that is, experiencing deprivation) were more likely to be depressed (OR: 1.81) and to experience persistent depression (OR: 2.06) than their high socioeconomic status peers (Lorant et al., 2002). Specifically among New Zealand adolescents, students experiencing moderate or high deprivation were disproportionately more likely to report high depressive symptoms (OR: 2.41 and 1.84, respectively) than students not experiencing deprivation (Denny et al., 2016). In a similar manner, a review of the field finds robust evidence for an association between anxiety disorders and low household income or financial difficulties among children and adolescents (Beesdo, Knappe, & Pine, 2009). This association

extends to New Zealand, where research from the Dunedin Longitudinal Study found that adolescents who met the criteria for an anxiety disorder were more likely to live in families with low socioeconomic status (Miech, Caspi, Moffitt, Wright, & Silva, 1999). Taken together, previous research suggests that depression and anxiety are strongly linked with socioeconomic deprivation.

International and local research has also demonstrated robust associations between NSSI and both depression and anxiety (see for example, Garisch & Wilson, 2015; Glenn & Klonsky, 2011; Selby, Bender, Gordon, Nock, & Joiner, 2012; Wilcox et al., 2012). A recent meta-analysis reviewed 56 articles comparing NSSI engagement among people with and without emotional disorders such as depression, anxiety, and post-traumatic stress disorder (Bentley, Cassiello-Robbins, Vittorio, Sauer-Zavala, & Barlow, 2015). People with an emotional disorder were reported to be 1.75 times more likely to also report engaging in NSSI than their peers without an emotional disorder. Additionally, no difference in NSSI engagement rates were found between depression and anxiety diagnoses.

Although previous research has linked depression and anxiety with both NSSI and socioeconomic deprivation, and NSSI with socioeconomic deprivation, to date few studies have simultaneously examined the relationship between NSSI, socioeconomic deprivation, depression and anxiety. Using the Avon Longitudinal Study, Page and colleagues (2014) found that across all socioeconomic deprivation measures (i.e., social class, household income and maternal education), relative risk for self-harm was reduced by 1-9% when adjusting for depressive symptoms during early adolescence. This reduction suggests that depression may partially mediate the association between socioeconomic deprivation as well as self-injury. However, at present this hypothesis has not been directly tested. In addition, it is not clear whether anxiety may also independently mediate the relationship between socioeconomic deprivation and NSSI.

The current study

The present study aims to better establish the relationship between socioeconomic deprivation and NSSI within community samples, and to gain further insight into psychological mechanisms underlying this relationship. Given that onset of NSSI is typically considered to occur around ages 12 to 14 (Jacobson & Gould, 2007; Plener, Schumacher, Munz & Groschwitz, 2015) focusing on early adolescence is particularly appropriate. Using data from the Youth Wellbeing Study, the current study tests whether socioeconomic deprivation creates a situation of psychological distress, which young people then cope with using self-injury. We use multiple mediation models to test whether depression and anxiety independently mediate the relationship between socioeconomic deprivation and NSSI severity in Aotearoa New Zealand adolescents. We test two predictions; first, that NSSI severity is positively associated with socioeconomic deprivation in New Zealand adolescents, and second, that depression and anxiety symptoms independently mediate this relationship for both males and females.

Method

Participants

Participants were 797 students enrolled at 15 high schools in the greater Wellington area of Aotearoa New Zealand. Participants were made up of 304 males, 491 females and 2 who identified as transgender (6 did not report their gender), with an average age of 13.57 (*SD* = 0.63). The majority of participants (71%) identified as Pākehā/New Zealand European, 8% as Māori, 5% as Pasifika, 1% as Chinese, 2% as Indian, 9% as a non-listed ethnicity (e.g. Filipino), and 5% did could not choose a primary ethnicity.

Materials

Non-suicidal self-injury

All participants completed a NSSI history screening question. Participants read the following *"Sometimes people have thoughts about hurting themselves on purpose, but do not actually hurt themselves. And sometimes people hurt themselves deliberately (i.e., on purpose) to cause damage to their body but NOT to kill themselves (e.g. cut, burn, scratch, or carve their skin, bang or hit themselves, or prevent wounds from healing)"* and then indicated either *'No, I have never hurt myself on purpose', 'Yes, I have hurt myself on purpose',* or *'I have thought about hurting myself on purpose'*. Participants who indicated that they had engaged in NSSI, or that they thought about doing so, then completed a modified version of the simplified Deliberate Self-Harm Inventory (DSHI-s; Lundh, Karim & Quilisch, 2007), to assess the lifetime frequency and severity of self-injurious behaviours in adolescents. In the current study the DSHI-s was modified to include an additional scale point; such that *"Never"* was differentiated into *"I have never thought about doing this"* and *"I have thought about doing this, but never done it"* in line with theoretical arguments that NSSI thoughts of action and NSSI actions are related, but often distinct (Martin, Bureau, Cloutier, & Lafontaine, 2011; Nock, Prinstein, & Sterba, 2009). The *"any of the above-mentioned behaviours causing hospitalization or injury requiring medical treatment"* item was removed. Additionally, the *"punched oneself"* and *"banged head"* items were combined into one item (modified item *"punched yourself, or banged your head against something, to the extent that caused a bruise to appear"*). The revised DSHI-s consisted of 13-items, and demonstrated good internal consistency within this sample (α = 0.79). Participants were asked to indicate he extent to which they had ever thought of or engaged in the DSHI statements on a 5 point scale, ranging from 0 (*"I've never thought about doing this"*) to 4 (*"I've done this many times"*). Items began with *"Have you ever deliberately (but without wanting to kill yourself)"* and then listed 13 different self-injurious behaviours such as *"cut your wrist, arms, or other areas of your body", "burned yourself with a cigarette, lighter or matches"* and *"rubbed glass into your skin"*. A measure of NSSI severity was created by averaging participant's responses to the 13 items, thus taking into account the number of NSSI forms, and the frequency of engagement. In order to capture the complete spectrum of NSSI severity, participants who indicated that they had never thought about or engaged

in NSSI were assigned a score of zero. The revised DSHI-s consisted of 13-items, and demonstrated good internal consistency within this sample (α = 0.79).

Socioeconomic deprivation

Participants completed a six-item Socioeconomic Deprivation Scale created for the present study. Participants were presented with items such as *"Do you ever go without breakfast because there is not enough food in your household?"* to which they responded either *"yes"* or *"no"*, (coded as 1 and 0 respectively). The item *"Do the people who care for you ever worry about money for food, rent, or electricity?"* was adapted from the item *"Do your parents, or the people who act as your parents, ever worry about not having enough money to buy food?"* used in the Youth'12 National Health and Wellbeing Survey of New Zealand Secondary School Students (Adolescent Health Research Group, 2012). An additional item was created to assess whether adolescents themselves worried about money for necessities. The other four items were developed following a review of the literature. See Table 1 for all items, factor loadings and rates of endorsement. A socioeconomic deprivation score was created by averaging participant's responses to the 6 items. In order to establish the factor structure of the Deprivation Scale, an unrotated exploratory factor analysis was conducted with the six items. Inspection of eigenvalues and the scree plot indicated a one-factor solution, which explained 37.5% of the variance. Inspection of the item loadings onto the component revealed that the majority of factors loaded on the factor (ranging .69 to .63), but the item *"Do you ever miss school because there is not enough money to get there"* loaded at .38, and so this item was removed from subsequent analyses (see Giles, 2013). The five item socioeconomic deprivation scale showed questionable internal reliability α = 0.64, although this is likely to be influenced by the few items in the scale.

Table 1.

Items comprising the Socioeconomic Deprivation Scale, factor loadings and rate of endorsement

Item	Factor loading	Endorsement rate
Do your parents, whānau, or other people who look after you ever worry about money for food, rent, or electricity?	.69	24.9%
Do you ever worry about your parents, whānau, or other people who look after you not having enough money to buy food, pay rent, or pay for electricity?	.64	26.1%
Have you ever not had enough money for books or to go on school trips because your parents, whānau, or other people who look after you could not afford it?	.63	7.5%
Do you ever go without breakfast because there's not enough food in your household?	.63	4.4%
Do you ever go without lunch because there's not enough food in your household?	.65	4.2%
Do you ever miss school because there's not enough money for the bus or train, or not enough petrol in the car to get there?	.38	1.4%

*N*s range from 783 to 788. Note that the final item was removed to improve the internal reliability of the scale.

Depression and Anxiety

Depression and anxiety symptomatology were measured using the Depression Anxiety Stress Scale (DASS-21; Lovibond & Lovibond, 1995a). Due to timing constraints during data collection, participants completed only the depression and anxiety subscales. Participants completed seven items to index each construct, reporting the degree to which each item applied to them over the past week. Sample items include: *"I found it difficult to work up the initiative to do things"* (Depression item) and *"I felt that I was using a lot of nervous energy"* (Anxiety item) to which participants respond on a 4-point scale ranging from *'0 – did not apply to me at all'* to *'3 – applied to me very much or most of the time'*. Responses on each item in the subscale were totalled and multiplied by two in order to provide scores comparable to norms of clinically relevant symptoms (consistent with instructions, Lovibond & Lovibond, 1995b). Previous research has validated the use of the DASS in young adolescents (Szabó, 2010). In the present sample, the internal consistency of both the depression and anxiety subscales were satisfactory (α =.90, and .83, respectively).

Procedure

Ethical approval for this study was granted by the New Zealand National Health and Disability Ethics Committee. Forty-five secondary schools in the greater in the Wellington region were contacted and invited to take part in the broader Youth Wellbeing Study in 2011 and 2013. After consultation with school management and Board of Trustees, 15 schools participated in the study. Students in Year 9 (US Grade 8) and, at one school Year 10, took home an information pack and consent form for parents. 1451 students returned a completed consent form, 75.5% of these having parental permission to take part in the study. This overall rate of consent is consistent with other high school based NSSI research requiring active parental consent (Andrew, Martin, Hasking & Page, 2014). In order to take part in the study, both parental consent and participant assent were required.

The survey was administered in 2013 in classrooms under the supervision of a research team member(s) during a class period. Participants were first given an information sheet outlining the study and the opportunity to ask researchers any questions. Participants were informed that their participation in the current study was voluntary and that they were able to withdraw at any time without consequence. Participants were also given assurance that their answers would remain confidential, unless researchers were concerned for their safety. The survey consisted of demographic information, the Socioeconomic Deprivation Scale, the depression and anxiety subscales of DASS-21, the modified version of the DSHI-s, and a number other questionnaire measures assessing youth wellbeing not included in the present study. The survey took approximately 40 minutes to complete. Following participation, students were debriefed and given a list of contact details for community services, should they wish to seek support. Students were also able to approach team members following participation if they had any questions or concerns. Students also had the option of leaving their email or postal address to receive a summary of study results.

Analytic plan

In order to maximise the sample size available missing data was computed where possible. Given that the DASS -21 Depression and the DASS-21 Anxiety subscales show adequate internal consistency, when participants had completed 80% or more of the scale the average of the items they had completed was calculated and inserted into the missing cells before a sum score was calculated. In contrast, the DSHI-s is more like a symptoms checklist than a typical scale. Therefore, DSHI-s missing cells were assumed to be the absence of that NSSI behaviour and replaced with zeros (see Lundh, Karim & Qulisch, 2007 for a similar method of addressing missing DSHI-s data). Given that the internal consistency of the Deprivation scale was poor, and the current study is the first to use the scale, missing data was not computed.

Given our use of a community sample, we anticipated that NSSI severity, Depression, Anxiety and Socioeconomic Deprivation would be non-normally distributed, and so we standardised the data prior to mediational analysis. As previous research has found gender differences in NSSI engagement (Plener, Libal, Keller, Fegert, & Muehlenkamp, 2009), depression (Piccinelli & Wilkinson, 2000), and anxiety (McLean & Anderson, 2009), we split our sample by gender in order to establish whether the mechanisms underlying the relationship between socioeconomic deprivation and NSSI differed for boys and girls[1] .

We followed the general procedure outlined by Preacher and Hayes (2008) using the programme PROCESS (Hayes, 2012) to test simultaneously for significant mediations by Anxiety and Depression. That is, we simultaneously assessed the indirect effect of Socioeconomic Deprivation (*X*) on NSSI severity (*Y*) through Anxiety (*M1*); the indirect effect of Socioeconomic Deprivation (*X*) on NSSI severity (*Y*) through Depression (*M2*); the indirect effect of Socioeconomic Deprivation (X) on NSSI severity (*Y*) through both Anxiety (*M1*) and Depression (*M2*) in parallel; and the direct effect of Socioeconomic Deprivation (*X*) on NSSI severity (*Y*). Bootstrapping with 5000 samples provided a 95% confidence interval around the indirect effects in order to determine if the mediating effects are different from zero (Preacher & Hayes, 2008)[2] .

Results

Descriptive statistics

Within the current sample, 37.8% of participants indicated yes to one or more of the five items of the Socioeconomic Deprivation scale, indicating that a substantial proportion of the sample experience some degree of socioeconomic deprivation. Individual item endorsement is presented in Table 1. Participants were most likely to report that they worried about not having enough money for food, rent, or electricity (26.1%), and were least likely to report ever missing school

1 As the number of adolescents who identified as transgender in our sample is too small to draw informative statistical conclusions, subsequent gender analyses will compare only participants who identify either as male or female.

2 Note that in order to be informative, the 95% confidence intervals reported here were calculated from the unstandardized data.

because there was not enough money to get there (1.4%). Girls (*mean rank* = 399.14) reported greater socioeconomic deprivation than boys (*mean rank* = 367.33), $U = 64703.50$, $p = .026$, $r = .08$.

Consistent with international prevalence rates, the majority (71.5%) of adolescents indicated that they had never thought about, or engaged in, self-injury. Of all participants, 19.1% reported having engaged in at least one form of NSSI, while the remainder (9.4%) reported having thought about hurting themselves, but not engaging in any self-injurious behaviours. The most common NSSI behaviours were cutting (15.5%) and scratching skin (9.8%). Of the participants who reported engaging in NSSI, 15.8% reported that the last time they had self-injured was more than a year ago, 30.1% within the last year, 30.8% within the last month, and 23.3% within the last week. The majority of participants who reported NSSI reported engaging in self-injurous behaviours more than once (66.3%). Girls (*mean rank* = 428.57) reported greater NSSI severity than boys (*mean rank* = 348.62, $U = 59620.00$, $p < .001$, $r = .22$).

As expected in a community sample, anxiety scores were non-normally distributed (*skewness* = 1.51, *kurtosis* = 1.83). Using the cut off scores reported by Lovibond and Lovibond (1995b), the majority of participants (63.4%) reported aniety symptoms within the normal range, 7.2% in the mild anxiety range, 14.3% in the moderate anxiety range, 4.2% in the severe anxiety range, and 10.8% in the range for extremely severe anxiety. Girls (*mean rank* = 416.17) reported experiencing greater anxiety symptoms than did boys (mean rank = 368.66), $U = 65711.50$, $p < .001$, $r = .10$.

In a similar fashion, depression scores were also non-normally distributed (*skewness* = 1.50, *kurtosis* = 1.65). Again, the majority of participants (69.9%) reported depression scores in the normal range, 8.7% in the mild depression range, 10.7% in the moderate depression range, 4.6% in the severe depression range, and 6.1% in the extremely severe depression range. Girls (*mean rank* = 418.69) reported experiencing greater depression symptoms than did boys (*mean rank* = 364.58), $U = 64473.50$, $p < .001$, $r = .12$.

Relationship between socioeconomic deprivation and psychological wellbeing

Table 2 show the zero-order correlations between depression, anxiety, NSSI, and deprivation. Consistent with predictions, socioeconomic deprivation was associated with greater self-injurious ideation and behaviours. Replicating prior local and international research, depression and anxiety were also positively associated with NSSI, as well as strongly correlated with each other. In order to establish if there were differences in the strength of the relationship among boys and girls, we use the Fisher r-to-z transformation to compare correlations. There was no evidence for a difference in the strength of the relationship between self-injury and deprivation, anxiety and depression, anxiety and deprivation, or depression and deprivation (*ps* range from .653 to .076). However, the relationship between anxiety and self-injury (*Z* = 4.20, *p* <.001) and depression and self-injury (*Z* = 3.27, *p* =.001) was significantly stronger for females than for males, suggesting that the relationship between psychological

wellbeing and self-injury may differ by gender.

Table 2.

Means (and standard deviations), and zero-order correlations between deprivation, DASS-21 depression and anxiety, and DSHI-s scores for the total sample and for males and females separately

	NSSI	DASS Depression	DASS Anxiety	Deprivation
Total *M* (*SD*)	.17 (.38)	7.56 (9.27)	7.20 (8.10)	0.13 (.21)
Males *M* (*SD*)	.08 (.28)	5.84 (7.65)	5.79 (6.48)	0.11 (.19)
Female *M* (*SD*)	.21 (.42)	8.45 (9.86)	8.03 (8.82)	0.14 (.21)
Males:				
Deprivation	.26*	.33*	.33*	-
DASS Anxiety	.36*[a]	.73*	-	
DASS Depression	.50*[a]	-		
NSSI	-			
Females:				
Deprivation	.19*	.26*	.30*	-
DASS Anxiety	.60*[a]	.72*	-	
DASS Depression	.65*[a]	-		
NSSI	-			
Total				
Deprivation	.22*	.28*	.31*	-
DASS Anxiety	.55*	.73*	-	
DASS Depression	.62*	-		
NSSI	-			

Female *N*'s range from 478 to 491; male *N*'s range from 295 to 304; * *p* <.01. [a] indicates that the size of correlation differs between males and females, *p*s range from <.001 to .001.

Given these significant zero-order relationships, we next assessed whether depression and anxiety mediate the association between deprivation and self-injury. For girls, the combined indirect effect of Depression and Anxiety on the relationship between Deprivation and NSSI was significant, R^2 = .47, $F(3, 474)$ = 141.94, $p < .001$, indicating that the combined set of mediators partially explained the relationship between Deprivation and NSSI. Both Depression, $t(476)$ = 9.60, p <.001, unstandardized 95% CI [0.15, 0.36], and Anxiety $t(476)$ = 5.69, p <.001, unstandardized 95% CI [0.09, 0.28] independently mediated the effect of Deprivation on NSSI. When taking into account both mediating variables, the direct pathway between Deprivation and NSSI became non-significant, $t(476)$ =0.27, p =.784, suggesting that for girls the relationship between Deprivation and NSSI is fully mediated by both Depression and Anxiety. See Figure 1A for the standardized parameter estimates for each of the direct and indirect pathways.

For boys, the combined indirect effect of Depression and Anxiety on the relationship between Deprivation and NSSI was significant, R^2 = .26, $F(3, 291)$ = 34.48, $p < .001$, indicating

that the combined set of mediators partially explained the relationship between Deprivation and NSSI. In contrast to girls, for boys Depression, $t(293)$ = 6.55, p <.001, unstandardized 95% CI [0.08, 0.50], independently mediated the effect of Deprivation on NSSI, but Anxiety did not $t(293)$ = -.01, p =.992, unstandardized 95% CI [-0.14, 0.14]. When taking into account both mediating variables, the direct pathway between Deprivation and NSSI became non-significant, $t(293)$ = 1.94, p =.053, suggesting that for boys the relationship between Deprivation and NSSI is fully mediated by Depression alone. See Figure 1B for the standardized parameter estimates for each of the direct and indirect pathways.

Discussion

Previous international research has provided mixed evidence for a relationship between socioeconomic deprivation and greater engagement in self-injury, with subjective measures of socioeconomic deprivation more consistently demonstrating a relationship with NSSI than objective measures.

In particular, the potential mechanisms underlying this relationship have largely remained unexplored. Drawing from a New Zealand sample of community adolescents, the present study tested the hypotheses that greater socioeconomic deprivation is associated with greater NSSI severity, and that both anxiety and depression independently mediate this relationship. Adolescents who reported greater socioeconomic deprivation were more likely to also report engaging in NSSI, as well as greater depression and anxiety symptoms. However, the strength of the relationship between NSSI and depression, and NSSI anxiety was greater for girls than for boys, leading us to split our mediational analyses by gender. Consistent with our hypothesis, psychological distress fully mediated the relationship between deprivation and NSSI. Among girls, both depression and anxiety independently mediated this relationship, while among boys, only depression independently mediated the relationship.

Previous research has consistently found hospital presentation for deliberate self-injury to be associated with geographic variation in deprivation, as was as family socioeconomic status (Ayton et al., 2003; Hawton et al., 2001; Jablonska et al., 2009). However, use of hospital records is problematic in that these samples fail to distinguish between suicidal and non-suicidal self-injury, as well as disproportionately excluding those whose self-injury did not require medical attention and individuals who are unable to access hospital services. Even in contexts with minimal financial costs associated with state-funded medical care, deprived individuals will likely experience difficulties associated with travel to hospital and follow-up care, and will therefore be under-represented in hospital presentation data (Rowe et al., 2014; Whitlock et al., 2006). Overall, the results presented here provide additional evidence that the relationship between deprivation and NSSI extends to community samples of adolescents, which is likely to be more representative of those in the population who self-injure.

However, previous research within community samples find mixed evidence for a relationship between socioeconomic

deprivation and self-injury. Research utilising subjective indices of socioeconomic deprivation (e.g., reported experiences of financial difficulties) consistently find greater socioeconomic deprivation to be associated with NSSI (Hurtig et al., 2012; Mossige et al., 2016; Nixon et al., 2008; Zetterqvist et al., 2013). In contrast, research using more objective measures of socioeconomic deprivation (e.g., parental income, or parental unemployment) find evidence of a negative relationship or no relationship (see for example, Baetens et al., 2013; Klonsky, 2011; Liang et al., 2014; Mossige et al., 2016; Swannell et al., 2014). The disparity in results between subjective and objective measures of socioeconomic deprivation suggests that subjective socioeconomic deprivation measures variability that objective deprivation does not. Previous research suggests
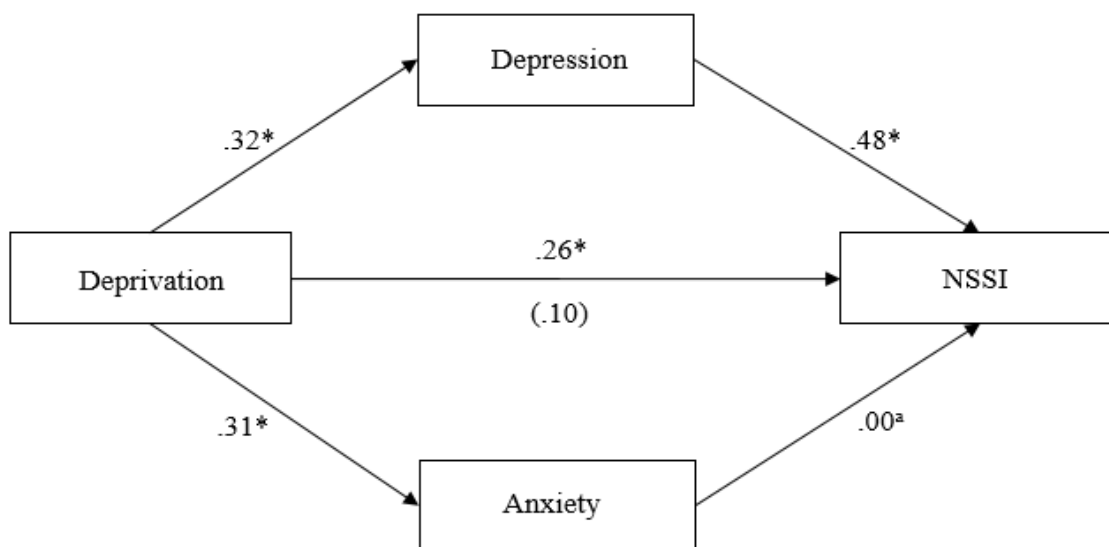
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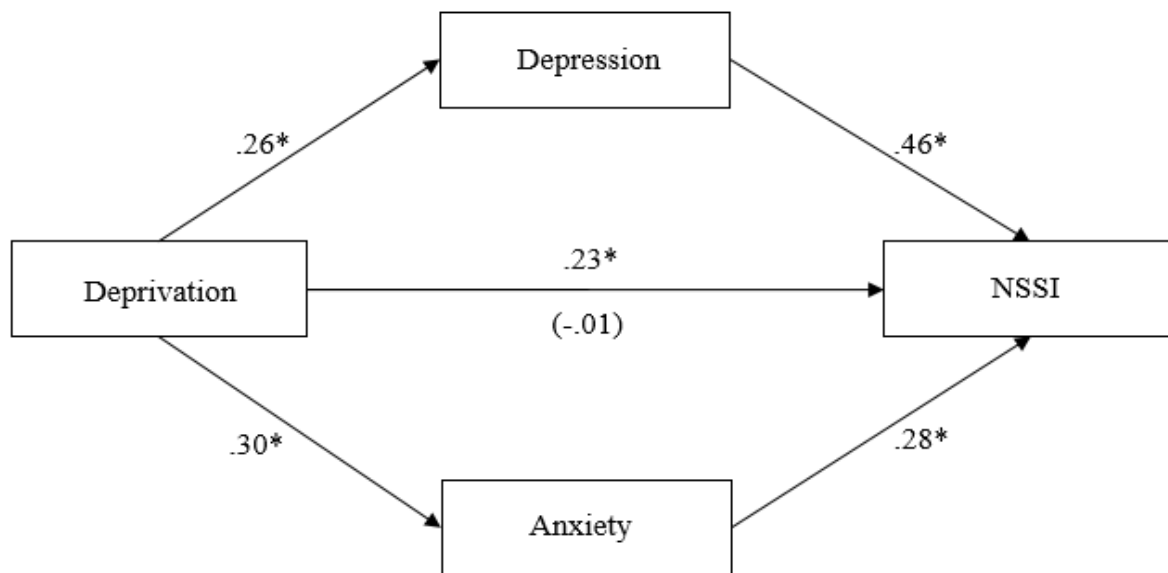
B

Figure 1. Multiple mediation models of Deprivation and NSSI through Depression and Anxiety for girls (Panel A) and boys (Panel B). Standardised regression coefficients are provided along the paths. *$p<.001$.

that socioeconomic deprivation can be distressing for some young people (Egan-Bitran, 2010), and that the risk of self-injury is reduced when adjusting for depression symptoms (Page et al., 2014). The current study found that psychological distress fully mediated the relationship between deprivation and NSSI. Our data provides a tentative theoretical hypothesis that socioeconomic deprivation indirectly increases risk for NSSI by directly increasing the risk for depression and, among girls only, anxiety. Consistent with theoretical understandings of NSSI as a strategy to avoid overwhelming emotional experiences (Chapman et al., 2006), the current study suggests that deprivation leads to symptoms of psychological distress (or vice versa), and that NSSI is then used to cope with this distress.

Critically, although we we feared similar relationships between deprivation and mental health outcomes, the psychological mechanisms underlying the relationship between socioeconomic deprivation and NSSI appear to differ for boys and girls. For girls, greater depression and anxiety independently mediated the relationship between socioeconomic deprivation and NSSI. However, for boys only depression independently mediated this relationship. This suggests that depressed boys choose to manage their distress with NSSI, whereas anxious boys choose a different coping strategy. Given that conduct problems and substance use are more common in males than females (Chen & Jacobson, 2012; Zahn-Waxler, Shirtcliff, & Marceau, 2008), these behaviours may be fruitful areas for future study.

Consistent with previous adolescent research (Zahn-Waxler et al., 2008), girls reported greater anxiety and depression than did boys. However, we found no evidence of a difference in the strength of the relationship between socioeconomic deprivation and either self-injury, depression or anxiety. This finding adds to the already mixed results of previous research investigating the relationship between mental health outcomes and socioeconomic deprivation in children and adolescents. Specifically, a systematic review of research investigating mental health outcomes and deprivation in children and adolescents (Reiss, 2013) highlighted studies for which there were no gender differences (e.g. Ravens-Sieberer et al., 2008), studies where the association between mental health outcomes and deprivation was stronger for males (e.g. Due et al., 2003) and studies where the association was stronger for females (e.g. Leve et al., 2005). Therefore it is clear that future meta-analytic work is needed to understand the conditions under which socioeconomic deprivation is associated with gender differences in mental health outcomes.

Practically, this study emphasises that adolescents whose families are experiencing socioeconomic deprivation are at greater risk of poor mental health outcomes, including anxiety, depression, and self-injury. Policy and funding should focus on providing low decile schools or comparatively poorer geographical areas with greater resources for mental health and wellbeing support, perhaps in the form of larger school guidance counsellor teams or programmes targeted at prevention or promoting student wellbeing. Given that populations with the greatest socioeconomic deprivation have the highest mental health needs but typically the poorest access to health services (Saxena, Thornicroft, Knapp,

& Whiteford, 2007), school-based interventions are likely to be particularly important for addressing socioeconomic disparities in adolescent mental health. Additionally, assessing socioeconomic deprivation may then be useful for school guidance counsellors, school staff and mental health professionals in helping to identify adolescents who may be at greater risk of poorer mental health allowing for greater monitoring for any initial signs of difficulty or distress. The current study also reiterates the need for mental health services and NSSI intervention programmes to consider the role of environmental stressors such as deprivation in the development of mental health problems.

One strength of this research is that it assesses the mechanisms underlying the relationship between NSSI and socioeconomic deprivation within a large community sample of New Zealand adolescents. Unfortunately the cross-sectional nature of this study limits possible conclusions about causality in the relationships between socioeconomic deprivation, depression, anxiety, and NSSI. Although self-injury is unlikely to cause deprivation, deprivation, depression and anxiety may simply co-occur, or perhaps a depressed young person is both more likely to perceive deprivation and to engage in self-injury. Quasi-experimental studies suggest that socioeconomic deprivation may be causality implemented in poorer mental health, reporting that a decrease in deprivation leads to a decrease or remission of mental health issues (Costello, Comptom, Keeler, & Angold, 2003; Strohschein, 2005). However, it is import to note that Costello and colleagues (2005) found no effect of improved financial circumstances on depression or anxiety symptoms, while Strohschein (2005) found that the effect of household income on depression attenuated as the children aged into adolescence. A second caveat of the current research is the time course captured by the measures. We assessed current experience of socioeconomic deprivation, level of anxiety and depression symptoms in the past week, and lifetime NSSI, effactually assessing whether the relationship between current deprivation and past NSSI is mediated by recent anxiety and depression. Thus, it is clear that further longitudinal analyses are required to better clarify the nature of the relationship between socioeconomic deprivation and mental health outcomes.

Given that we know that in Aotearoa New Zealand, Māori experience greater deprivation than non-Māori (Denny et al., 2016; Perry, 2015), it is somewhat surprising that Māori youth do not appear to be significantly more likely than non-Māori youth to report NSSI (Wilson et al., 2016). Future research could explore whether there are cultural buffers of the relationship between deprivation and NSSI. Alternatively, there is evidence to suggest that the link between deprivation and population health is better accounted for by relative deprivation and social comparisons than it is by objective deprivation (e.g. Kondo, Kawachi, Subramanian, Takeda, & Yamagata, 2008; Wilkinson & Pickett, 2007). In many areas, Māori are concentrated in lower decile schools in which relative deprivation may be less obvious than in higher decile areas. Future research is needed to better understand the casual relationship between socioeconomic deprivation and self-injury, depression, anxiety and mental health more broadly.

Conclusions

Over a third (37.8%) of our young adolescent Aotearoa New Zealand sample reported experiencing some degree of subjective socioeconomic deprivation. Experiencing socioeconomic deprivation was associated with greater depression, anxiety, and engagement in self-injury. Among girls, the relationship between deprivation and NSSI was fully mediated by both depression and anxiety, whereas for boys only depression independently mediated the relationship. These findings suggest that psychological distress may be the mechanism by which socioeconomic deprivation predicts engagement in self-injury, and critically that this process may operate in a different manner among girls and boys. Taken together, these findings reiterate the need for greater mental health and wellbeing support for adolescents and their families experiencing socioeconomic deprivation.

Acknowledgements

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Mā te mātau, ka ora: The use of traditional Indigenous knowledge to support contemporary *rangatahi* Māori who self-injure

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International understanding of, and interventions for, self-injury are grounded in definitions and models that are based on a worldview that, for some *rangatahi* Māori (Māori youth), differ from their own lived realities. In this paper we explore the potential that traditional knowledge has for enabling *rangatahi* and *whānau* (families) to understand self-injury within a culturally-relevant context. *Kōrero tuku iho* (traditions or stories of the past) are affirming of behaviours that, in modern society, would be considered self-injury. These *kōrero tuku iho* have been passed down over generations and, as such, are grounded in traditional Māori values and beliefs. This knowledge can be applied to the behaviours *rangatahi* Māori engage in and provide a culturally-grounded context, rationale and mechanisms for healing when *rangatahi* self-injure. Learning of these behaviours facilitates an opportunity for *rangatahi* to reconnect and learn more about their culture.

Keywords: Self-Injury, Rangatahi Māori, Adolescents, Indigenous peoples, Culture, Ethnic minorities

Mā te rongo, ka mōhio

Mā te mōhio, ka mārama

Mā te mārama, ka mātau

Mā te mātau, ka ora[1]

This paper highlights traditional Māori cultural practices when working with *rangatahi* Māori who self-injure. In order to centralise the readers' thinking within a Māori worldview, this paper begins with an exploration of relevant aspects of *te ao Māori* (a Māori worldview), namely *kōrero tuku iho* (myths, ancient legends, or stories passed down through generations[2]) and *whakapapa* (geneology). *Kōrero tuku iho* are presented here as a metaphorical vehicle by which traditional behaviours can be transmitted from the past to the present. *Whakapapa* is introduced as a construct that is integral to an individual's wellbeing and, as such, it can be used for healing with *rangatahi* Māori and *whānau* (Durie, 2015). The intention of this paper is to highlight the role that culture can play in healing in a mental health context, particularly when working with rangatahi Māori and whānau.

Kōrero tuku iho are traditional stories, myths or legends that are transmitted over generations. But *kōrero tuku iho* function as much more than just stories; they pass on knowledge from *tīpuna* (ancestors) that reflect a Māori worldview (Lee, 2009; Roberts & Wills, 1998). Imbued in these *kōrero tuku iho* are morals, values and beliefs that can be taken a priori and applied in a modern context in order to guide current and future generations. In essence, *kōrero*

1 Through perception comes awareness, through awareness comes understanding, through understanding comes knowledge, and through knowledge comes well-being (Māori proverb).
2 The literal translation of *kōrero tuku iho* is a story/stories passed down. Thus, the term *kōrero tuku iho* can describe the myths and legends of Māori history that are also referred to as *pūrākau* (myths or legends). However *kōrero tuku iho* may also include colloquial and familial stories passed down within *whānau*.

tuku iho are grounded in *te ao* Māori and provide guidelines for being Māori in a modern context.

Kōrero tuku iho reflect a Māori worldview, and central to a Māori worldview is *whakapapa*. *Whakapapa*, in its simplest form, is translated to mean 'geneology', however, on a deeper level, *whakapapa* provides an understanding for how, to Māori, the world came to be as it is, and how Māori continue to live (Mikaere, 2011). Knowing one's *whakapapa* provides a sense of belongingness, affinity and membership to particular *iwi* (tribes) and *hapū* (sub-tribes) (Mead, 2016). Often when Māori introduce themselves, particularly at formal gatherings, they will locate themselves within space and time by reciting their *whakapapa* and naming aspects of *te ao tūroa* (the natural world) with which they affiliate, for example the mountain, river/lake/sea, and *rohe* (region) from which their *iwi*, *hapū* and *whānau* originate. Mead (2016) describes how one's *tuakiri* (identity) can be inextricably linked to these physical elements. In essence, the significance of locating oneself within space provides a physical place of belonging, where one can stand with confidence; understood in *te ao* Māori as one's *tūrangawaewae* (home base, literally a place for ones feet to stand; Mead, 2016).

Given that *whakapapa* is inherently tied to identity as Māori, *whakapapa* is also a core component of Māori wellbeing. In his keynote address at Healing our Spirit Worldwide, Durie (2015) described the concept of *mauri* (life force; Moorfield, 2005) as a reflection of the energy or vitality that encompasses a person's whole self beyond their physical wellbeing. Cultural identity is described by Durie as one of eight elements that are essential to a person reaching a state of *mauri ora* (flourishing), whereby:

"[m]auri ora is mirrored by an enlightened spirit, an alert and inquiring mind, a body that is fit for purpose and free of pain, and engagement with a set of relationships that are positive, nurturing, and mutually beneficial. In contrast, *mauri*

noho [languishing] can be manifest by the loss of hope, a mind that is clouded and insular, a tortured body, and engagement in a set of relationships that are disempowering and humiliating. In brief, the *mauri*, whether flourishing or languishing, reflects four dimensions: *wairua* (the spirit), *hinengaro* (the mind), *tinana* (the body), and *whānau* (relationships).

Therefore, in *te ao* Māori, *whakapapa* describes the history of people, places and behaviours (Mikaere, 2011). Knowledge of *whakapapa* can strengthen one's cultural identity and contribute to ones wellbeing and achievement of mauri ora. Through *kōrero tuku iho* whakapapa has the potential to serve as a mechanism by which *rangatahi* Māori can connect with their identity as Māori.

Current research on NSSI in Rangatahi Māori

Throughout the course of this research, anecdotal evidence from clinical practitioners who work with Māori has highlighted the prevalence of self-injury with *rangatahi* Māori [3]. Furthermore, recent research conducted by the authors as part of the Youth Wellbeing Study has found that in the *Wave Three sample*[4] of *rangatahi* who identified as Māori[5], 32% had either hurt themselves on purpose, or thought about hurting themselves on purpose (7%) in ways that are considered to fit the definition of non-suicidal self-injury (NSSI: deliberate self-inflicted damage to bodily tissue without suicidal endorsement or suicidal intent; Nock, 2010). Of those who had self-injured, cutting their wrists, arms or other areas of the body were the most common form of self-injury. Also, of those who had self-injured, 2% identified that they were 'not at all' interested in stopping hurting themselves on purpose, whilst 12% 'would like to stop'. Of all *rangatahi* Māori surveyed, 71% knew someone who had hurt themselves on purpose. With regard to functions, Mendiola (2011) has found that cultural influences, such as *matakite* (seeing spirits, or into the future, or past), were reported by *whānau* members of *rangatahi* as reasons for why their *rangatahi* had hurt themselves on purpose.

Taken together, these findings validate what has been described by practitioners anecdotally, and highlights the extent to which self-injury is an issue relevant for *rangatahi* and *whānau* in communities in Aotearoa. Even if they have not done it themselves, most *rangatahi* Māori have come in contact with someone who has hurt themselves on purpose, and cultural influences are important.

International Research on NSSI

Leading research internationally tells us that for adolescents NSSI serves both intra- and inter-personal

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3 One half-day advisory group workshop was conducted with practitioners who work with rangatahi and whānau who had self-injured. As follow-on from this, a full-day workshop was held with the wider community for practitioners and whānau to come together and share their experiences of supporting rangatahi who had self-injured.

4 Wave three of the sample was comprised of participants who were surveyed in 2015. The total number of rangatahi who identified as Māori within this sample was 175. The age range was 14-17 years, with the median age of 15

5 Identity as Māori was established by those who answered 'Yes' to the question "Are any of your parents, grandparents or great grandparents Māori?", and/or who identified Māori as their ethnicity (primary or other).

functions, and the behaviour can serve multiple functions at one time and are not mutually exclusive (Nock, 2010). Primary intrapersonal functions include the regulation of emotional experiences (Klonsky, 2009; Muehlenkamp, et al 2011; Nock, Prinstein, & Sterba, 2009) self-punishment (Lundh, Karim, & Quilisch, 2007) and as an alternative to suicidal behaviour (Klonsky & Muehlenkamp, 2007). Empirically-validated interpersonal functions include communicating distress or influencing others' behaviour (Klonsky & Muehlenkamp, 2007; Nock & Prinstein, 2005).

One of the most prominent models used to explain NSSI is the Experiential Avoidance Model (EAM; Chapman, Gratz, & Brown, 2006). This model describes NSSI as a coping mechanism; a form of emotion regulation that serves to manage distressing thoughts (Chapman et al., 2006). According to the EAM, when an individual experiences unwanted negative emotions they self-injure in order to either allay or eliminate the negative emotions. The temporary relief that is felt then negatively reinforces the self-injury, which, over time, may become an automatic coping mechanism (Chapman et al., 2006).

With regard to interventions for those who self-injure, there is a paucity of treatments that specifically target NSSI in any population, including adolescents (see Klonsky, Muehlenkamp, Lewin & Walsh (2011) for a review of evidence-based treatments). An emerging treatment approach is Emotion Regulation Group Therapy (ERGT), developed by Gratz and Tull (2011) with adult populations. ERGT has been developed based on the EAM's conceptualisation of NSSI as an emotionally avoidant behaviour. The treatment for NSSI focuses on several components, including mindfulness, emotional awareness, decreasing avoidance, accepting emotions, and a focus on the relationship between emotions and behaviour. Strategies of regulating emotions often utilise mindfulness techniques. Mindfulness is grounded in the beliefs of Buddhism, and activities such as meditation and being fully present in a moment are common practices in mindfulness workshops (Brown & Ryan, 2003). The intervention process for ERGT also includes modules that teach participants to identify their values and encourages engaging in valued action. Currently there is little information on the effectiveness of ERGT in adolescent populations, although as an individualised treatment programme, Bjareberg et al (2014) have recently piloted emotion regulation therapy with adolescents in Sweden, with promising results to date.

Self-Injury in Māori

In exploring traditional Māori knowledge regarding self-injury, this research looked to *kōrero tuku iho*; to stories from Māori ancestors, both real and mythical. These *kōrero tuku iho* are located within *mōteatea* (traditional chants; Ngata & Te Hurinui, 1961), *whakataukī* (proverbs; Mead & Grove, 2004) and *waiata* (songs; Moorfield, 2005) that are passed down over generations (Orbell, 1992).

Indigenous cultures across the world share many similar cultural values, though they may be expressed in different terms. The strong connections that *whenua* (land) holds as a place of belonging (*tūrangawaewae*) described here for Māori are also strong in other cultures. For example, Hawai'ian

(Rezentes, 1996) and other Indigenous cultures such as the Western Apache people of Arizona (Basso, 1996) and, closer to home, the Aboriginal communities of Australia (McKay, McLeod, Jones, & Barber, 2001). We can also look to other Indigenous cultures for similarities in traditional knowledge regarding self-injury. Favazza (2011) provides one of the most comprehensive accounts of cultural understandings of self-injury knowledge accessible in mainstream society. He describes rituals of indigenous cultures that serve as rites of passage, signs of respect and honour for ancestors, the rebalancing of body and/or spirit energies, and for healing of diseased or wounded body, self, or psyche. Traditional Hawai'ian stories talk of the practice of *Ma-newa-newa*, which is an expression of *Na'au'auwa* or intense grief at the passing of a loved one (Pukui, Haertig, & Lee, 1983). Examples of such behaviours include scarring the body or knocking out teeth. Traditional practices such as this demonstrate that there may be behaviours, that from a Western perspective, may be classified as intentional self-harm. Whilst the practice of *Ma-newa-newa* was not culturally mandated or sanctioned as a cultural norm, it was in some ways respectfully tolerated during *Na'au'auwa* (Rezentes, W. personal communication, 29 April 2016).

Returning to examples from traditional Māori perspectives, *Kiri haehae* may be a practice that warrants exploration as a cultural analogue of self-injury. The term *kiri haehae* is translated to mean to scratch, draw, cut up, lacerate or tear (Moorfield, 2005) . Ngahuia Te Awekotuku (2009) describes the traditional practice of *kiri haehae* as

... a more primal form of modifying the body, including the face, in response to grief and death. Unlike *tā moko*, which was an erudite art form applied by an expert *tohunga* with chisels and pigment, *haehae* was a spontaneous expression of intense grief. Inflicted with *tuhua*, or obsidian flakes, sharp *mata* or *whaiapu* stone, or razor shells; you did this to yourself. It was not seen as mutilation, as self harm; it was a visceral compulsion, still occurring today, but usually misread and misunderstood in modern times. Many *waiata tangi*, or songs of lamentation, allude to this practice as a vivid demonstration of loss. More females than males tended to do this, yet men also engaged in *haehae*. (Te Awekotuku, 2009, p. 5)

Te Awekotuku (2009) refers to this scarification process as a mark of honour that serves as a constant reminder of a loved one who has passed on. *Kiri haehae* is also depicted visually in images/paintings from the 1860's that show Māori, often women, lacerating their arms and chest and letting their blood fall on the tools of war used by their loved ones lost in battle (Higgins, 2015).

Traditional *waiata* and *mōteatea*, such as '*He Tangi*' written by Parewahaika from *Te Arawa*[6] also talk of grief and loss. The final lines of this *waiata*, "*me ana ripi, hei totohi i ngā toihau*" talks of the use of stones as tools for *haehae* (referred to here as *totohi*). This song was written in the context of mourning for a loved one (Ngata & Te Hurinui, 1961). A more commonly known *waiata*, *Pūtauaki*, from the tribe of Ngāti Awa, contains the line "*nāu nei i haehae tō kiri e*" (you who lacerated your skin). The well known story that this song refers to talks of the grief expressed by *Tarawera* (the river of the

6 A tribe from the Rotorua region of Aotearoa New Zealand

Ngāti Awa tribe) when her lover *Pūtauaki* (the paramount mountain of the *Ngāti Awa* people) left Tarawera in pursuit of *Whakaari* (known today as White Island). The lines "*hotuhotu ana te whatumanawa e, rere ana te mataku, rū ana te whenua e*" speaks to the intense emotion felt and the expression of this, through the shaking of the earth.

More recent depictions of *kiri haehae* serve as powerful demonstrations of grief and loss in modern contexts. A piece by Robyn Kahukiwa titled 'Haehae mō ngā Pēpi Kāhui' depicts an image of a Māori female lacerating her chest using mussel shells. The blood flows down her breasts as a small child lies on her lap. This image is the artist's expression of grief for the Kāhui twins Chris and Cru, who passed away in 2006 as victims of child abuse. It is a poignant representation of a mother whose grief is etched into her skin (Trevelyan, n.d.).

The practice of *kiri haehae* also facilitates powerful connections with *atua* (god, ancestor with continuing influence). Roberts (2013) retraces the *whakapapa* of the *pungawerewere* (spider) to *Haumietiketike*, one of the many children of *Ranginui* and *Papatūānuku*, and *atua* of uncultivated/wild foods. As the *atua* of things that grow wild, *Haumietiketike* is also considered to be the *atua* of fertility. Dr Ihirangi Heke recalled *kōrero* about grieving mothers who had lacerated their skin in mourning the loss of a child (personal communication, 1 April 2015). This functioned as expressions of grief and loss and a release of the *mamae* that they were experiencing. Following these acts, they would wrap their wounds in the *whare tukutuku* (spider webs). This behaviour served to stop the blood flow, but on a deeper level, it functioned as a connection to *atua*; in particular to *Haumietiketike* as the *atua* of fertility, signifying her desire to bear children again. The examples presented here provide a brief snapshot of a larger body of knowledge that describes traditional Māori practices of regulating emotions, particularly the intense grief that comes with the loss of a loved one. These practices occurred in differing contexts over different lifetimes, and have been passed down over generations in order to preserve the experiences and memories of those gone before.

The present study

Information from large-scale studies with adolescents, such as the Youth Wellbeing Study and the Youth '07 study (Fortune et al., 2010), tell us that rangatahi Māori engage in self-injury. Research of this nature validates anecdotal evidence from practitioners and whānau members who have described first-hand their experiences of rangatahi who self-injure. Thus the pertinence of self-injury as an issue for rangatahi Māori and their whānau is clear. The present study sought to delve further into the experiences of rangatahi who self-injure in order to understand what rangatahi Māori and whānau believe is 'self-injury', why they engage in this behaviour, and importantly, what helps rangatahi and whānau to desist from self-injuring. It was anticipated that rangatahi would not be explicitly aware of traditional practices of *kiri haehae*, and we were unsurprised to learn that the underlying functions of the self-injurious behaviours that Māori *tīpuna* engaged in a historical context would be similar to some of the functions of self-injury for rangatahi Māori today, namely the physical expressions of grief and loss.

Method

Rangatahi and *whānau* participants were recruited through an open letter of invitation to participate, which was distributed by email through the networks of the three lead authors. This letter invited *rangatahi* who identified as Māori with an interest in speaking in a focus group about NSSI to attend an information *hui* (meeting) held at Victoria University of Wellington. A history of self-injury was not a requirement for participation, nor was it a reason for exclusion from participation. *Rangatahi* were encouraged to bring along members of their *whānau*, and the consent of *whānau* for those under 16 was specified as a condition to participate. In order to understand current *rangatahi* Māori definitions and experiences of NSSI, a series of three sequential focus groups (Boulton, 2012) (*hui*) with *rangatahi* and their *whānau* were conducted over a period of three nights. Twenty five *rangatahi* who identified as Māori took part in two separate groups. At the time of initial contact the age range was between 13 and 18 years, with 20 identifying as female and five males. The process for engagement and collection of data was grounded in *tikanga* Māori (Māori customs) and as such was underpinned by *kaupapa* Māori research values including *whakapapa* (*whānau, whakawhanaungatanga,* interconnectedness), *manaakitanga* (hospitality, kindness, generosity), and *rangatiratanga* (collaboration and ownership of knowledge) (Cram, 2001; Smith, 2012). Importantly, both groups consisted of rangatahi with a broad spectrum of experiences and history of self-injury. 56% (*n*=14) had never hurt themselves on purpose. Some of these *rangatahi* had never considered it, and some had experiences of supporting other *rangatahi* who self-injured. The remaining *rangatahi* had hurt themselves on purpose previously, and a few still engaged in this behaviour.

Over and above the importance of the ethical requirement of *whānau* consent for participants were the *kaupapa* Māori principles upon this research was grounded, particularly that of *whakawhanaungatanga* (Cram & Kennedy, 2010). In this research, that meant *whānau* had the option to be actively aware and involved in the research process alongside their *rangatahi*, by attending the series of *hui* but remaining in a separate room in order to ensure the *rangatahi* participants felt supported but could speak freely without their *whānau* members in the room.

Whānau experiences of self-injury in *rangatahi* were collected from two sources. Firstly, as an initial scoping study for this research project a one-day *wānanga* (workshop) was held. The invitation to attend was extended to anyone who had experience, either professionally or personally, in supporting *rangatahi* who self-injured, to come and share their experiences. 30 people attended this *wānanga* and came with a variety of roles, backgrounds and histories of experience with self-injury. This included mental health nurses, youth workers, social workers, *kaumātua* (elders), *whānau* members of *rangatahi*, and many of the participants filled multiple roles (for example, a social worker who was also the grandparent of a young person who had self-injured, and a mental health nurse who had a history of self-injury). As an additional source, during the *hui* with *rangatahi*, the *whānau* members in attendance were meeting in a separate room, hosted by members of the research team. At this time conversations

were had regarding their experiences with rangatahi who had self-injured. There were 12 *whānau* members in total present at these *hui*, and these conversations were facilitated by members of the research team.

The option to be audio-recorded was presented to both groups during the initial *hui*, consistent with *kaupapa* Māori principles of *rangatiratanga* (governance or ownership of knowledge). The *hui* were audio-recorded for only one of the two groups of *rangatahi*, as one group chose not to be recorded. For the group that was not recorded, notes were taken by both researchers present, and these notes were checked with the participants in subsequent *hui* to ensure that their responses had been recorded correctly. For the first group of participants, who were not audio-recorded, a follow-up *hui* was held five months later where the notes from the three sessions were presented in their entirety. Participants extracted what they deemed to be the key themes that they felt were important to share as a summary of the conversations from the series of research *hui*[7] . In the second group the conversations were transcribed and thematic analysis (Guest, MacQueen, & Namey, 2011) was applied to group related quotes. These quotes (54 in total) were printed on cue cards and a copy of all quotes was given to each participant. During the follow-up session they were asked to sort these quote cards along a five-point continuum from strongly agree to strongly disagree. This information, combined with the key themes and messages identified by the first group of participants, comprises the key findings of this research from the perspectives of the *rangatahi*. This method of active participation and collaboration with participants in the feedback and follow up sessions was loosely based on the Q sort used in Q methodology (Stephenson, 1953). This proved beneficial for this research because it was collaborative and enabled the *rangatahi* participants, in their own words, to clarify what they thought were the key messages that they wanted the wider community to know.

Results and Analysis

Findings from Sequential Focus Groups with rangatahi

Definitions of self-injury

In discussing some of the behaviours that the *rangatahi* defined as 'NSSI', their personal understandings differed slightly from the definition of NSSI adopted in the Youth Wellbeing Study, and international research. While these *rangatahi* often referred to cutting, the behavioural examples were broader and did not necessarily include direct destruction of bodily tissue. For example, "getting wasted when you're feeling sad" (participant 21) and "drinking and driving with the intention of hurting yourself" (participant 4).

When *whānau* members were asked what they considered to be self-injury, again some of the behaviours they described were consistent with the definition of NSSI however again they often spoke of a much broader range of behaviours that did not fit the definition. *Whānau* members considered self-injurious behaviours to include having unprotected sex, or getting a

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7 Only six of the 18 rangatahi participants were able to attend this follow-up hui.

tattoo (that doesn't represent their *whakapapa*) on impulse, without their *whānau* permission. They spoke of fighting and physical violence towards others. They described doing things that harm their *wairua* (spirit, essence), and, importantly, that this behaviour was not solely harm directed against self but also to their *whānau*. These conversations with *rangatahi* and *whānau* highlight the broad range of behaviours considered under the mantle of self-injury, which serve the same functions and yet differ from the definitions used both in research, and by clinicians in practice.

Suicidality

Rangatahi participants described their behaviour as anti-suicidal; as a means of keeping them alive, as opposed to wanting to end their life.

"Self-injury is different to suicide because with suicide there is no hope that things are going to get better. But with self-harm there's still hope that things are going to get better someday and this is just what's helping you now till you get there. You're still wanting a second chance" (participant 4).

Whānau found it difficult to see the distinction between suicidal and non-suicidal self-injurious behaviours; to them it was not always possible to separate that intent to die for some *rangatahi* who self-injured. This was echoed by many clinicians who work with *rangatahi* Māori who expressed their uncertainty regarding the relevance of the 'non-suicidal' component of the definition of NSSI. These findings further impress the importance of being cognisant of the definitions used in research, and in practice, in thinking about their relevance in the lived experiences of *rangatahi* and *whānau*.

Functions of self-injurious behaviours

Consistent with literature within Aotearoa and internationally (Garisch & Wilson, 2015; Klonsky, 2009; Muehlenkamp et al., 2011; Nock et al., 2009), emotion regulation served as a key function for self-injury. *Rangatahi* shared experiences of losing loved ones, relationship breakups, financial hardships and other significant emotional challenges. For some *rangatahi*, hurting themselves in some way became a way of dealing with the intense emotional pain and grief they were experiencing. They spoke about feeling emotionally numb and needing to bleed in order to feel something, or drinking to the point of passing out in order to numb themselves from their emotional pain. *Rangatahi* referred to self-injury as a 'cry for help' but that this was different to attention-seeking. "It's needing someone to notice that something's going on on the inside and being able to tell someone but not actually have to tell them what's going on" (participant 6). This emphasises the function that interpersonal influence plays for some *rangatahi* who self-injure, whereby self-injury may provide an opportunity for those close to them to offer help without *rangatahi* explicitly asking for it.

Autonomy and control was also discussed as a key motivator for self-injury. Some *rangatahi* spoke of the many different aspects of their life that they felt were spiralling out of control, particularly relationships with partners, family, *whānau* and friends. For some of these *rangatahi*, their body was the only thing that they felt they had control over. Comments such as "no one can tell you what you can

and can't do to your own body" (participant 15), "you don't need permission from anyone to do it" (participant 21) and "[cutting] is the one thing that no-one can take away from you" (participant 18) reflected their desire to maintain control over some aspect of their life.

Help-seeking

The sense of autonomy that self-injury served for some *rangatahi* also proved to be a barrier when it came to seeking help. Some *rangatahi* expressed a reluctance to access support because of how others may respond and their efforts to stop the behaviour. They spoke of the difficulty in reaching out for help for fear of losing control over the one thing they felt they were in control of; their bodies. When they did reach out for help, close friends were most commonly the ones they turned to.

In speaking of their experiences with supporting friends who had self-injured, many of them asserted that they would not violate their friends trust by telling someone else, unless they were concerned for their life. More often than not they would support their friend to tell someone else, e.g. a guidance counsellor, by going along with them to speak to someone who could help.

A key message that received overwhelming support from both focus groups, was that when they reached out for help to those older than themselves, often all they were looking for was someone to listen to them rather than someone to fix their problems. This message came through in both groups in the context of conversations broader than self-injury. *Rangatahi* spoke of how often when they had reached out for help to *whānau* or other adults, that confidant was focused more on finding a solution to the problem rather than just being a sounding board for them to talk about what's going on for them. *Rangatahi* may be reluctant to reach out for help to people other than their peers for fear of losing control over their behaviour, and what appears to help most is just having someone to listen to them rather than 'fix them', because often they did not feel they were broken. Culture and identity as Māori was a key theme that emerged as a vehicle for helping *rangatahi* to overcome their difficulties and desist from self-injury.

The role of whānau

In exploring what helped *rangatahi* to stop self-injuring, the role of culture and identity was discussed. As participant 6 described, "being Māori doesn't determine whether or not you're more likely to do it (self-injure). But you get through it better 'cos if you're Māori you're more likely to have *whānau* around you to help you get through". This was elaborated on in the context of *kaupapa whānau*, as opposed to *whānau* related by blood. Some of the participants attended an alternative education school for teenage parents. When they spoke of their '*whānau*' they were referring to each other, their peers at the school, as opposed to their *whānau* related by *whakapapa*. Some of these *rangatahi* had felt isolated from their *whakapapa whānau* upon becoming parents, and it was within the school that they found their *kaupapa whānau* who became their *pou* (post, a source of strength or something to lean on); to be there for each other when they needed to.

The role of culture and identity as Māori

For all participants who had self-injured the strength of their identity as Māori differed, yet connecting with their culture in some way, for example through learning *waiata* and *haka*, was found to be a helpful factor in ceasing the behaviour. For those who felt they strongly identified as Māori, they spoke of being taken back home to their *marae*, swimming in their *awa* (river), walking up their *maunga* (mountain) and reconnecting with their whenua. This connection with their *whakapapa* via physical space affirmed their sense of self and their identity as Māori.

Some participants had received *tā moko* (traditional Māori tattoo), particularly on their wrists. The use of *tā moko* functioned both to cover their scars, which many felt were noticed and mentioned by people even years after ceasing self-injuring. The *tā moko* also served a greater purpose - as a reminder of who they were and where they came from; their *whakapapa*. As an example, participant 13 had a strong connection with water, in particular their ancestral *awa*, and to them swimming in it was cleansing. So they had their *awa* tattooed on their arm as a symbolic form of cleansing, and of moving on. For these *rangatahi*, knowing their *whakapapa* provided a source of strength and a connection to a physical space that contributed to their wellbeing.

For those *rangatahi* who had self-injured and who did not strongly identify as Māori, some felt a sort of tension between *te ao* Māori and *te ao Pākeha*, and a sense of not really belonging to either. For them, what helped were was the small gestures that helped them to reconnect with their culture that helped them to recover, for example through small acts such as learning a simple *karakia* (prayer) or *waiata*, learning their *pepeha*, being encouraged by a guidance counsellor or youth worker to join their school *kapa haka* (Māori cultural) group. Increased involvement in cultural activities enabled some participants to reconnect and belong in *Te Ao Maori* or develop some sort of familiarity with their Māori *whakapapa*, as a reminder of who they were and where they came from. For example, for participant 5, participation in cultural activities such as *kapa haka* provided them with a culturally-based social support network of their peers who also served to affirm their cultural values as Māori. For another participant (participant 18), learning their *pepeha* ignited conversations with their parents, aunties or grandparents that enabled them to learn more about their *whakapapa*. This sent the message to their *whānau* that they were interested in learning more about their *whakapapa* Māori, and opened other doors to engaging in their culture, for example by spending more time on their marae.

Other factors that helped *rangatahi* to stop self-injuring included meditation and mindfulness practices, such as focusing on their breath to calm them down. Distraction techniques such as getting outside and being active, being around close friends and whānau, or listening to music were alternatives to self-injuring. Importantly, the type of music *rangatahi* preferred to listen to was that which was emotionally charged and served to validate their mood, rather than overly joyful music that others often suggested they listened to in order to "cheer them up" (participant 4), but often had the opposite effect.

Many of the participants who had self-injured also had young children. For some of them, their children served as both a distraction from hurting themselves, and as an incentive to stop self-injuring. They spoke of the stigma that they received when they were seen with their children and others noticed their scars, and of the risk that they may cut too deep and require medical attention, in which case they risked losing their children, or taking their own life and no longer be there for their children.

A resounding feature that the research team noticed in these young mothers was the strength and resilience that they showed to turn their lives around upon becoming mothers. They talked of realising the importance of taking medication they may have been prescribed, and of looking after themselves in order to be fit to parent. This transition to motherhood and the realisation that they were now responsible for another person who shared their *whakapapa* sparked a change in behaviour for the better, not only for themselves but for their *whānau*.

The relevance of traditional understandings of self-injury

During the *hui* the research team shared some of the traditional stories regarding *kiri haehae*. This knowledge was new to most of the *rangatahi*, but through the discussions many identified that within the *waiata* they grew up with the word *haehae* popped up occasionally, and many became curious as to its' meaning in the context of that song. In discussing how these stories might be relevant for *rangatahi* today, participant 18 echoed the sentiments of many in both groups, that

"it's helpful to learn about traditional Māori self-injury... like what our *tīpuna* did back in the day and why they did it. Understanding why they did it and even if it isn't relevant to us today it still puts things into context. And it might help other people to know that it's not something that's new, that what we're doing isn't new it's been around for a long time. Might help people to not overreact when they find out".

This highlights the potential relevance that facilitating *rangatahi* to strengthen their connections with their *whānau* and *whakapapa*, through traditional *kōrero pūrākau* (myths, legends or stories) such as *waiata*, can have for helping them to heal and desist from self-injuring.

Discussion

Definitions of self-injury

The conversations with *rangatahi* and *whānau* regarding understandings of self-injury reflects a Māori worldview that is holistic and all-encompassing. It is broader than just a physical description of the behaviour such as that consistent with the Eurocentric understanding of the mind-body dualism. While some behaviours described were consistent with a definition of NSSI, other behaviours that *rangatahi* and *whānau* considered to be self-injury (e.g. non-cultural tattoos, drinking to excess) served the same functions for *rangatahi* as NSSI behaviours, but they are not culturally sanctioned behaviours. Behaviours such as these fit better under the broader term 'self-injury, but

we believe that there is a real danger in using such a narrow and specific definition of a behaviour that only includes *te taha tinana*, the physical manifestations of health that are based on non-indigenous understandings of being 'well'. The Experiential Avoidance Model (EAM; Chapman et al., 2006) of NSSI is one of the leading models used to understand NSSI. While this model has its merits, we have demonstrated here that, as a model for explaining self-injury, for *rangatahi* Māori it may not suffice. In its application, the EAM focuses narrowly on physical manifestations of wellbeing. The significance of understanding this lies in its possibilities for healing. The consideration of alternative manifestations of harm, for example harm to *wairua*, is more consistent with *whānau* descriptions of self-injury as a manifestation of *wairua* pain and a need to control and or express that pain.

In addition, understanding *whakapapa* also emphasises the importance of relationships, and the understanding that all things and all people are connected. So *rangatahi* who may be suffering to the extent where they feel they need to hurt themselves on purpose may be lacking in some critical relationships with their *whānau*; and (keeping in mind that definitions of *whānau* are broad (e.g. *kaupapa whānau*)), damaged relationships may influence their state of being unwell. Therefore, while we acknowledge the utility of the EAM in understanding NSSI, we encourage practitioners who work with rangatahi Māori and their *whānau* to take a wider, contextual view that is consistent with holistic definitions of wellbeing.

Functions of self-injury

Traditional *kōrero* on *kiri haehae* talks of the practice of honouring loved ones who have passed on. Similarly, the *rangatahi* participants in this research have talked of expressing grief at the loss of a loved one and self-injuring was a way of acknowledging their loved ones who have passed. While this may be considered to be an intrapersonal function of self-injury through the regulation of emotions, we suggest that it may also serve interpersonal functions but in a unique manner. Nock (2008) discusses how interpersonal functions directly influence those physically around the individual. However, the behaviour of *kiri haehae* as expressed by the *rangatahi* participants in this study, is a practice that relates to others who are not currently with them physically, but remain with them *ā wairua* (in spirit). Whilst this behaviour may be culturally sanctioned and therefore exempt from definition as NSSI, self-injury (in the broader sense of the definition) that occurs within a cultural context may still share similar functions, both inter- and intra-personal.

The role of culture and identity

For the *rangatahi* participants who had self-injured, the extent to which their identity as Māori played a significant part in their lives differed. Some had been raised in *kohanga reo* (Māori full immersion language preschools) and were in *kura kaupapa* (full immersion high schools). They were confident and fluent speakers of *te reo Māori* (Māori language) who knew their *whakapapa*, were connected with their *marae*, and had strong connections to where they were from. There were others who self-injured who were really *whakamā* (shy) about

identifying as Māori. They did not know their *whakapapa* or which *iwi* they descended from, and they could not speak te reo. Yet, for all of these *rangatahi*, regardless of the strength of their cultural identity, reconnecting with their culture in some way was a significant factor in helping them to stop self-injuring. These results indicate that there significant benefits related to the power of *whakapapa* in connecting rangatahi with their past in order to encourage them to learn more about who they are and find their place to stand, their *tūrangawaewae*.

One key finding of this research has been to realise that, without being consciously aware, these rangatahi are engaging in Māori understandings of mindfulness as ways of overcoming self-injurious behaviours; by returning to their *tūrangawaewae*, immersing themselves in their *awa* to be cleansed by their ancestral waters; walking barefoot on their *whenua* so as to be grounded and connected to *Papatūānuku*. "*Hoki atu ki tō maunga kia purea e koe i ngā hau o Tāwhirimatea.*" This *whakataukī* talks about going back home to your mountain, to be cleansed by the winds of *Tawhirimatea*, god of the wind. *Kōrero tuku iho* that speak of the actions of *atua* and ancestors can serve as vehicles for the transmission of *whakapapa* and be used to place the self-harming behaviour of *rangatahi* in a broader context.

Durie (2015) talks of the integral role that *whānau* plays in ones *mauri*; a reflection of the importance of *whānau* for Māori. This was reflected in the value that all of the *rangatahi* participants in this research placed on their whānau. What was interesting, however, were the broad and varied definitions of *whānau* that *rangatahi* held. Those who did not feel that they had *whakapapa whānau* to turn to formed *kaupapa whānau* who served as a source of strength and support when needed.

The use of traditional knowledge in healing with *tangata whaiora* (mental health clients) is not new; practitioners throughout Aotearoa have been using traditional knowledge in healing for *tangata whaiora* for many years (Cherrington, 2002; Rangihuna & Kopua, 2015). In the context of the present research, by relating the self-injurious behaviours of *rangatahi* to traditional *kōrero tuku iho* rather than trying to impose western concepts of being 'well' on them, this can serve to help them to find their sense of self, regardless of the strength of their identity as Māori. The benefits of this are numerous, particularly in utilising *whakapapa* as a tool for understanding who they are and how they fit in the world, and what that means with regards to wellbeing.

Conclusion

Similar to the role that *kōrero tuku iho* play in guiding our Māori values and beliefs, understanding traditional behaviours helps to provide "contextually-relevant explanatory theories" (Roberts & Wills, 1998, p. 66) that can help to guide behaviour in a modern context. Thus the traditional *kōrero* such as those given here are relevant because by helping *rangatahi* and *whānau* to understand some of the reasons behind why they may hurt themselves, it can help them see that it's not something unnatural, that it was done by Māori *tīpuna* back in the day, and that this has connections back to atua Māori. This is not about encouraging *rangatahi* to engage in this behaviour,

but it can put their actions into a larger context that enables them to heal their *wairua*. Practitioners may use traditional stories to discuss the behaviours as processes of engaging with *wairua, hinengaro*, and *whakapapa*, right back to *atua* Māori. This would be far more beneficial than framing the behaviour as problematic which in turn risks invalidating the experiences of *rangatahi* and *whānau*, which can often push them away and deter them from seeking help. Through the *kōrero tuku iho rangatahi* and *whānau* can learn, through reconnecting with atua, of ways of moving on from grief and loss. The learning of these stories may also facilitate reconnections with culture and identity, with *whakapapa*, and with *atua*.

Mā te mātau, ka ora

Through understanding comes wellbeing.

Acknowledgment

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Peer Responses to Non-Suicidal Self-Injury: Young Women Speak About the Complexity of the Support-Provider Role

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Non-suicidal self-injury (NSSI) is a coping strategy employed by young people in response to feelings of distress. Adolescents may communicate NSSI involvement to peers whom they turn to for support. How young people respond to peers engaging in NSSI, how this affects the friendship, and how these supporters cope with assuming and administering this role are largely unknown. A qualitative methodology, Interpretative Phenomenological Analysis (IPA), was chosen for this project in order to explore and understand the experiences of participants. Five 15-year-old females whose friends engage in NSSI were interviewed from a secondary school in a provincial area of New Zealand. Four themes were identified: helping responses, NSSI and relationships, costs of caring, and supporters' needs. The results highlighted the complex nature of this helping relationship and emphasised the need for increased and multifaceted forms of support to be provided for those responding to a peer engaging in self-harm.

Keywords: Self-harm, Non-suicidal self-injury, adolescent, peer, support

Non-suicidal self-injury (NSSI)[1] is the intentional destruction of body tissue that occurs outside of cultural acceptance and without suicidal intent (Nock, 2009). This is considered a maladaptive coping strategy with international prevalence rates between 15-20% for adolescents (Favazza, DeRosear, & Conterio, 1989; Ross & Heath, 2002). A longitudinal study in New Zealand established that 18% of 13-year-olds had engaged in NSSI at some point in their life, and 28% of 15-year-olds (Wilson et al., 2015). Prevalence rates for rangatahi Māori (indigenous youth population of New Zealand) were similar to those for non-Māori (Wilson et al., 2015). NSSI is also a risk factor for adolescent suicide (Klonsky, May, & Glenn, 2013) which makes provision of effective support of the utmost importance. A further confound is that those who self-injure typically report less social support from peers and family than those who do not self-injure (Rotolone & Martin, 2012). This suggests a degree of social isolation which is made more acute as the majority of adolescents who self-injure do not seek help (Evans, Hawton, & Rodham, 2005; Fortune, Sinclair, & Hawton, 2008). If NSSI sufferers reach out at all it is to a very small group, and friends are more than twice as likely to be involved than any other social group (Wester, Clemens, & McKibben, 2015). Indeed, most will turn to a peer rather than a family member or helping professional (Michelmore & Hindley, 2012). Help-seeking patterns of adolescent New Zealanders reflect international trends (Garisch, 2010; Nada-Raja, Morrison, & Skegg, 2003) with friends often being the support resource of choice during times of emotional distress (Barton, Hirsch, & Lovejoy, 2013). Wester, Clemens and McKibben (2015) point out, while social support can be an important factor in extinguishing NSSI, there has been little research directly examining peer support.

James (2013) in a school-based survey of 387 New Zealand adolescent girls aged 13-16 years suggested that high levels

of secrecy desired by young people engaging in self-injury were maintained in the parental relationship rather than with peers. It remains unclear why NSSI is kept from parents, but there are studies documenting high levels of parental stress. Byrne and colleagues (2008) suggest parents experience this as deeply distressing and McDonald, O'Brien and Jackson (2007) document the extreme shame and guilt experienced by mothers in particular. This suggests the possibility that NSSI secrecy is motivated, in part, by protecting parents. Either way, there is a good deal of evidence supporting the proposition that many young people are aware of peers engaging in NSSI, at least some of whom are seeking assistance.

Help-Providing

Despite the fact that peers may be the most informed about their friends' self-harming it is noticeable that there is a dearth of research exploring the young support-provider's experience. This is surprising as research demonstrates a positive correlation between young people in distress (including those engaging in NSSI) who access support from peers and then proceed to access formal help services (Idenfors, Kullgren, & Renberg, 2015; Nada-Raja et al., 2003). Most research in this area focusses on late adolescence with methodologies that capture intention to provide support rather than examples of actual support. Studies focus on a range of behaviours associated with distress rather than self-injury specifically, and show that peers commonly provide emotional support in the form of talking and listening while showing understanding, sympathy, and offering companionship (Clark, MacGeorge, & Robinson, 2008; Yap, Wright, & Jorm, 2011). Denton and Zarbatany (1996) suggest that the type and effectiveness of support provided partly depends on the young provider's sensitivity to a peer's distress, interpersonal skills, and experience meeting the needs for their peer. Adolescent females are more likely to provide social and

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[1] For the purpose of this article the terms "self-harm", "self-injury" and "non-suicidal self-injury" are used interchangeably to refer to the same behaviour and to imply the absence of suicidal intent.

emotional support to a close friend or family member than adolescent males, and will also more often engage an adult to help (Yap et al., 2011).

While the provision and receipt of peer support may lead to positive outcomes for both parties, this is far from assured and the relationship is complicated. A non-judgemental response to a disclosure of NSSI may facilitate deeper understanding and acceptance within the friendship (Armiento, Hamza, & Willoughby, 2014). There can be personal benefits to offering support in times of distress including enhancing one's capacity for empathy, and honing social, emotional and problem-solving skills. Equally, there can be disadvantages to providing support given the cognitive, social and emotional maturity that exists at this developmental stage. Adolescents may be ill-equipped to recognise signs of distress and to respond due to a low level of mental health literacy, and developmental needs which may conflict with carrying out this task (e.g. Jorm, Wright, & Morgan, 2007). Curiously, adolescents have been found to have less sophisticated knowledge about identifying signs of distress and responding effectively compared to young adults, yet more confidence about providing help to their peers (Jorm et al., 2007).

If young peers are unable or unwilling to seek adult assistance, this can mean they take on the burden of responsibility for caring for a distressed peer. Adolescents providing peer-support are also more likely to approach another peer for assistance (Fortune et al., 2008). Assuming high levels of responsibility for another's distress could be detrimental to the help-provider's wellbeing in many ways including increased stress, neglecting other relationships or commitments, and potentially detrimental effects to the help-provider's mental health. The promise of secrecy that some distressed peers place on support-providers can also be upsetting and stressful (Coggan, Patterson, & Fill, 1997). Empathetic distress or being unable to emotionally distance oneself from a distressed friend, although related to high positive relationship quality and high social perspective taking skills, also incurs an emotional cost (Smith & Rose, 2011). Adding further to the complexity of these matters is a body of literature suggesting social contagion of NSSI among peers (Jarvi, Jackson, Swenson, & Crawford, 2013). The modelling function of such intimate self-disclosures may be quite sinister as suggested by researchers Heath, Ross, Toste, Charlebois and Nedecheva (2009) who report a number of high impact social factors being involved. In particular, they report 43% claimed to have learned NSSI from another, and 65% report talking to friends about self-injury. Fifty-nine percent said a friend had been the first to engage in self-injury and 17% self-injured in front of friends.

Study Aims

The perspective of the adolescent supporter has remained largely unheard in the NSSI literature despite their position as the 'resource of choice' for peers in distress (Barton et al., 2013). Given the importance of social networks for those involved in NSSI, this study aims to respond to the call (Wester et al., 2015) to further investigate the dynamics occurring within peer based social networks. Indeed, increased awareness of peer experiences could aid helping professionals working with young people engaging in NSSI, and providing support for young people who find themselves as peer-supporters. This study sets out to examine how adolescent females respond to peer disclosures of NSSI; what support they provide, and how this affects their well-being; the impact this support interaction has on the peer relationship; and what supporters need to continue to fulfil this role.

Method

Design

Interpretative Phenomenological Analysis (IPA) provided the methodological framework for this study enabling the exploration of participants' lived experience in detail. IPA is founded on the belief that there is "a chain of connection between embodied experience, talk about that experience and a participant's making sense of, and emotional reaction to, that experience" (J. Smith, 2011, p10). Capturing these experiences and their meaning to the participant is the primary goal of IPA. IPA also provides a framework that goes beyond a deficit-focus regarding distress and difficulties, in order to tease out the benefits and strengths of participants assuming this role.

There were difficulties anticipated in conducting research with an adolescent population and the topic of NSSI. Factors that made this a complex process were negotiating consent to carry out the study within a school context where adults may have been sensitive to the subject of NSSI, and recruiting participants who were prepared to speak about an experience that not only involved reflecting on their distress but that of their friend. Recruiting within a youthful population required ensuring participants were fully aware of the emotional and practical demands of the research process in order for informed consent to be possible. To ensure potential participants were fully informed about the study and their rights in a context that they felt comfortable and able to decline participation or ask further questions the school's Guidance Counsellor approached students for the project and provided this information. To meet the consent needs of students and the school (and upholding the researcher's ethical obligations) students who were interested in taking part were given information and consent forms to gain parental consent. Approval to carry out this study was provided by the Research Ethics Committee at Massey University.

Participants

Participants were recruited via their School Guidance Counsellor based on a review of student files and the following criteria; (a) female, (b) 13-15 years of age, (c) had experience supporting a peer who had been engaging in NSSI over the last twelve months, and (d) had no personal engagement in NSSI over the last six months. Only females were recruited for two reasons: Past research details higher rates of NSSI for females than males (Jose, Ryan, & Pryor, 2012), and in early adolescence females typically draw support from same-sex peers (Barton et al., 2013; von Salisch, Zeman, Luepschen, & Kanevski, 2014). Thus females may have more 'support experiences' to draw from for the purpose of this

research. From this file review five fifteen year old students were identified and informed of the study by the Guidance Counsellor. All five individuals gained informed consent from a parent after providing an information sheet that detailed the study, and each student consented to participate. Participants were from a single state co-educational secondary school in a provincial town in New Zealand. Participants were all of European or New Zealand/European descent.

Data Collection

Semi-structured, in-depth interviews were conducted with each participant on school grounds. Interviews were conducted by the lead researcher, ranged in length from 30-60 minutes, and were audio-recorded. Examples of questions posed were 'Can you tell me about the time you first found out your friend was harming themselves?', 'How did you respond to your friend at the time?', followed by 'How do you respond now?' Participants were informed that if they disclosed an imminent risk to their safety or the safety of another student, this information would be passed on to the School Guidance Counsellor to ensure student safety.

At the conclusion of each interview participants were invited to discuss their experience of the interview and any distress resulting from this. Each participant was provided with a Resource Sheet detailing a range of local support services available in the community, online or via free phone numbers. Interview recordings were transcribed and analysed, with participants identified with pseudonyms to ensure anonymity. The researcher met with participants at a later date and provided each with a transcript of their interviews.

Data Analysis

IPA advocates moving beyond the spoken word to reveal deeper levels of cognition and belief that constitute connecting and contrasting themes when participants' stories are read together (Reid, Flowers, & Larkin, 2005). To achieve this, transcripts were analysed in stages. The lead researcher engaged with the data by repeated readings of the transcript noting anything of descriptive, linguistic or conceptual interest (Smith, Flowers, & Larkin, 2009). Themes were identified from this added layer of information gathered from each transcript, consistently ensuring that key threads of meaning connected back to participants' responses (Smith, Jarman, & Osborn, 1999; Storey, 2007). After an analysis of individual narratives, thematic analysis was performed across the participants' transcripts to identify thematic clusters. These cross examinations provided a master list of superordinate themes, with their related sub-themes and examples of illustrative quotations (Smith et al., 1999). Next the analysis was discussed amongst the authors to provide a validity check and a rigorous and transparent process of analysis.

Throughout the process of data collection and analysis the lead researcher attended to the reflexive nature of the research process. This required an acknowledgement of inherent characteristics of the researcher such as culture and gender, as well as the impact of professional experiences in the co-production of the data and its analysis. As an example, participants were aware that the lead researcher, who interviewed each participant, was a Guidance Counsellor. It

is possible that this role and its associated parameters, for example the provision of confidentiality and expectance of a talking interaction, influenced participants interviewed to feel more comfortable to both engage with the researcher and reveal personal experience.

Results

Most participants had been offering support to a mixture of peers, family members and close friends engaging in self-injury over the past three to four years. This support was directed to same-sex peers who were of a similar age (maximum one year difference in age) to participants. Data analysis identified four super-ordinate themes: helping responses, NSSI and relationships, the costs of caring, and supporter needs.

Helping Responses – "...Oh what do we do?"

The support that participants provided ranged from minimal interventions to those that were assertive in connecting an individual to a source of adult help. For example, participants described asking peers if they were okay, inviting a discussion of troubles, providing physical comfort, reassurance, distraction from the problem at hand, using humour, discussing a disclosure of self-injury with another friend for the purpose of identifying a helpful response, suggesting the student speak with the Guidance Counsellor, and confronting a peer suspected of self-injuring and demanding an explanation. Other actions taken were discussing the situation with the supporter's parent and making a referral to a responsible adult (e.g., the young person's parents, school counsellor, year level dean). The support response chosen was influenced by the adolescent's motivation, and the beliefs and goals that underpinned the support effort.

a. Motivation.

Each participant referred to their own interpersonal struggles with issues such as bullying, isolation from peers, dysfunctional parental relationships, and mental health issues such as historical self-injury and suicide attempts. These experiences created a heightened sensitivity to recognising signs of distress and augmented their ability to perspective-take, a skill required for enhanced levels of empathy.

Samantha's experience of difficult times when she entertained thoughts of suicide provided motivation to help others.

> "...well I actually don't want anyone else to go through what I went through so I want to help people"
>
> (Samantha)

Preventing a friend experiencing further distress and/or a suicide attempt also motivated participants to intervene.

> "Before the end of school the [other person] attempted suicide and so it made me think, oh my gosh, what if I can't help her [another friend] and what if this is what I think it is and what if I can't help her and what if she wants to kill herself"
>
> (Lola)

Lola's experience coupled with doubts about her ability

to help a friend who disclosed NSSI motivated her to divulge this information to a trusted adult.

Helping others in order to help themselves was evident throughout participants' stories as another source of motivation to provide support. Whether this was to secure companionship, to heal by healing others, or to avoid dealing with their own challenges, each participant gained something from this helping transaction.

> *"I've always been a fixer… I don't like people being uncomfortable around me and I think that is me running away from [my] own problems probably… like having to fix everyone else's"*

(Sarah)

Participants were practiced at recognising signs of distress and intervening to assist people across a range of differing relationships. Their motivation for doing so stemmed from wanting to help others, to help themselves, and in some cases to avoid peers taking more drastic action.

b. Beliefs.

Beliefs about whether a peer requires assistance, or indeed deserves this, can promote or prevent help being offered. Participants voiced beliefs about how they identified those who required or merited help and those who did not depending on whether NSSI was communicated openly.

> *"…when people are hurt and stuff they don't like showing it off …they hide it. It's like some people do it for attention and some people do it because they're actually hurt"*

(Samantha)

Participants made judgements about who was genuine and the excerpt shows how self-injury motivated by the pursuit of attention was regarded as inauthentic and thereby less deserving of support. It appears there is a certain way that it is appropriate to ask for help. An honest call for help is one that is spoken quietly or not at all; communicated via the body; and denying that the injuries are self-inflicted appears to hook the helper more securely than an open admission of distress.

c. Support goals.

Most participants viewed the goal of support provision as helping their friend cease self-injuring. Many evaluated their effectiveness in this role by whether this aim was achieved. However, it is unknown whether recipients of this support aspired to the same goal.

> *"Oh I would be like why are you cutting are you okay or something or I'd be like don't do that you know…"*

(Sarah)

Sarah's comment begins on a positive note suggesting the possibility that someone can be engaging in NSSI and still be "okay". Sarah shows interest and empathy, but communicates that she does not want this to continue; a response that may say more about the supporter's goals than those of the distressed peer.

There are a multitude of factors that lead an individual to resort to self-injury and this act in itself can quickly become a coping strategy for dealing with further distress (Klonsky & Glenn, 2009). A lack of awareness of the intricacies of how NSSI functions to alleviate distress and also further perpetuates a cycle of dysfunctional emotional regulation may create dissonance between participant goals and friend's needs.

NSSI and Relationships – The Unwelcome Intruder

For the supporter, once a disclosure of NSSI occurred the person engaging in NSSI appeared different. Even those who were careful to comment that they did not treat their friend differently confided that the relationship changed significantly.

> *"…like we had to like tip toe around her I guess, like it was quite like stepping on eggshells, I didn't want to say the wrong thing"*

(Sarah)

Sarah's comment underlines the delicacy required in the participant's indecisive dance of carefully choreographed support steps. Indeed, participants felt uncertain about how to interact with their friend. In this way NSSI became a barrier to the give-and-take of typical adolescent same-sex friendships.

Participants spoke about their friend's support needs overtaking their own requirements for companionship and problem-solving. For some this was an overt development that sparked a sudden change in the relationship and for others a more subtle and gradual process occurred.

> *"It's uncomfortable… it's not easy, it's hard to not be able to talk about something that you want to talk about with a friend… you can't say anything that might offend them in any way because then you're worried oh my God they're going to cut themselves or something"*

(Sarah)

Sarah suggests the supporter needs to change the way they behave in the relationship with the person engaging in NSSI.

a. Responsibility, trust, and secrecy.

All participants spoke about feeling responsible for a friend engaging in NSSI.

> *"…she said that if I wasn't there, she probably would have died …because it would have been so much harder on her"*

(Mikayla)

> *"…you're put in the most difficult spot because you don't want to break that person's trust or you don't want to make them feel like they couldn't tell you things because at the end of the day you want to be trusted, you want people to be able to tell you things, well I do anyway"*

(Sarah)

Sarah's reference to being "put in the most difficult spot" points to the dilemma experienced by adolescents

straddling the roles of supporter and friend. The desire to help is surpassed by feelings of loyalty that epitomise close friendships particularly in early adolescence, when developing and maintaining reciprocal peer relationships is important. Despite Sarah's wish to be confided in, she may then act to prevent the employment of further support from an adult or more specialised service to maintain her peer connection.

Interviewer:

"Do you remember what it was like when your friend said 'don't tell anyone'?"

Lola:

"Yes, it felt like I was carrying the weight of a thousand people on my back and I wasn't allowed to tell anyone because I didn't want to hurt her and I couldn't even tell my mum because she didn't want my mum to tell people and it just felt like I had a heavy weight, like I was carrying around something I wasn't meant to have"

If an adolescent wanted to access outside support for their friend engaged in self-injury or for themselves, they had to consider compromising their friendship. In the eyes of the supporter this risked the friendship but they could no longer sustain such an independent helping role and the associated responsibility this entailed. The result of such a disclosure was typically followed by a short-term break in the friendship followed by positive reinforcement of the supporter's actions at a later date. This was a dilemma faced by all participants.

Interviewer:

"When you told the counsellor, and you walked away from that conversation, how did you feel?"

Diara:

"I don't know, I was still quite upset with what had happened, like I was up all night... [friend] had kind of like had a go at me because she found out that it would have been me, but then after a while she kind of thanked me"

These comments demonstrate the strength of the friendship bond and how this can be used in an attempt to constrain supporters' helping responses. Those participants who disclosed to a staff member at school or another professional felt uncertain about whether they had done the right thing and whether this was helpful. This dilemma often resulted in supporters turning to their peers for assistance and advice instead.

"...she told my other friend so my other friend told me, look you know I think she's been cutting and that and it was all like oh what do we do"

(Sarah)

b. Impact within the peer group

A disclosure of NSSI can also change the landscape of the wider peer group. Often group support would be extended to a member engaging in NSSI. Individually they may approach the person and offer support but group discussions concerning the friend's level of distress and what to do about this occurred almost daily. Individuals within the peer group had varying levels of emotional stamina or resilience in terms of sustaining a prolonged support relationship with the person engaged in NSSI. Different tolerance levels to group talk on this topic was also evident.

"...I got quite sick and then I came back and I noticed two of them are closer and the other girl [engaging in NSSI] was kind of left on her own... so I started to hang out with her because I felt left out as a friend too...it was hard...I was used to having two other people there to like talk to about what she was doing... but they didn't want to know, didn't want the drama in their life"

(Mikayla)

Mikayla relied on her peer group to assist her support efforts as well as to meet her own companionship needs. However, when two group members saw an opportunity to disengage from this responsibility, Mikayla decided to turn to her friend engaging in NSSI in an attempt to find companionship and continued to support her.

Sometimes supporters purposefully relinquished ties to a peer group in order to channel their full attention and efforts to helping their friend engaging in NSSI. This decision to leave a peer group may stem from feeling obliged to support a friend in distress. The support provider in this instance acted out of a sense of duty and fear that sustaining these relationships may contribute to the distress of her friend or dilute the support effort.

"I didn't like being around other people but her because I didn't want her to get upset or jealous"

(Lola)

"I felt like I couldn't partake in other things or be friends with other people because she was hurting herself and I felt like I owed my attention, like all my attention had to be on her always"

(Sarah)

Relationships changed after a disclosure of NSSI. Self-injury provided a barrier to the usual relationship tasks within the friendship dyad and amongst peer group relations. The support response was constrained by the boundaries of adolescent friendships weighted with expectations of loyalty and lacked additional support from parental figures. Thus the process of adapting to new ways of interacting with friends that encompassed a disclosure of NSSI brought both costs and benefits to participants.

The Costs of Caring – Being "Intoxicated with Worry"

Worry, difficulties sleeping, panic attacks, and anxiety were typical symptoms listed by participants as a result of their support efforts. Other feelings such as sadness, desperation, confusion, abandonment, betrayal, protective, angry, overwhelmed, relief, happiness, suspicion, curiosity, helpless, defensive, sympathetic, helpful, exhaustion, guilt, lonely, responsibility, disgust, and disappointment were also mentioned.

"I feel like the stress made me quite... I had to talk about it a lot to let it out I guess and it made my whole life just kind of intoxicated with this kind of worry about this person"

(Sarah)

"...I chose to forget about myself and think about them until their problems were sorted and then I could think about myself again... they would get grumpy because they wanted it to be about them and they wanted their situation fixed before mine could even be thought of"

(Lola)

Sarah's reference to being 'intoxicated' suggests the stress she experienced permeated her day-to-day life leaving her in an altered state. Similarly, Lola's comment points to periods of time when she was so consumed with providing support that she deliberately discounted her own needs.

Unmet friendship needs of the supporter were a common thread leading to feelings of frustration and resentment but sometimes participants did not have another source of support to turn to. Forgoing their own relationship needs for the benefit of a friend's need for support could also result in the support person's emotional experience becoming dependent upon that of the friend's. The supporting adolescent then became vulnerable to experiencing an array of tumultuous negative emotions which she had little control over. Behaviours such as internalising one's own difficulties and engaging in self-harm were also expressed as attempts at coping with this secondary distress.

One disadvantage of harbouring such a potent sense of responsibility is the blame and guilt felt when participants appraised their efforts as inadequate.

"Sometimes I felt it was my fault and I couldn't stop them, because every time I tried they would just go back to it even if they had stopped for a period of time. So it made me feel like it was my fault and that I couldn't stop them and I couldn't do anything to help them"

(Lola)

Lola believes it should have been within her capabilities to prevent her friend engaging in NSSI. She takes personal responsibility for not being able to help and as a result evaluates herself negatively.

While negative impacts are evident there can be some benefits accrued in this helping relationship. Supporting someone in distress provided some with a social connection that perhaps they would otherwise not have had. Others derived a sense of satisfaction from successful helping, a sense of relief tempered with gratification or pleasure at what their efforts had achieved. Lola had been supporting a friend and described how she "kind of talked her out of it [self-injury]". The following is Lola's response to this friend telling her she had stopped self-harming.

"Imagine carrying a 10kg sack of potatoes on your back. It felt that the whole sack had ripped open and fallen off my back... She couldn't see that I was actually crying that I was so happy that she had stopped, I had been so worried about her and I guess when she said that she had stopped, the whole sack of potatoes fell off"

(Lola)

Accompanying someone to such depths of despair and empathising to such a degree evident within these young participants' stories provides an opportunity for experiencing more positive emotions with a similar intensity such as joy, relief, and a sense of achievement. Lola certainly responded with relief at her friend's disclosure of no longer engaging in NSSI.

Samantha attributes the support she gave her friend to developing the close relationship they now enjoy.

"... like she knows when I'm upset, like I'll walk into school and she'll be like you're upset, come here, what's wrong and yeah she just knows. I'll be texting her and she's like what's wrong. Just by something I've said"

(Samantha)

The characteristics of the friend who is self-harming impact on the supporter's identity particularly within a friendship during adolescence when identity formation is in process. Because of this it could also be beneficial for the supporter to gain insight into their own challenges compared to those of their friend.

Supporting a friend was stressful. Participants' needs were secondary to their friends' and emotions were vicariously experienced. Participants felt a weight of responsibility for the wellbeing of their friend. However, participants also acknowledged benefits from helping such as feeling connected to another person, a sense of satisfaction from helping, and these efforts contributed to a 'supporter identity' for many.

Supporter Needs – "...Our friends hurting themselves is hurting us"

All participants mentioned interpersonal difficulties such as struggles making friends and/or a history of being bullied. This complex social background contributed to participants being reluctant to disengage from a friendship when NSSI was disclosed. Just as friendship provided an open gateway to accelerating the offer of help amongst peers, participants in return often searched for their friendship needs to be met by the person engaged in self-injury. They desired the friendship to be on more equal terms with an expectation that friendship would be reciprocated.

"...I know friends are there to support each other and it's quite difficult when there's that like self-harm in the way I guess of the friendship..."

(Sarah)

"I kind of forgot about what was going on in my life and made them [friends self-harming] more important because I felt like that my problems were slim to nil to what their big problems were"

(Lola)

These excerpts highlight the importance for the supporting peer to be able to connect with another trusted person with whom they can air their own worries and concerns. It was important for most participants to be able to discuss the difficulties of providing support and receive encouragement for the help they provided.

"I think we also need support and someone to talk to, because I wish I had support when I was supporting other people because I felt like I was giving it all away and I had nothing that was keeping me going..."

(Lola)

Few exhibited any attempts at establishing boundaries with friends to ensure their own wellbeing. The application of boundaries was most commonly for the purpose of ensuring the safety of the person engaged in self-injury. Perhaps this lack of restriction to help provided was the result of a knowledge gap for young adolescents. One participant who was most effective at creating boundaries applied her experience from a prior counselling relationship.

"…if someone says hey can we talk I'll be like if it gets really bad or something I'm going to have to tell someone. But they're like yeah that's okay"

(Samantha)

Other participants were aware they lacked strategies to cope with the level of distress their friend exhibited and the resulting stress and negative emotion this caused. Sarah's comment suggests her experiences supporting a friend and the associated distress accumulate and endure through time.

"… I don't have a way of dealing with it… it just kind of stays in my brain. It like stays in the back of my head or something…"

(Sarah)

Only one participant overtly commented on the topic of self-care listing the following tactics to reduce the stress that helping a peer exposed her to: exercise, talking to a parent, accessing counselling, and artistic expression. Learning how to look after oneself, how to manage emotions, and problem-solve are skills that are typically learnt and developed at this stage of life. However, for peers supporting friends in distress these are essential skills to maintain the helpers' wellbeing and to sustain the helping effort.

For young people securing support from their day-to-day environment was fraught with difficulties. Predicting parental response, concerns about burdening parents, uncertainty whether an adult could help, and fears about confidentiality, were common reasons for not accessing support.

"I sort of had to think about it for a couple of days and then be able to be brave and tell my mum what had happened because I didn't know what to expect like what she would say"

(Diara)

"I'd talk to my mum about stuff like that but then obviously she wouldn't know what to do about it. Like she couldn't go and tell her mum that you know her daughter was self-harming or anything because she felt like that wasn't her place to say anything… I was like kind of just handing that stress on to her…"

(Sarah)

Despite these difficulties all participants made reference to speaking to their parents about a friend self-injuring with a view to exploring support possibilities for the friend and themselves. However, parents struggled with how best to advise their daughters just as much as their daughters grappled with their support response. There was often reluctance by

parents to become involved in a direct way, such as contacting a parent of the young person self-harming or a pastoral staff member at school, but instead focussed on supporting their daughter.

Supporters wanted to access support from their school and home, and sought reliable and knowledgeable support for both their friends and themselves. Responses that were empathetic, provided validation and encouragement were important, alongside suggestion of specific actions and information relevant to NSSI to help their support efforts.

The provision of these helping strategies would afford supporters reassurance as the confusion, indecision and worry participants felt required a more in-depth response than simply being told to tell an adult.

"…there is no way that they've actually told us to deal with it and it's really hard… I think having some actual steps to know how to deal with it would be very helpful… I want to know what to do"

(Sarah)

Sarah's comments stem from her commitment to solve the issue at hand (NSSI) and address the effects of this on her friend, their relationship, and herself. Sarah is not yet able to conceive her own limitations and, perhaps crucially, know when to share the support role with an adult.

Adolescents are looking to adult figures in their lives to provide this information and assistance. Perhaps this has been a function of the dilemma for young people supporting a friend engaging in NSSI: How to provide this help with limited resources, skills and knowledge alongside an urge to be the one, instigated in part through the loyalty of a friendship, who fulfils this helping need.

"I think emotionally it would help people and just like let them know what to say like about that, trying… that staying living is the best option for them"

(Mikayla)

Discussion

This study explored how young adolescent females respond to and support a friend engaging in NSSI and the impact this had on the adolescent and their friendships. Whether support was offered depended upon the support-provider's beliefs about who genuinely required assistance. Participants believed that some who self-injure do so to attract attention rather than being motivated by genuine distress and were thus not deserving of support. This is significant given that Armiento et al. (2014) found that individuals reporting prior engagement in NSSI resulting in severe tissue damage (labelled 'severe NSSI' by the researchers) were more likely to disclose this behaviour than those engaging in 'less severe NSSI' (NSSI that resulted in mild tissue damage only). Paradoxically, it appears young participants may be more likely to attend to peers who reveal less severe forms of NSSI and not engage with those exhibiting more serious NSSI. Perhaps the communication of severe or chronic NSSI is left unattended as potential supporters realise they are ill-equipped to meet these more severe needs. This unmet need

aligns with Rotolone and Martin's (2012) finding that those self-injuring typically receive less social support than youth who do not engage in NSSI.

Just as parents report high levels of stress when their child self-harms (Byrne et al., 2008), adolescent supporters also experience various levels of distress (including stress, worry, fear, sadness, sleepless nights, and panic attacks). Often supporters are so closely engaged with their friend's distress that they begin to vicariously experience this person's emotional lows in addition to their own life stress (Kessler & McLeod, 1984). That is, they can experience empathetic distress (Swenson & Rose, 2009) which occurs when individuals are unable to distance themselves emotionally from another's distress, and instead take on this distress as their own (R. Smith & Rose, 2011). This experience is further compounded by the supporter's sparse self-care strategies and limited NSSI-specific support-tools to meet the needs of the person engaging in NSSI, and thus reduce both individuals' stress levels. In this study, participants offered support by discussing their friends' troubles, providing physical comfort and distraction, and sometimes making a disclosure concerning the NSSI to an adult. These are similar strategies to those identified in the existing research (Clark et al., 2008; Yap et al., 2011). If making a connection with an adult who is a formal help provider is one of the young supporters' strategies, this may explain the positive correlation found between accessing informal support (friends and family) and progressing to involvement in a formal support relationship (such as a mental health service) (Idenfors et al., 2015; Nada-Raja et al., 2003).

All participants displayed at least some reluctance to involve an adult who could provide more specialised help. The analysis points to an explanation suggesting the supporter aspired to be the one to provide the helping effort, with some participants referring to this as their responsibility given their friendship connection, or as their "job" to fulfil. Existing research regarding mental health literacy and first aid actions, demonstrated that young people (aged 12-17) had "less sophisticated first aid knowledge and beliefs than young adults (aged 18-25) but were paradoxically more confident about providing help to a peer" (Jorm et al., 2007, p. 61). The developmental stage of adolescence in itself works against the involvement of adults as adolescents form tighter bonds with their peers, weaker connections with adults, and are more likely to take part in risky behaviour. These factors encourage young people to embrace the role of supporter with independence. Thus the friendship bond between peer supporter and the person engaged in NSSI may preclude the involvement of adult help. The involvement of an adult may, for this group of young people, demonstrate their failure as a friend.

For participants who were more confident in their helping abilities the support role formed an important component of their identity. Young people who commit to this role embrace the tasks of the supporter with intensity and determination. Their efforts are not restricted to one or two friends engaged in self-harm, but anyone within their wider social circle may receive this support. For such a young person the support role can transform into a supporter identity such as the 'hero' or even 'vigilante'. The maintenance of a supporter identity requires exhibiting regular helping efforts which further contribute to and accentuate a positive perception of their identity.

Application of Findings

This is a small-scale exploratory study and therefore caution needs to be exercised when offering practical applications based on the findings. However, the following points would contribute to the creation of an informed approach to assisting those in a supporting role. Supporting adolescents require validation, continuing support, and education about NSSI (including warning signs and how to best support a young person[2]) and the impact that this role can have on the individual and peer group. Particular skills in self-care, utilising support networks, and setting and maintaining boundaries for the safety of both adolescents need to be imparted. School staff and parents would benefit from similar information being made available to appreciate the stresses involved in the support process and to be able to offer creative solutions to support students. Schools should work to create more open communication between students who act as gate keepers to those who are distressed in order to provide specialised assistance alongside the integral support being delivered by peers. Helping professionals need to be aware of the distress and burden created by a peer helping role, including how an adolescent supporter negotiates relationship changes with the person engaging in NSSI, and the unmet social and emotional needs of the supporter.

Limitations and Future Directions

It is acknowledged that recruitment via the Guidance Counsellor's client files created a limited sample, as recruitment was not open to the wider school population and in particular students who had not sought the assistance of the Guidance Counsellor. Another limitation is that participants were of European or New Zealand/European ethnicity only. Therefore the views of other ethnicities such as Māori (indigenous population), Pasifika or Asian were not represented in the data. However, it is believed that within the parameters of the qualitative methodology applied, the findings are relevant and offer important insights to the experiences of young adolescents supporting their friends engaged in NSSI.

Research with a larger sample of young people from diverse cultural backgrounds, a wider age range, and including males to understand gender differences in the peer support process, would be useful directions for future research. As would exploring whether there is disparity between supporters who have a history of self-harm and those who do not within the support process.

Providing support to a friend engaging in NSSI afforded for some a sense of achievement and a role that helped create a sense of who they were in the world. Yet each and every participant experienced repeated distress in many forms as a result of their support effort. As Lola insisted:

> *"… we may not be hurting ourselves, but our friends hurting themselves is hurting us." (Lola)*

2 Peer support resources available within New Zealand and internationally can be accessed via the links http://www.victoria.ac.nz/psyc/research/youth-and-wellbeing-study//resources, http://sioutreach.org/learn-self-injury/friends/, and http://www.selfinjury.bctr.cornell.edu/resources.html.

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Non-suicidal self-injury in a New Zealand student population: Demographic and self-harm characteristics

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There is an established international literature on the prevalence of non-suicidal self-injury (NSSI). However, New Zealand information regarding prevalence, attitudes, motivation, co-morbidities, etc., is limited. In this study data were collected using an on-line survey from approximately 850 university students regarding self-injurious behaviour, risk and protective factors, mental health co-morbidity, help-seeking, and addiction. Our data revealed that 293 participants (38%) had engaged in NSSI on at least one occasion in their lifetime, elevated risk for females who were lesbian or bisexual, and different patterns of site and function of injury by gender. Given research suggesting that Māori (indigenous New Zealanders) are at elevated risk for suicide it was surprising that those identifying as Māori were at no greater risk of NSSI than those identifying as New Zealanders of European origin. Females were more likely to exhibit chronic self-injuring and more likely to engage in more 'covert' forms of self-injury that can be hidden or disguised (e.g., scratching and cutting on their wrists, arms or thighs) whereas males were more likely to engage in 'overt' forms of self-injury (e.g., banging or punching themselves or objects with their hands or head). Patterns of NSSI were similar to international comparisons, although prevalence was somewhat elevated. A number of factors differed by gender, including underlying reasons, forms, rates and increasing severity of self-injury, which add to the international literature.

Keywords: Non-suicidal self-injury, NSSI, university students, prevalence, self-harm, risk factors

Non-suicidal self-injury (NSSI) is defined as the deliberate, self-inflicted destruction of body tissue without suicidal intent and for purposes not socially sanctioned (ISSS, 2007; Muehlenkamp, Claes, Havertape, & Plener, 2012). Estimates of the prevalence of self-injury vary internationally and within different sectors of national populations due to the influence of a range of demographic, health, and social factors (Bergen, Hawton, Waters, Cooper, & Kapur, 2010; Hawton, Rodham, Evans, & Weatherall, 2002; Nock, 2010) as well as differences in definition and measurement strategies employed. For example, Nock (2010) cites studies reporting lifetime prevalence rates between 13%-45% for adolescents. However, Muehlenkamp and colleagues (2012), in a review of 52 international studies citing prevalence rates, suggest a stable lifetime prevalence rate of 18%.

The publication of New Zealand prevalence data has been limited. Nada-Raja, Skegg, Langley, Morrison, and Sowerby (2004) reported a lifetime self-harm prevalence rate of 13% amongst 966 26-year-olds who were part of the longitudinal Dunedin Multidisciplinary Health & Development Study. However, this report did not distinguish between behaviours enacted with or without suicidal intent. This distinction is the key difference between NSSI (self-injury without suicidal intent) and self-harm (self-injury with no limitations on suicidal intentions), and generally results in higher prevalence figures for self-harm over NSSI.

Data from the New Zealand Secondary Schools Survey (Lucassen et al, 2011) was included in the review by Muehlenkamp et al. (2012) although the researchers asked only a single 'Yes/No' question about self-injury within the previous 12 months (22.8% responding affirmatively), an approach which is likely to lead to an under-estimation of actual prevalence rates.

More recently, as part of a larger research project focused primarily on NSSI among young people in Wellington, New Zealand members of the Youth Wellbeing Study Team at Victoria University of Wellington reported a lifetime rate of NSSI amongst senior high school students (aged 16-18 years) of approximately 50% (Garisch & Wilson, 2015).

The New Zealand Ministry of Health reports data on hospitalisations attributed to intentional self-harm, although no distinction is made between suicidal behaviour and NSSI (Ministry of Health, 2015a). The most recent figures indicate that the rate of self-injury related hospitalisation (irrespective of suicidal intentionality) decreased over the decade to 2012, down to 71.0 per 100,000 of the population, although caution should be exercised regarding these figures, especially for individuals who engage in self-injurious behaviours but have no suicidal intent. That is, set against this encouraging reduction in the hospitalisation rate is the fact that a substantial proportion of those engaging in self-harm behaviours do not seek or obtain medical assistance (Evans, Hawton, & Rodham, 2005; Hawton, Saunders, & O'Connor, 2012; Nixon, Cloutier, & Jansson, 2008), and few of those who receive medical care, even at a hospital Emergency Department, would be admitted (Olfson, Marcus, & Bridge, 2012). It is generally accepted in the literature that many of those who engage in self-injurious behaviour, whether there is suicidal intent or not, do so in a way which is unobserved and unrecognised (Nada-Raja, Morrison, & Skegg, 2003; Whitlock, Eckenrode,

& Silverman, 2006).

While there is a slowly developing consensus in the literature about the prevalence rate of NSSI, there remains a complicated picture regarding other demographic and life course factors associated with NSSI behaviour. Based on their review of the best international data, Klonsky, Victor, and Saffer (2014) provide an estimate of lifetime rates in between 15% - 20% and onset typically around age 13 or 14 years. They found that about 6% of adults report a history of NSSI. Bergen et al. (2010) found that their sample of self-harm repeaters (undetermined intent) included a sizable proportion of adults in their middle age (approximately 30% in the 35-54 years age range). NSSI is often seen as predominantly the preserve of females, although recent studies show it is a behaviour also engaged in by a substantial number of males (Andover, Primack, Gibb, & Pepper, 2010). Indeed, general population studies find equivalent rates between men and women (Whitlock, Eckenrode, & Silverman, 2006; Klonsky, 2011), although there are differences in age of onset, type of self-injury, degree of medical injury, and help-seeking behaviour. Within New Zealand, Wilson et al. (2015) also report comparable rates between males and females in their sample of older high school students (16 years and older), although an earlier study by Fortune (2006) involving a random selection of clinical files of young people presenting with deliberate self-harm found significantly more females presented for assistance than males, suggesting differences in help-seeking and/or referral.

Within both the international and developing New Zealand literatures the area of ethnicity and cultural affiliation, and its association with NSSI, has not been systematically investigated. This is somewhat surprising given the data that minority cultural groups and indigenous people tend to have higher rates of mental health difficulties than dominate cultural groups (Goebert, 2014; Santiago & Miranda, 2014). Within New Zealand we might expect special attention to this issue given socio-cultural disparities in mental health status (Oakley-Browne, Wells, & Scott, 2006) and the high suicide rate for Māori youth (Ministry of Health, 2015b). Though the disparity is not as high as for completed suicide (17.8 per 100,000 Māori, compared with 10.6 per 100,000 non-Māori), the age-standardised rate for Māori self-harm hospitalisations in 2012 was 85.0 per 100,000 compared with 68.0 per 100,000 non-Māori (Ministry of Health, 2015a).

As with many areas of NSSI research the issue of cultural differences is not resolved. Martin, Swannell, Hazell, Harrison, and Taylor (2010), in a large cross-sectional study of self-injury in Australia found no significant difference based on gender, socioeconomic status, or indigeneity between those who reported self-harming during the four weeks prior to the interview. However, those born in Australia were more likely to have engaged in self-harming than those born elsewhere.

More recent research has highlighted the vulnerability of individuals within minority sexual orientation groups. Batejan, Jarvi, and Swenson (2015) report results of a meta-analysis including 15 studies which found that individuals within a sexual minority group were three times more likely to have engaged in self-injurious behaviour than those within a heterosexual group, with adolescents and bi-sexual individuals being at particular risk. These data are consistent with studies by, for example, Liu and Mustanski (2012), and in New Zealand by Skegg, Nada-Raja, Dickson, Paul, and Williams (2003).

Lucassen, Clark, Moselen, Robinson, and the Adolescent Health Research Group (2014), reporting the latest results from the New Zealand Secondary Schools Health and Wellbeing Survey, provide data for nearly 8,000 students who responded to a question about having engaged in deliberate self-harm during the previous 12 months. Of those who identified as being sexually attracted to the opposite sex 23% disclosed that they had engaged in self-harm. This is similar to the rate for those indicating they were not sure about the focus of their sexual attraction, or were attracted to neither sex (21.7%), both were substantially lower than the rate for those attracted to the same or both sexes (59.4%).

There is a well-documented link between ever having engaged in NSSI and subsequent risk of suicidal behaviour (Glenn & Klonsky, 2009; Turner, Layden, Butler, & Chapman, 2013; Whitlock, Muehlenkamp, Eckenrode et al., 2013). While the suicide rate amongst New Zealanders appears to have plateaued at around 11.5 per 100,000 the rate continues to be highest amongst young people, so any factors which contribute to increased risk must be explored carefully (MoH, 2015b).

Despite the increase in the number of studies into NSSI conducted in New Zealand there is still little detailed information about those who engage in NSSI, how these individuals present, and what they have to say about the experience. By comparison, one of the most comprehensive overseas surveys of NSSI in young people was that undertaken by Whitlock et al. (2011) who report data collected from a web-based 'Health and Well-Being' survey conducted across eight universities in North America. Whitlock and her colleagues were able to attract over 14,000 student respondents in total, of whom 15% reported NSSI at some point in their lives, and approximately 7% had self-injured in the previous 12 months. The study found females 1.8 times more likely to report NSSI than males, while males were more likely to report anger as a factor in their self-injuring and more likely to report intoxication as an initiating factor. Whitlock et al. also report a significant relationship between sexual orientation and NSSI. From the same data set Whitlock et al. (2013) report a clear association between NSSI and concurrent or later suicidal behaviour, suggesting that NSSI may serve as a gateway to suicidal behaviour for youth and young adults. This is consistent with the Interpersonal Theory of Suicide proposed by Joiner (2005) which proposed an Acquired Capability (elimination of the fear associated with engaging in a lethal act) as one of three primary risk factors for suicidal action. To date there are few New Zealand studies primarily focused on NSSI which have attempted to provide a comprehensive review of risk factors and responses associated with NSSI (Garish & Wilson, 2015, Nada-Raja et al., 2004).

Current study

The study reported here employed a format adapted from the survey tool developed by Whitlock, Eckenrode, and Silverman (2006) and used in the Whitlock et al. (2011) survey. These authors used the Survey of College Mental Health and Wellbeing to collect general data on demographics, risk and

protective factors, co-morbidity (eating disorder, suicidality, and severe mental illness), help-seeking, self-injurious behaviour, and addiction. Our primary purpose was to examine NSSI in a sample of New Zealand university students, gaining data that would be generally comparable to Whitlock's data. There are two reasons for this, the first being the comparatively high suicide rate in New Zealand (MoH, 2015b), compared with other countries, including America (WHO, 2014). Secondly, given the over-representation of Māori and Pacific Islanders in negative mental health statistics (MoH, 2015c), it is important to explore prevalence rates for peoples indigenous to the South Pacific region.

Method

Study participants

The population from which the current sample was drawn were all domestic students studying on the main campus of one of New Zealand's six urban universities. International students (students normally resident in a country other than New Zealand) were excluded from the study because of the difficulty in anticipating and managing any complications resulting from cultural or language factors. Domestic students were only sent invitations to participate if they were studying on the main campus as it would have been impossible to ensure the availability of robust support options for those either studying on a satellite campus or those engaged in distance-learning. There were a total of 12,300 students enrolled at the target university. Of these approximately 9,000 were eligible to participate in the survey.

Survey form and procedure

The original survey form used by Whitlock et al. (2006) consisted of 201 items covering a wide range of psychological and well-being issues, including the Non-Suicidal Self-Injury Assessment Tool (NSSI-AT; Whitlock, Exner-Cortens, & Purington, 2014). The NSSI-AT contains items related to a range of NSSI factors, for example, injury type (from a list of 15 ways), functions (20 options), frequency and recency, age of onset, severity of injury, wound location (16 options), treatment experiences, and personal reflections. As we were unable to offer incentives to participants, as they did in the original American research, we maximised the likelihood of participation by removing items to shorten the survey to a maximum of 86 items. The excluded items primarily covered the areas of religiosity, parental/family demographics, computer usage, accessing therapy for issues other than NSSI, and some of the more detailed items regarding suicidal behaviour.

With the assistance of the university's Student & Academic Services Division survey information and a link to the on-line survey was sent to all local domestic students. A follow-up email, including the information sheet and survey link, was sent to all potential participants three weeks after the initial email. Participants were entered into a draw to win one of four $50 department store vouchers.

The research design, questionnaire and documentation was reviewed and approved by the university's Psychology Human Research Ethics Committee. Because this was a non-intervention study and it was assessed that completion of the survey was unlikely to cause distress, the ethics review committee was happy to allow all potential participants to give consent after having the opportunity to read a comprehensive information sheet. Participants could opt-out by simply declining to complete the whole or any part of the survey. The survey was conducted after consultation with the local Student Health & Counselling Service.

Analysis

Analysis of data was undertaken using SPSS v23.0. Logistic regressions were undertaken with NSSI as the dichotomized dependent variable indicating the presence/absence of any lifetime experience of NSSI. Other variables were entered as covariates. The analyses and reporting of results followed the general path set by Whitlock et al. (2011) so that comparisons between the data sets could be made. Where appropriate corrected confidence intervals are reported to take multiple comparisons into account.

Results

Participant characteristics

The survey was started by 862 and completed by 772 (89.6%) individuals; approximately 12% of the population to whom it was sent. Of these 549 were female (71.6%, see Table 1). The modal age band was 19-20 years (28.8%) and 63.3% participants were aged between 19-25 years. A majority of participants (70.3%) were undergraduates. Nearly three-quarters (73.5%) identified as being NZ-born of European extraction, 15.1% identified with Māori. A further 9.9% identified as European; all other ethnicity groups were each endorsed by less than 10%. Participants were able to indicate more than one ethnic affiliation. These figures are approximately in accordance with the university population, apart from the gender distribution where 55.7% of the university population were female, in contrast to 71.6% of those who completed the survey.

The most common relational categories showed participants as being single (40.0%), heterosexual (85.5%), and living off-campus in shared accommodation ('flatting', 41.1%). Of the total participants (*n*=862), 112 (13%) indicated that they had intentionally inflicted self-injury within the preceding 12 months.

Comparisons by NSSI status

Crude Odds Ratios (OR) for each variable analysed separately and Confidence Intervals (CI) for a range of demographic characteristics are reported in Table 1.

As comparisons by gender were used in subsequent analyses the five participants who declined to report their gender were excluded at this point. Of the 767 participants who completed the entire survey, 293 (38.2%; 95% CI = 34.7-41.7) reported NSSI at some point in their lives. Males were significantly less likely to report ever having engaged in NSSI (OR = 0.6, CI = 0.4-0.8). Of the females who completed the

survey 229 (41.7%) reported that they had self-injured at some point in their life compared to 64 (29.4%) males. The likelihood of participants engaging in NSSI declined as age increased. This difference was statistically significant for the groups aged 41-50 years (OR = 0.2, CI = 0.1-0.4) and 51 years and over (OR = 0.06, CI = 0.01-0.3). The group aged 18 years and under (*n*=70) was the only group where more than half of the members reported having engaged in NSSI (No = 47.1%, Yes = 52.8%).

Table 1

Logistic Regression of Self-Injury on Primary Demographic Characteristics

Characteristics	Total (*n*=767)		No-NSSI sample (*n*=474)		NSSI sample (*n*=293)			
	n	%	*n*	%	*n*	%	OR	95% CI
Gender								
Female	549	71.6	320	67.5	229	78.2	1.0	
Male	218	28.4	154	32.5	64	21.8	0.6*	0.4-0.8
Age								
18 and under	70	9.1	33	7.0	37	12.6	1.0	
19-20	221	28.8	118	24.9	103	35.2	0.8	0.5-1.3
21-22	163	21.3	98	20.7	65	22.2	0.6	0.3-1.0
23-25	101	13.2	64	13.5	37	12.6	0.5*	0.3-1.0
26-30	63	8.2	42	8.9	21	7.2	0.4*	0.2-0.9
31-35	38	5.0	26	5.5	12	4.1	0.4*	0.2-0.9
36-40	28	3.7	20	4.2	8	2.7	0.4*	0.1-0.9
41-50	49	6.4	41	8.6	8	2.7	0.2**	0.1-0.4
51 and over	34	4.4	32	6.8	2	0.7	0.06**	0.01-0.3
Year of Study [a]								
UG1	171	22.3	81	17.1	90	30.7	1.0	
UG2	193	25.2	114	24.1	79	27.0	0.6*	0.4-0.9
UG3	174	22.8	110	23.2	65	22.2	0.5*	0.3-0.8
PG1	69	9.0	45	9.5	24	8.2	0.5*	0.3-0.9
PG2	54	7.0	45	9.5	9	3.1	0.2**	0.1-0.4
PhD	48	6.3	37	7.8	11	3.8	0.3**	0.1-0.5
Ethnicity [b]								
NZ-European	564	73.5	341	71.9	223	76.1	1.9*	1.1-3.1
Māori	116	15.1	66	13.9	50	17.1	1.6*	1.0-2.5
Pacific Island	39	5.1	31	6.5	8	2.7	0.5	0.2-1.2
European	76	9.9	45	9.5	31	10.6	1.7	0.9-3.2
Asian	27	3.5	18	3.8	9	3.1	1.2	0.5-2.8
Indian	16	2.1	10	2.1	6	2.0	1.6	0.5-4.8
Americas	5	0.7	4	0.8	1	0.3	0.4	0.05-4.0
African	11	1.4	6	1.3	5	1.7	2.0	0.6-7.3
Other	34	4.4	17	3.6	17	5.8	2.7*	1.2-5.9
Sexual Orientation								
Heterosexual	656	85.5	436	92.0	220	75.1	1.0	
Gay/Lesbian	23	3.0	12	2.5	11	3.8	1.8	0.8-4.2
Bisexual	44	5.7	13	2.7	31	10.6	4.7**	2.4-9.2
Questioning	19	2.5	7	1.5	12	4.1	3.4*	1.3-8.8
Other	19	2.5	3	0.6	16	5.5	10.6**	3.0-36.7

Notes.
* *p*<.05
** *p*<.001
[a] UG=Undergraduate, PG=Postgraduate
[b] Participants were able to select multiple ethnic affiliations. Each ethnicity was treated as a separate dichotomous variable rather than categories of a more general 'ethnicity' variable.

Whitlock et al. (2011) reported significantly increased risk of NSSI associated with sexual orientation in their sample of college students. We found a similar increase in risk amongst all non-heterosexual individuals with the elevated risk being almost entirely associated with the female participants. That is, females identifying as other than heterosexual had an increased risk of also reporting a history of self-harm; lesbian/gay (OR = 1.8, CI = 0.8-4.2), an a significantly increased risk for individuals who identified as bisexual (OR = 4.7, CI = 2.4-9.2), and 'questioning' (OR = 3.4, CI = 1.3-3.4). Further multivariate

analysis in which gender was added as an independent variable suggests that females (lesbian, AOR = 4.0, CI = 1.2-13.3; bisexual, AOR = 6.0, CI = 2.7-13.6; 'questioning', AOR = 8.0, CI = 1.7-37.7) were are much higher risk than their male counterparts, and that these factors did not accounted for significant elevation of risk amongst male participants.

Participants who identified themselves as being either a New Zealander of European origin or indigenous Māori were at greater risk of NSSI than those who did not. It is of interest that the risk of reporting NSSI was not significantly greater for Māori, which is not reflective of the national suicide statistics.

It had been anticipated that potential isolation associated with living circumstances may be linked with an increased risk of NSSI, but this was not reflected in the data.

Comparisons by gender

Table 2 shows the frequency and dominant form of self-injury, and Odds Ratio and Confidence Intervals by gender. Of the 264 participants (90.1% of those who had intentionally self-injured) who indicated at what age they had first self-injured, the modal age group was 11-15 years (*n*=140, 53.0%). This was also the modal age group for females (*n*=116, 56.9% of females) with the modal age group for males being 16-20 years (*n*=29, 48.3% of males).

Table 2

Logistic Regression of Primary NSSI Characteristics by Gender

Characteristics	Total (*n*=293)		Female (*n*=229)		Male (*n*=64)		Univariate Analyses	
	n	%	*n*	%	*n*	%	OR	CI
Lifetime Frequency								
Once	25	9.1	22	10.3	3	5.0	0.9	0.8-1.0
2-5 times	61	22.3	44	20.6	17	28.3	2.8	0.8-10.7
4-5 times	45	16.4	32	15.0	13	21.7	3.0	0.8-11.7
6-10 times	34	12.4	26	12.1	8	13.3	2.3	0.5-9.6
11-20 times	32	11.7	23	10.7	9	15.0	2.9	0.7-12.0
21-50 times	27	9.9	23	10.7	4	6.7	1.3	0.3-6.4
Over 50 times	50	18.2	44	20.6	6	10.0	1.0	0.2-4.4
Dominant form [ab]								
Scratch skin	202	68.9	170	74.2	32	50.0	0.3**	0.1-0.8
Cut body	166	56.7	140	61.1	26	40.6	0.3*	0.2-0.8
Carved words/symbols in skin	97	33.1	83	36.2	14	21.9	0.8	0.3-1.8
Bitten self	51	17.4	42	18.3	9	14.1	1.1	0.4-3.2
Ripped or torn skin	50	17.1	39	17.0	11	17.2	1.8	0.6-5.6
Burned body	54	18.4	43	18.8	11	17.2	1.7	0.6-4.9
Rubbed glass into or pierced skin	58	19.8	53	23.1	5	7.8	0.2*	0.1-0.8
Banged/punched an object	104	35.5	69	30.1	35	54.7	3.2**	1.5-6.8
Banged/punched self	81	27.6	59	25.8	22	34.4	1.3	0.5-3.0
Prevented healing	50	17.1	45	19.7	5	7.8	0.3	0.1-1.1
Pulled own hair	49	16.7	38	16.6	11	17.2	0.7	0.2-2.0

Notes.
* *p*<.05
** *p*<.01
[a] Only self-injury occurring at a rate greater than 15% in the total sample is reported. [b] Participants were able to select multiple forms of self-harm. Each form was treated as a separate dichotomous variable (present/absent)

Males were at lower risk of having 'severely scratched or pinched with fingernails or other objects to the point that bleeding occurs or marks remain on the skin' (OR = 0.3, CI = 0.1-0.8), 'cut wrists, arm, legs, torso or other areas of the body' (OR = 0.3, CI = 0.2-0.8), or 'rubbed glass into skin or stuck sharp

objects such as needles, pins, and staples into or underneath the skin (not including tattooing, body piercing, or needles used for medication use)' (OR = 0.2, CI = 0.1-0.8), but were more likely than females to have 'banged or punched objects to the point of bruising or bleeding' (OR = 3.2, CI = 1.5-6.8). For all participants the mean number of different forms of self-injury experienced was 3.6 (*SD*=3.0) and while females reported a slightly higher mean number than males this was not statistically significant.

There is some evidence that the number of different forms of self-injury is a better predictor of the likelihood of further self-harm than frequency or the recent occurrence of self-harm (Latimer, Meade, & Tennant, 2013; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006). To explore this we completed a correlation analysis of the number of different forms of self-injuring by participants' self-ratings of how likely they were to intentionally injure themselves again. We found a moderate positive correlation between the two variables, Spearman's *r* (272) = .467, *p*<0.01 (2-tailed).

Table 3 reports comparisons between male and female participants on a range of secondary characteristics of NSSI. Under all categories the table only includes those items rated as present by more than 20% of males or females[1], or which were found to be rated differently by the two gender groups. Omitted items were excluded from analyses. Females were significantly less likely than males to hurt themselves 'to get a rush or surge of energy' (OR = 0.3, CI = 0.1-1.0) or 'because of self-hatred' (OR = 0.4, CI = 0.2-0.9), but more likely to do it as a way of gaining 'control over myself or my life' (OR = 3.8, CI = 1.2-11.5) or 'to change my emotional pain into something physical' (OR = 2.6, CI = 1.1-6.2). Some of the traditionally cited functions of self-harm were frequently endorsed, for example, emotion regulation (coping with uncomfortable feelings, relieving stress, dealing with frustration and anger), but these were not selected at different rates by males and females. Items related to interpersonal influence (e.g., to cry for help, to be part of a group, to attract attention) were not selected at a high rate and also did not differentiate between males and females.

Females were more likely to injure their wrists (OR = 2.4, CI = 1.2-4.8) or thighs (OR = 3.2, CI = 1.5-6.7), but substantially less likely to cause injury to their head (OR = 0.3, CI = 0.1-0.7). The overall number of those reporting injuries (293 participants reporting injury to 716 sites) demonstrates that many participants had histories of injury to more than one site. Only three factors were identified as being substantial motivators for initial episodes of self-harm – feeling upset, feeling angry, and use of substances. Of these only "I was drunk or high" presented an increased risk by gender with females being significantly less likely to indicate this motivation than males (OR = 0.2, CI = 0.1-0.7).

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[1] Omitted items are – **Function:** 'It feels good', 'Like the way it looks', 'To help me cry', 'Friends hurt themselves', 'Friend expected me to', 'Be part of the group', "Get attention/support', 'Practice suicide', 'Suicide attempt', 'Feel closer to God', 'Avoid other self-harming', 'Shock/hurt someone', 'Avoid something else'. **Initial Motivation** – 'Friend suggested it', 'Saw on internet', 'Saw on movie', 'Works for others', 'Celebrities do it', 'Accident', 'A dare', 'To fit in', 'To be noticed', "To shock others',' I was upset', 'To feel good', 'Angry at others'. "I cannot remember'. **Routines and Habits** – 'Have friends who self-harm', 'Sometimes self-injure with others', 'Let other people injure me', 'Have a regular routine of self-injuring', 'Have a particular place/room where I self-injure'.

Overall 50% of participants who had self-injured reported that someone knew about their behaviour and had talked with them about it. Eleven per cent reported that they believed another person knew or suspected their self-injuring, but

Table 3

Logistic Regression of Secondary NSSI Characteristics and Help-Seeking by Gender

	Total (n=293)		Female (n=229)		Male (n=64)		Univariate Analyses	
Characteristics	n	%	n	%	n	%	OR	95% CI
Function [a]								
Cope with uncomfortable feelings	192	65.5	153	66.8	39	60.9	1.0	0.5-2.1
Relieve stress	183	62.5	147	64.2	36	56.3	1.0	0.5-2.2
Self-punishment	62	21.2	45	19.7	17	26.6	0.6	0.2-1.4
Energy rush	26	8.9	17	7.4	9	14.1	0.3*	0.1-0.9
Self-control	73	24.9	65	28.4	8	12.5	4.1*	1.4-12.4
Distraction	89	30.4	72	31.4	17	26.6	0.7	0.3-1.7
Change emotional to physical pain	139	47.4	118	51.5	21	32.8	2.6*	1.1-6.0
Unstoppable urge	59	20.1	51	22.3	8	12.5	2.2	0.7-6.6
Deal with frustration	130	44.4	106	46.3	24	37.5	1.4	0.6-3.2
Deal with anger	105	35.8	84	36.7	21	32.8	0.8	0.3-1.7
Self-hatred	101	34.5	74	32.3	27	42.2	0.4*	0.2-0.9
Primary body parts affected [a]								
Wrist	127	43.3	108	47.2	19	29.7	2.3*	1.1-4.9
Hand	101	34.5	73	31.9	29	45.3	0.5	0.3-1.0
Arm	138	47.1	111	48.5	27	42.2	1.0	0.5-1.9
Thigh	130	44.4	114	49.8	16	25.0	3.5**	1.6-7.7
Head	29	9.9	15	6.6	14	21.9	0.3*	0.1-0.7
Initial motivation [a]								
Upset and decided to try it	126	43.0	103	45.0	23	35.9	1.1	0.6-2.1
Angry at self	105	35.8	81	35.4	24	37.5	0.8	0.4-1.5
Because of being drunk or high	12	4.1	6	2.6	6	9.4	0.1*	0.1-0.7
Routines and habits [a]								
Always injure in private	157	53.6	125	54.6	32	50.0	1.1	0.5-2.3
Does not feel much pain when injuring	72	24.6	54	23.6	18	28.1	0.7	0.4-1.5
Has periods of self-injury and non-injuring	75	25.6	58	25.3	17	26.6	0.9	0.4-1.7
Unintended severity [b]								
Increasing tolerance to pain	60	23.5	54	27.1	6	10.7	0.7**	0.5-0.9
Has trouble stopping	56	22.0	46	23.2	10	17.5	0.9	0.5-1.3
Will be able to stop when ready	137	53.7	103	51.8	34	60.7	1.1	0.9-1.4
Under the influence of alcohol of drugs	44	17.3	32	16.2	12	21.1	1.4**	1.1-1.7
Best way to calm self	144	56.5	87	43.9	16	28.1	0.9	0.7-1.2
Have to continually fight urge	92	36.1	75	38.1	17	29.8	0.8	0.6-1.1
Control is easy	88	34.8	64	32.7	24	42.1	1.0	0.8-1.3
Self-injury is a problem in life	56	22.0	45	22.7	11	19.3	1.1	0.8-1.5
No desire to stop	25	9.8	16	8.1	9	15.8	1.4*	1.0-1.8

Notes.
* *p*<0.5
** *p*<0.01
[a] Only includes responses rated by at least 20% of male or female respondents, or where differences between the gender groups was statistically significant.
[b] Only includes responses rated 'strongly agree' or 'somewhat agree' by at least 20% of male or female respondents, or where differences between the gender groups was statistically significant.

had not discussed it, and 39% reported a belief that no-one knew about their self-harming. It should be noted that while another person may have identified the participant's self-harm this does not mean that the participant displayed signs of this intentionally, or welcomed the recognition. There were no significant differences by gender. Those who had self-injured three times or less were more likely to indicate a belief that no-one knew about their behaviour, whereas those who had self-injured more than three times were most likely to indicate that someone else knew. Despite this 25% of those who had self-injured more than 50 times indicated their belief that no-one knew about their behaviour, suggesting they were actively hiding their NSSI.

For those who reported that they had discussed their self-harming with another person the most commonly cited people were a Significant Other (boyfriend, girlfriend, or spouse/partner, 62%), friend (55%), therapist (37%), or parent (35%). Less than 10% had discussed their behaviour with a medical practitioner.

Discussion

As indicated in many other studies NSSI is primarily, but not exclusively, a behaviour of younger females. Whitlock et al. (2011) reported, using largely the same survey items, that approximately 29% of her survey participants who engaged in NSSI were male compared with our finding of 22%, with a gender ratio of approximately 4:1. Because of the high suicide rate for young people in New Zealand (Ministry of Health, 2015b), especially Māori, it was surprising that Māori participants were at no greater risk than New Zealanders of European origin. However, our data appears consistent with the findings from Australia that immigrants may be less at risk of self-harm than those born in New Zealand (Martin et al., 2010).

The overall 12-month prevalence rate for NSSI in our sample of 13% is high, although the literature contains incidence and prevalence rates which vary widely (Swannell, Martin, Page, Hasking, & St John, 2014). Whitlock's survey results reported a lifetime prevalence rate of 15.3% and a 12-months rate of 6.8%, about half the rate found in the current study. The rates are higher than those reported in the extant literature and may reflect the more limited age range of most participants (the peak risk is in the 15-24 year age group), and the greater proportion of female participants in our survey. However, the most likely explanation is that students with a history of self-harming were more likely to complete the survey introducing a self-selection bias, whereas the availability of incentives in Whitlock's research may have supported a broader and more community-representative participation. The variation in rates is unsurprising as Bergen et al. (2010) reported that self-injuring is more common in those who are socially disadvantaged, have experienced negative life events, have co-morbid mental health problems, have consumed alcohol of other drugs immediately prior to or during a self-harm episode, or have close social contacts (including family) who also engage in self-harm. With this range of risk factors, it is not surprising that NSSI rates vary between regions and countries.

There has been a steady increase in research studies suggesting that sexual orientation is associated with NSSI (Batejan, Jarvi, & Swenson, 2014; King et al., 2008), a finding also supported by Whitlock et al. (2011). We also found that this association was primarily found for female participants and particularly bisexual females. The mechanism linking sexual orientation and self-injurious behaviour is not clear; however, Joiner (2005) posits a low sense of belonging/high social alienation as one of the three precursors of suicidal behaviour. The other two factors are perceived burdensomeness and an acquired capacity to engage in life-threatening behaviour, as exhibited in episodes of NSSI. Having a sexual orientation which may be perceived as alternative could be both isolating and perceived as potentially burdensome to others. Muehlenkamp, Hilt, Ehlinger, and McMillan (2015) also found evidence that minority (group) stress significantly increases the risk for self-injury. However, Zaki, Gross, and Pachankis (2017) report more nuanced findings with lower rates of NSSI in lesbian youth and greater willingness to seek help compared with heterosexual peers, but elevated risk and reduced help seeking in bisexual young females. While these later findings are consistent with our data the over-riding conclusion is that the relationship between sexuality and self-injury is complex and requires further investigation.

The primary characteristics analysed were those directly related to the participants' experience of self-injury. In the lower lifetime frequency bands there were a greater proportion of males with the converse being true in the highest frequency bands (21-50 or over 50 times), where females were more likely to be represented. Indeed, over 40% of females who engaged in NSSI reported having self-injured more than 10 times. While these differences were not statistically significant between genders they do generally supports the picture of self-injury as a chronic behaviour among a sub-group of individuals, and particularly amongst females.

The same forms of self-injury were present in the current survey as found by Whitlock et al. (2011). That is, females were significantly more likely to engage in scratching and cutting, whereas males were more likely to bang/punch an object with the intention of causing injury. The frequency of other self-injurious behaviours was similar across genders. Both males and females indicated that the primary reason why they engaged in NSSI was to cope with uncomfortable emotions and relieve stress, although for females this process appears more controlled and precise, and for males it is less controlled and more explosive based on the most common form of self-injury outlined above. This difference is reinforced by the analysis of secondary characteristics where females were significantly more likely to indicate that, for them, the function of self-injury was to gain control and *manage* emotions (e.g., 'self-control', 'change emotional into physical pain', 'deal with frustration'). Males were more likely to self-injure for the excitement/energy and because they were angry and did not like themselves ('energy rush', 'unstoppable urge', 'self-punishment'), that is, NSSI may provide a way to *express* emotions. These data suggest that females and males may self-injure at different rates, in somewhat different ways, and for potentially different reasons, a conclusion also arrived at by other researchers (Andover, Primack, Gibb, & Pepper, 2010; Bresin & Schoenleber, 2015; Green, Kearns, Ledoux, Addis, & Marx, 2015; Green & Jakupcak, 2016). It seems reasonable to suggest that any support/intervention strategies will need to take this into account, and difficulty in doing this may be one factor explaining the relative lack of success in reducing rates of NSSI and altering its chronic course (Collinson et al., 2014; Hatcher et al., 2015; Kerr, Muehlenkamp, & Turner, 2010; Newman, 2009).

New Zealand has a well-recognised problem with alcohol consumption amongst its young people (Lyons et al., 2014; McEwan, Campbell, Lyons, & Swain, 2013). The use of substances was generally reported to be a common factor in the origins of self-injury, particularly for males, and it is

a factor in ongoing self-injuring and when individuals injure themselves more seriously than they had intended. Although substance use was not a risk factor in our survey, it did assist in differentiating females from males. Further research is merited, focusing on alcohol-associated injuries that present at hospital Accident & Emergency Departments to identify those cases where it is not an injury following intoxication, but intoxication for the purpose of self-injury.

A further concern in our data related to the reporting by females, at significantly greater rates than males, that they had to injure themselves more severely over time to get the same effect. As indicated previously, Joiner (2005) suggested that obtaining an acquired capacity for self-inflicted harm is one precursor for suicide. The apparent increased tolerance to pain reported by nearly a third of the females in our self-injuring group indicates that this group may be at an increasing risk of transitioning from non-suicidal self-injury to suicidal behaviour.

This study is one of the largest to focus specifically on NSSI within New Zealand. However, it is limited by its focus on a student population drawn from a single university. While many students undoubtedly experience substantial social, financial, and academic stressors, especially first-year students, they have access to social and professional support, and have experienced a level of success in the educational system by virtue of their attendance at university. This is not the case for many young people, and we cannot assume our results can be generalised to other groups within New Zealand. Also, while the focus of the survey was NSSI the questions about self-injury were largely limited to cutting and forms of physical self-mutilation. There were some items which referred to ingestion of toxic substances, but this form of self-harming was not explicitly addressed in open questions. Other potential biases include the relatively low response rate (12%), self-selection of participants as is usual with anonymous web-based survey research, and the limited categorisation of gender into a traditional binary for analytical purposes. Despite these limitations the data reported here will contribute to the establishment of a robust baseline of NSSI in the student body of New Zealand which can be used to assist in the shaping of support services, and the application of overseas findings to the local environment.

Acknowledgement

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2 The Non-Suicidal Self-Injury-Assessment Tool (NSSI-AT) can be obtained at http://www.selfinjury.bctr.cornell.edu/perch/resources/nssi-at-revised-final-3.pdf

Predicting Party Vote Sentiment: Identifying the Demographic and Psychological Correlates of Party Preference in Two Large Datasets

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This paper models the demographic and psychological correlates of voter preference in two independent datasets collected in 2014: a random digit-dial survey conducted by research firm Colmar Brunton for Television New Zealand (*N*=7,830), and a national probability postal survey: the New Zealand Attitudes and Values Study (NZAVS; *N*=10,581). Together, these data allow us to uncover not only the consistent demographic factors, but also the psychological variables that predict voter sentiment. A standard set of demographic variables were statistically significant predictors: ethnicity, age, gender, and income. However, the NZAVS data showed that education, local area deprivation, being on the Māori electoral roll, and sexual orientation should also be taken into account. Additionally, all of the Big-Six personality traits, Nationalism, and Patriotism predicted voter sentiment. This paper provides reliable statistical data by utilizing two independent, large-scale, national probability samples to document important demographic and psychological differences in voter preference in New Zealand.

Keywords: Voting, Personality, Demographics, Political psychology, 2014 General Election

Across established democracies and across decades, sociological models of voter choice have shown that people with certain social or demographic characteristics are more likely to vote for different political parties. In New Zealand, the New Zealand Election Study (NZES) and a handful of smaller studies have provided reliable data from a national sample on demographics and vote choice for past elections (e.g., Aimer & Vowles, 2004; Coffé, 2013; Iusitini & Crothers, 2013; Park, 2006; Vowles, 1998, 2002a, 2014). Our aim here is to document not only the social and demographic variables, but also the psychological variables associated with voter sentiment[1] by utilising two large, independent national probability samples. We seek to replicate past analyses with the advantage of two large datasets and to synchronise information on how demographic and psychological variables relate to voter preference in New Zealand into a single paper.

Firstly, we use data from a random-digit dialled survey conducted by research firm Colmar Brunton for Television New Zealand (*N*=7,830) in the run up to the 2014 General Election. These analyses show how the standard set of demographic variables collected through phone polling predict voter sentiment, and also provide validation for the second model which was collected via a postal-based survey. Due to the relative efficiency and quicker time frames of phone polling, mail surveys have not traditionally been used as a method to track voter sentiment on the lead up to an election (Sibley et al., 2017). As such, our first model provides a benchmark for the second set of analyses using a national probability mail survey, the New Zealand Attitudes and Values Study (NZAVS; *N*=10,581), collected from the end of 2013 through to the end of 2014. The NZAVS is a valuable data source as it includes not only the "standard set" of demographic variables, but also psychological variables which may help shed light on previously-unidentified correlates of voter preference in New Zealand. Thus, with this second set of analyses, we extend previous analyses by adding psychological variables, such as personality, Patriotism, and Nationalism. Additionally, the large size of the NZAVS (in terms of both sample size, and range of questions) allows us to explore differences in voter sentiment for groups that past studies have been unable to reliably examine due to small sample sizes. For example, differences in voter preferences across minority ethnic groups, and the previously unexamined attitudes of the Lesbian, Gay, Bisexual (LGB+) population.

Previous Research on Demographics and Voting

There have been many studies conducted both nationally and worldwide on how demographics relate to voting behaviour. However, the focus of this paper is on providing data, rather than providing an exhaustive review of how demographics may relate to vote choice. As such, we focus on recent research (since the introduction of the Mixed Member Proportional electoral system in 1996) from New Zealand. Such research largely uses the NZES, a study which provides researchers with a rich source of national data, and one that has led to many publications based on quantitative analyses (for an overview, see Vowles, 2000; New Zealand Election Study, n.d.), including prominent analyses of voter turnout (to cite just a few examples: Karp & Banducci, 1999; Karp & Brockington, 2005; Vowles, 2002b, 2010).

Research from the NZES has shown consistent demographic

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1 A note on terminology: here we use voter sentiment, intended vote, and voter preference interchangeably to refer to the party for which the participants would vote. This is because both datasets used in this paper capture sentiment or preference towards one party over others at the time data were collected rather than the party they identify with, support, or actually vote for.

differences across a number of variables, including a gender gap in voting. Women have tended to vote for Labour over National since the 1993 election and have expressed significantly less support for NZ First (Coffé, 2013; Curtin, 2014; Vowles, 1998, 2002a, 2014). Research based on the NZES has also found reliable socioeconomic differences and differences in rurality/urbanicity between voters. National voters tend to be small business owners, self-employed, living in rural areas, and have a higher socio-economic status than other voters (Aimer & Vowles, 2004; Vowles, 1998, 2002a, 2014). However, Labour and Green voters tend to have a higher level of education than National voters (Aimer & Vowles, 2004; Vowles, 2014). In terms of age, Green voters are generally the youngest, with many middle-aged voters opting for National, and older voters choosing Labour or NZ First (Vowles, 2002a). Additionally, Christians have shown a higher level of support for National over other parties (Aimer & Vowles, 2004).

Though informative, the NZES is limited in its size of two to three thousand participants over the past four elections (2005-2014; although the 2002 and 1999 editions had closer to six thousand participants). While the NZES is large enough to provide data on the social characteristics for larger groups (for example, the comparison between women and men), the data on smaller social groups may be unreliable, or such groups may be too small to analyse. For example, minority ethnic groups are notoriously hard to survey. However, studies have found differences in voting based on ethnicity in the NZES. Throughout the years, researchers utilising NZES data have found that Māori are more likely to support Labour or NZ First over National (Aimer & Vowles, 2004; Vowles, 1998, 2014). Additionally, using pooled NZES data, Iusitini and Crothers (2013) found that Pasifika were twice as likely as other voters to vote for the Labour Party when controlling for variables like socio-economic status and education (see also Aimer & Vowles, 2004). Finally, Park (2006) used both the NZES and data collected around the 2002 election, and found that Asian voters (limited to those who identified as Korean or Chinese) were more supportive of the major parties than the Greens and NZ First (see also Vowles, 2014). In this paper we test these demographic variables with two new, large data sets, collected using two different methods. Additionally, while these extant NZES analyses provide a good source of research on the basic demographic differences between voters, little research in New Zealand has incorporated social psychological variables into models of voter sentiment.

The second study of this paper also includes sexual orientation as a predictor of vote choice. Sexual orientation in this case refers to one's sexual identity which is typically based on the gender(s) one has romantic and sexual attractions for and past sexual or romantic behaviour (e.g., see Greaves et al., 2016; Laumann, Gagnon, Michael, & Michaels, 1994; Savin-Williams, 2009). Internationally, lesbian, gay, and bisexual individuals have been shown to be more politically liberal and vote for the Democrats in the US than their heterosexual counterparts (Edelman, 1993; Egan, 2008; Herek, Norton, Allen, & Sims, 2010; Hertzog, 1996; Schaffner & Senic, 2006). Similarly, Perrella, Brown, and Kay (2012) found in a large survey of Canadian voters that the LGB+ population tend to be less supportive of the Conservative party, and more supportive

of the Liberal and New Democratic parties. Although we would expect to find a similar pattern in New Zealand, sexual orientation and vote choice has yet to be examined in the New Zealand context.

Personality and Voting

Personality is defined as "relatively enduring styles of thinking, feeling and acting" (McCrae & Costa, 1997, p.509) and is typically conceptualised into 5 or 6 traits that are considered to be universal human characteristics across cultures (McCrae & Costa, 1997). Personality, and how it relates to political attitudes and behaviour, has been examined extensively overseas (for reviews see Gerber, Huber, Doherty, & Dowling, 2011; Sibley, Osborne, & Duckitt, 2012). Consistent findings are that liberal or left-wing voters tend to be higher on Openness to Experience (i.e., more curious, imaginative, and tolerant of ambiguity) than their conservative counterparts. On the other hand, right-wing or conservative voters are found to be higher than liberals on Conscientiousness, which is a trait marked by higher diligence, organisational skills, and attention to detail.

Locally, research using NZAVS data has supported these international findings, and a couple of papers have focused specifically on personality and vote choice (Greaves, Osborne, & Sibley, 2015; Osborne & Sibley, 2012). In an analysis of different voter profiles (made from the extent to which people supported different parties in 2009), Greaves and colleagues yielded mixed findings for party support and personality. Specifically, the results for Conscientiousness and Openness to Experience followed the international literature. However, Neuroticism (i.e., the tendency to feel anxious, insecure and a restless; McCrae & Costa, 1997) was found to be higher in those who supported left-wing (vs. right-wing) parties, which is less often found to be a predictor of political preference internationally (Greaves, Osborne, & Sibley, 2015). Osborne and Sibley (2012) also used NZAVS data to specifically analyse the personality correlates of conservative vote choice (that is, whether someone was a National Party voter in the 2011 election or not). The researchers found that National voters were less Open to Experience, more Conscientious, and had lower Neuroticism than non-National voters. It could be that some of these effects appear in a multiparty system where vote choice is more nuanced, in that the difference between Green and National voters, for example, should be larger than the difference between Democratic and Republican voters in the United States. Nonetheless, this area remains unexplored in New Zealand when using actual vote preference across multiple parties as an outcome variable.

Patriotism, Nationalism, and Vote Preference

Patriotism and Nationalism are yet to be explored in relation to voter preference in the New Zealand context. Patriotism is defined as an attachment and love for one's nation that is unrelated to one's feelings about other nations, or other out-groups (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Bar-Tal, & Staub, 1997; Kosterman & Feshbach, 1989; Skitka, 2005). Patriotism leads to behaviours like flag-waving, and helps maintain social order (Sidanius & Petrocik, 2001; Skitka, 2005). In New Zealand, high levels of Patriotism

have been found across ethnic groups and may relate to acceptance of multiculturalism (Sibley & Ward, 2013; Osborne, Milojev, & Sibley, 2017). While this seems subjectively positive, Patriotism may serve to maintain the status quo wherein those who advocate change on certain issues in society are seen as "unpatriotic" (Sidanius & Petrocik, 2001). As such, voters of parties that show an opposition towards the current status quo, for example, the Greens, might have lower Patriotism. Patriotism has been shown to relate to vote choice internationally. In the US, higher Patriotism relates to voting for the Republican Party and lower support for President Obama, although part of this effect may be based on campaign rhetoric and priming (Kalmoe & Gross, 2016; Parker, Sawyer, & Towler, 2009; Sullivan, Fried, & Dietz, 1992; Tesler, 2010). As such, in New Zealand, higher Patriotism may predict support for the centre-right National party over the Greens or Labour.

On the other hand, Nationalism refers to an uncritical and somewhat unconditional acceptance or love of one's country (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Hechter, 2000; Kosterman & Feshbach, 1989; Schatz, Staub, & Lavine, 1999; Skitka, 2005). Nationalism manifests itself as a blind belief in the power of authorities and a drive for expression of the dominance and superiority of one's own nation over others. It includes negative comparisons between other nations and one's own (Kosterman & Feshbach, 1989). Nationalism tends to reflect behaviours relating to out-group derogation, xenophobia, and opposition to immigration (Ariely, 2011; Mummendey, Klink, & Brown, 2001; Wagner, Becker, Christ, Pettigrew, & Schmidt, 2010). In Europe, higher Nationalism has been shown to relate to higher opposition to immigration (especially from Muslim-majority countries) and support for far-right parties (Lubbers & Coenders, 2017). Thus, to speculate about our results, we would expect NZ First voters to have higher Nationalism, as one of their key party policies has been opposition to immigration (New Zealand First, n.d.).

Overview of the Present Research

In the present paper, we aim to document the demographic and social psychological differences between intended voters capitalising on data from two large, national samples collected using two different sampling methods. This allows us to consider demographic differences across voters from two different sources and increases the robustness of our results. Furthermore, the second sample (i.e., the NZAVS) allows us to (a) examine a broader range of demographic variables and in greater detail than previous, smaller studies and (b) model these demographic differences while controlling for (and exploring) the social psychological differences between voters. These analyses allow us to examine a wide set of correlates—including demographic and social psychological variables—of voter preference in the New Zealand context.

Demographics

Broadly, across our two studies, we expect that our findings for gender, age, religion, socio-economic status, rurality, and education will provide support for what has been found in analyses of NZES data in recent years (Aimer & Vowles, 2004; Coffé, 2013; Curtin, 2014; Vowles, 1998, 2002, 2014). We also expect that Māori will be more supportive

of the Labour and NZ First parties over National, and that Pasifika will intend to vote for Labour at far higher rates than National (Aimer & Vowles, 2004; Iusitini & Crothers, 2013; Vowles, 1998, 2014). We hypothesise that Asian voters will be significantly more likely to show preference for National over the Greens and NZ First (Park, 2006; Vowles, 2014). Additionally, the NZAVS includes sexual orientation, a variable that has not been included in the NZES previously or examined in a national sample in NZ before. We hypothesize, based on the international literature (Edelman, 1993; Herek et al., 2010; Hertzog, 1996; Perrella et al., 2012; Schaffner & Senic, 2006), that LGB+ individuals will be more likely to vote Labour and the Greens over National, as both parties are considered to be more liberal, and were supportive of marriage equality (Singh & Ball, 2013).

Personality

The relationship between personality and politics is fairly well established in the literature, including in analyses of NZAVS data and political party support (Gerber et al., 2011; Greaves et al., 2015; Osborne & Sibley, 2012; Sibley et al., 2012). However, researchers are yet to analyse the relationship between personality and actual voter sentiment in the NZAVS (rather than the political party support variable for each party, which may show more complex patterns of support beyond a forced intended vote choice; Greaves et al., 2015). That said, we do expect that our results will follow past analyses using NZAVS data. We hypothesise that intended Green and Labour voters will have higher Openness to Experience and lower Conscientiousness, and may have higher Neuroticism scores than intended National voters (Greaves et al., 2015; Osborne & Sibley, 2012). NZ First voters tend to see their party as slightly left of centre (Vowles, 2014). Thus, there may be significant differences between those who intend to vote NZ First and National on some personality traits.

Patriotism and Nationalism

Our paper presents the first examination of Patriotism, Nationalism and vote choice with a large, national sample in New Zealand. Patriotism has been shown to relate to agreement with the status quo (Sidanius & Petrocik, 2001) and support for right-wing parties internationally (Parker et al., 2009; Sullivan et al., 1992; Tesler, 2010). As such, we expect that lower Patriotism may relate to a higher likelihood of intending to vote for the Greens or Labour over National. Additionally, as higher Nationalism has been shown to relate to support for restrictions on immigration (Ariely, 2011; Lubbers & Coenders, 2017; Mummendey et al., 2001; Wagner et al., 2010), we expect that higher Nationalism may mean a higher likelihood of intending to vote for NZ First over National.

Study 1

The first study uses data from the One News Colmar Brunton polls collected in the lead-up to the 2014 election to examine demographic differences between those with different party preferences.

Method

Sampling Procedure

The One News Colmar Brunton poll employed a three-stage sampling scheme. First, the sample was stratified by telephone number ranges into 37 random-digit dial area strata. This stratification was on main urban centres, partitions of main centres (where local calling boundaries cut across main centres), and non-main urban areas adjacent to main centres, with resulting strata completely covering New Zealand landlines. Next, household selection was made by an interviewer who called randomly generated telephone phone numbers within a given stratum. The number of interviews conducted within each stratum was set in advance and in proportion to the size of each stratum, defined as the number of permanent residents aged 18 years and over at the time of the 2013 Census. Finally, on contact with the household, the person aged 18 years and over who would have the next birthday was selected as the respondent for the survey. This potential respondent was not substituted for anyone else in the household.

Respondents were contacted over a range of times throughout the five-day fieldwork period. To mitigate bias against people who were not home at the time of initial contact, many calls were made to numbers where there was no reply. In addition, selected respondents were called back by appointment, if unavailable at the initial contact. Each One News Colmar Brunton poll targeted a response rate of 30% (the average response rate in 2014 was 28.3%), and achieved a refusal rate of 35.0%, on average. These rates were calculated using the AAPOR's standard call outcome definitions and their RR1 response.

Participant Details

A total of 10,210 participants (5,720 women, 4,490 men) responded to the One News Colmar Brunton polls between 1 February and 19 September 2014. The age spread of participants was as follows: 18-19 (1.5%), 20-24 (3%), 25-29 (3.8%), 30-34 (6%), 35-39 (7.3%), 40-44 (10%), 45-49 (10.1%), 50-54 (10.3%), 55-59 (9.6%), 60-64 (8.8%), 65-69 (8.8%), and 70+ (20%). In terms of ethnicity, 8.2% of these participants identified as Māori (*n*=842), 3.8% of Pacific Nations descent (*n*=383), and 7.2% Asian (*n*=731). Most participants' incomes fell in to the over $30,000 band (68.8% *n*=7,026), with 42% earning over $70,000 (*n*=4,291), and 24.3% earning over $100,000 (*n*=2,477). Participants also reported the following number of adults in their household: 1 (27.6%), 2 (54.5%), 3 (11.3%), 4 (4.7%), 5 or more (1.9%). When asked which party they would vote for, 43.4% said National, 21.3% responded with Labour, 7.9% said they would vote for the Greens, 4.1% said NZ First and 4.1% responded with another party—numbers that closely reflect the actual outcome of the 2014 General Election. Some participants (19.2%; *n*=1,960) did not respond to the question, which accounted for the reduced sample size for our analyses (i.e., *n*=7830).

Post-stratification Weighting

We applied the post-stratification weighting procedures developed specifically for the One News Colmar Brunton surveys. The One News Colmar Brunton surveys apply a sample weight constructed for each separate poll. Estimates of intended party vote were obtained using this general sample weight. Results were weighted to adjust for sampling design probabilities of interviewing one person per household, and possible effects of non-response or non-coverage. The exact post-stratification weighting procedure employed by the One News Colmar Brunton poll is the intellectual property of Colmar Brunton. Non-disclosure of the post-stratification weighting procedure employed by Colmar Brunton was a condition of our access to the One News Colmar Brunton polling data.

Results

Model Results

We conducted one large multinomial logistic regression model to examine whether various demographic factors were associated with the likelihood of intending to vote for the Labour, Green, or NZ First political parties as opposed to intending to vote for the National Party. As is standard for these types of models, the numerically largest category (in this case, an intended vote for the National Party) was used as the reference category. The results of these analyses are reported in Table 1 for the Labour Party, Table 2 for the Green Party, and Table 3 for NZ First.

As seen in Tables 1-3, a clear pattern of demographic differences across intended party vote emerged. Women were more likely to intend to vote for either the Labour Party (*b*=-.248, *se*=.066, *OR*=.780, *z*=-3.736, *p*<.001) or the Greens (*b*=-.275, *se*=.092, *OR*=.760, *z*=-2.983, *p*=.003) than National. However, men were more likely to be NZ First voters (*b*=.466, *se*=.125, *OR*=1.594, *z*=3.740, *p*<.001). Age was negatively associated with intending to vote for the Green Party (*b*=-1.342, *se*=.196, *OR*=.261, *z*=-6.838, *p*<.001), showing that Green voters tend to be younger than National Party supporters. Age was also positively associated with intending to vote for NZ First (*b*=1.361, *se*=.299, *OR*=3.899, *z*=4.550, *p*<.001), suggesting that NZ First voters tend to be older than National Party supporters.

In terms of ethnicity, those identifying as Māori (versus those who did not) were 2.9 times more likely to intend to vote for the Labour Party than the National Party (*b*=1.059, *se*=.117, *OR*=2.884, *z*=9.086, *p*<.001). Māori were also 1.7 times more likely to vote for the Green Party (*b*=.535, *se*=.173, *OR*=1.708, *z*=3.100, *p*=.002), or 4.6 times more likely to vote for NZ First (*b*=1.518, *se*=.190, *z*=7.968, *OR*=4.562, *p*<.001), than for the National Party. As expected, those identifying as Pasifika were also significantly (6.6 times) more likely to vote for Labour (*b*=.1.885, *se*=.169, *OR*=6.586, *z*=11.185, *p*<.001). People who identify as Asian were, perhaps unsurprisingly, less likely to vote for NZ First (*b*=-1.433, *se*=.486, *z*=-2.950, *OR*=.239, p=.003) than National. However, Asian peoples were also less likely to vote for the Green Party relative to National (*b*=-1.174, *se*=.272, *OR*=.309, *z*=-4.312, *p*<.001).

There were no significant differences in income between National and Green voters. However, Labour voters were less likely than National voters to have an income over $30k ($b$=-.377, se=.088, OR=.686, z=-4.291, p<.001) or over $100k ($b$=-.583, se=.099, OR=.558, z=-5.895, p<.001). Potential voters from households with a greater number of adults were more likely to prefer Labour (b=1.037, se=.350, OR=2.821, z=2.959, p=.003) over National. NZ First voters were less likely than National voters to have an income over $70K ($b$=-.748, se=.192, OR=.474, z=-3.901, p<.001). There were no significant income differences between intended National and Green voters.

Table 1. Multinomial logistic regression for Study 1, predicting the likelihood of voter preference for the Labour Party (reference category is intending to vote for the National Party).

	b	se	OR	95% CI of OR	z
Labour					
Intercept/Threshold	-.172	.161			
Gender (0 women, 1 men)	-.248	.066	.780	[.685, .889]	-3.736**
Age (0 low to 1 high)	-.338	.147	.713	[.534, .952]	-2.295
Māori (0 no, 1 yes)	1.059	.117	2.884	[2.295, 3.624]	9.086**
Pacific Islander (0 no, 1 yes)	1.885	.169	6.586	[4.733, 9.163]	11.185**
Asian (0 no, 1 yes)	.082	.132	1.086	[.839, 1.405]	.625
Income above $30k (0 no, 1 yes)	-.377	.088	.686	[.578, .815]	-4.291**
Income above $70k (0 no, 1 yes)	-.240	.093	.787	[.656, .944]	-2.584
Income above $100k (0 no, 1 yes)	-.583	.099	.558	[.460, .678]	-5.895**
Number of Adults in Household (0 low to 1 high)	1.037	.350	2.821	[1.419, 5.606]	2.959*

Note. * p<.01, ** p<.001. Study 1 Ns for intended vote: National = 4,433, Labour = 2,170.

Table 2. Multinomial logistic regression for Study 1, predicting the likelihood of voter preference for the Green Party (reference category is intending to vote for the National Party).

	b	se	OR	95% CI of OR	z
Green					
Intercept/Threshold	-.393	.219			
Gender (0 women, 1 men)	-.275	.092	.760	[.634, .910]	-2.983*
Age (0 low to 1 high)	-1.342	.196	.261	[.178, .384]	-6.838**
Māori (0 no, 1 yes)	.535	.173	1.708	[1.218, 2.396]	3.100*
Pacific Islander (0 no, 1 yes)	-.413	.359	.662	[.327, 1.337]	-1.150
Asian (0 no, 1 yes)	-1.174	.272	.309	[.181, .527]	-4.312**
Income above $30k (0 no, 1 yes)	-.151	.133	.860	[.662, 1.117]	-1.132
Income above $70k (0 no, 1 yes)	-.201	.134	.818	[.628, 1.064]	-1.498
Income above $100k (0 no, 1 yes)	-.029	.125	.971	[.761, 1.240]	-.233
Number of Adults in Household (0 low to 1 high)	.515	.520	1.674	[.604, 4.641]	.990

Note. * p<.01, ** p<.001. Study 1 Ns for intended vote: National = 4,433, Greens = 807.

Thus, National and Green voters tend to be wealthier than their counterparts who preferred other parties.

Table 3. Multinomial logistic regression for Study 1, predicting the likelihood of voter preference for the NZ First Party (reference category is intending to vote for the National Party).

	b	se	OR	95% CI of OR	z
NZ First					
Intercept/Threshold	-3.137	.295			
Gender (0 women, 1 men)	.466	.125	1.594	[1.248, 2.035]	3.740**
Age (0 low to 1 high)	1.361	.299	3.899	[2.170, 7.006]	4.550**
Māori (0 no, 1 yes)	1.518	.190	4.562	[3.140, 6.626]	7.968**
Pacific Islander (0 no, 1 yes)	.860	.418	2.364	[1.041, 5.367]	2.056
Asian (0 no, 1 yes)	-1.433	.486	.239	[.092, .618]	-2.950*
Income above $30k (0 no, 1 yes)	-.114	.143	.892	[.675, 1.180]	-.800
Income above $70k (0 no, 1 yes)	-.748	.192	.474	[.325, .689]	-3.901**
Income above $100k (0 no, 1 yes)	-.491	.222	.612	[.396, .947]	-2.207*
Number of Adults in Household (0 low to 1 high)	.873	.607	2.394	[.729, 7.860]	1.439

Note. * p<.01, ** p<.001. Study 1 Ns for intended vote: National = 4,433, NZ First = 420.

Discussion

In summary, we found a consistent set of demographic differences across intended party vote that aligns well with past research completed using the NZES. This first model collected via the standard phone polling method provides a benchmark for our second study. The second study was collected via post, a method not traditionally used for predicting voter sentiment. While the NZAVS has been shown to accurately track voter sentiment pre-election when compared to the Colmar Brunton polling data (Sibley et al., 2017), it has a much lower response rate. Thus, Study 1 of this paper also acts as a benchmark: we should find similar results between studies across demographics.

As such, our second study examines these factors, extra demographic variables that may be important in predicting intended vote, and extends our analyses using a set of social psychological variables.

Study 2

Study 2 utilises data from the NZAVS 2013/14 wave (i.e., Time 5), collected largely in the year prior to the 2014 election, to build a large model of the demographic and social psychological predictors of party vote preference. Although the NZAVS was not started for the purpose of political polling, it has been shown to have good accuracy in predicting voter preference (Sibley et al., 2017).

Method

Sampling Procedure

The NZAVS sample was drawn primarily from the New Zealand Electoral Roll and largely consists of registered voters

who are aged 18 and over. Detailed sampling procedures for the Time 5 wave of the study analysed here are described below. Full details regarding sampling procedures for each wave are available online on the NZAVS technical documents page (Sibley, 2015a).

Participant Details

Participants included 10,518 people (6,501 women, 4,017 men) who responded to the Time 5 NZAVS questionnaire and stated that they intended to vote, and in an open-ended survey question that they would give their 2014 party vote to National (50.8%; *n*=5,345), Labour (25.0%; *n*=2,631), the Greens (20.5%; *n*=2,153) or NZ First (3.7%; *n*=389). Due to low sample sizes, we restricted our analyses to only those who intended to vote for a party that exceeded the 5% threshold for the party vote in the 2014 General Election. The analyses also only included people who provided complete information for all exogenous measures, the exception being household income for which missing values were replaced with the sample median.

Participants included in this study had an average age of 48.13 years (*SD*=13.77). In terms of ethnicity, 90.8% identified as NZ European (*n*=10,008), 10.3% of participants identified as Māori (*n*=1,084), 3.1% of Pacific Nations descent (*n*=322), 4.1% Asian (*n*=426; note that participants could identify with more than one ethnicity). Participant data were matched to the electoral roll, with 4.2% of participants enrolled on the Māori electoral roll (*n*=443). Around one fifth of the sample were immigrants, with 19.8% of participants born outside of New Zealand (*n*=2,087).

Participants' postal addresses were used to identify the level of economic deprivation of their neighbourhood. The New Zealand Deprivation Index uses aggregate census information about the residents of each meshblock to assign a decile-rank index from 1 (most affluent) to 10 (most impoverished) to each meshblock unit (Atkinson, Salmond, & Crampton, 2014). Because it is a decile-ranked index, the 10% of meshblocks that are most affluent are given a score of 1, the next 10% a score of 2, and so on. The mean score on this deprivation measure in our sample was 4.59 (*SD*=2.71). Additionally, we determined whether each participant lived in an urban versus rural region by identifying the territorial authority, either a district (rural) or city (urban) within which each participant resided (Statistics New Zealand, 2014). The majority of participants (68.7%) lived in urban wards.

With regard to other demographics, 78.2% of the sample was employed, with 92.8% having household earnings over $30,000 per year, 71.8% over $70,000, and 45.3% over $100,000. The majority were parents (74.6%; *n*=7,846) and 74.6% were in a serious romantic relationship (*n*=7,849). The majority of participants (95.2%; *n*=10,008) identified as heterosexual (see Greaves et al., 2016 for coding information). Less than half of participants (38.5%, *n*=4,052) identified with a religion or spiritual group. Education was coded according to the NZQA education level the participant had attainted (Statistics New Zealand, 2016) where 0 represents no qualification, 3 the end of secondary education, 7 a bachelor's degree, and 10 represents a doctorate. The mean qualification level the sample had attained was 5.05 (*SD*=2.82), or a sample

average of a Level 5 diploma or certificate.

Post-stratification Weighting

We applied the post-stratification weighting procedures developed specifically for the NZAVS. Detailed information about the post-stratification weighting procedure is available online on the NZAVS technical documents page (Sibley, 2015b). Briefly, the NZAVS Time 5 sample was weighted to adjust for the expected proportion of men and women from each of the four primary ethnic groups separately, as well as region of residence. This was based on information from the 2013 New Zealand census for those aged 18 and over. Regions were coded by identifying which of the 16 mutually exclusive and non-overlapping council zones of New Zealand each participant listed as their primary residential address.

Questionnaire Measures

Personality was assessed using the Mini-IPIP6 scale on a 1 (very inaccurate) to 7 (very accurate) scale. The Mini-IPIP6 is a short-form inventory assessing the Big-Six dimensions of personality (αs for Extraversion=.75, Agreeableness=.70, Conscientiousness=.67, Neuroticism=.70, Openness=.69, and Honesty-Humility=.77). The scale has been validated for use in the NZAVS with good test re-test stability (Milojev, Osborne, Greaves, Barlow, & Sibley, 2013; Sibley et al., 2011; Sibley, 2012; Sibley & Pirie, 2013).

Nationalism was measured with two items (α=.43) rated on a 1 (strongly disagree) to 7 (strongly agree) scale: "Generally, the more influence NZ has on other nations, the better off they are" and "Foreign nations have done some very fine things but they are still not as good as New Zealand" (modified for use in the NZ context from Kosterman & Feshbach, 1989). Patriotism was measured with two items (α=.72), also rated on a 1 (strongly disagree) to 7 (strongly agree) scale): "I feel a great pride in the land that is our New Zealand" and "Although at times I may not agree with the government, my commitment to New Zealand always remains strong" (modified for use in the NZ context from Kosterman & Feshbach, 1989).

Results

We conducted three multinomial logistic regression models to examine whether various personality, social psychological, and demographic factors were linked with the likelihood of intending to vote for the National, Labour, Green, or NZ First political parties. As is standard for these types of models, the numerically largest category (in this case, an intended vote for the National Party) was used as the reference category. The results of the regression models are reported in Table 4 for the Labour Party, Table 5 for the Green Party, and Table 6 for NZ First. Our analyses included 27 predictor variables relating to our primary goal of examining the possible differences between voters for different parties. Due to the large number of parameters in our models, we have focussed only on certain points of interest in the results below.

Demographics

Though we were using a different sample and controlling for a broader range of demographics (as well as personality,

Patriotism, and Nationalism), many of the demographic effects found in Study 1 were replicated. Of note, the gender differences between Labour and Green voters and National voters were not found in the NZAVS data set. Also present in the NZAVS data, but not in Study 1, were significant differences for Pacific voters in that Pasifika were more likely to intend to vote for the Greens (*b*=.638, *se*=.238, *OR*=1.892, *z*=2.676, *p*=.007) and NZ First (*b*=1.174, *se*=.332, *OR*=3.535, *z*=12.139, *p*<.001) than National.

Additionally, those living in more economically deprived neighbourhoods were more likely to intend to vote for Labour (*b*=1.411, se=.116, *OR*=4.100, *z*=12.139, *p*<.001), the Greens (*b*=.918, *se*=.128, *OR*=2.504, *z*=7.187, *p*<.001), or NZ First (*b*=1.438, se=.221, OR=4.210, *z*=6.439, *p*<.001) than National. Those living in urban neighbourhoods had a higher chance of intending to vote for the Greens (*b*=.218, *se*=.069, *OR*=1.244, *z*=3.143, *p*<.001) or Labour Party (*b*=.292, se=.063, OR=1.339, *z*=4.614, *p*<.001) relative to National. Unsurprisingly, participants on the Māori electoral roll were 4.4 times more likely to give their party vote to Labour (*b*=1.470, *se*=.189, *OR*=4.348, *z*=7.789, *p*<.001), 4.5 times more likely to vote for the Greens (*b*=1.509, *se*=.229, *OR*=4.523, *z*=6.601, *p*<.001), and 3 times more likely to vote NZ First (*b*=1.107, *se*=.257, *OR*=3.026, *z*=4.312, *p*<.001) over National. People with a higher average level of education were more likely to prefer Labour (*b*=.829, *se*=.115, *OR*=2.291, *z*=7.218, *p*<.001), or the Greens (*b*=1.935, *se*=.134, *OR*=6.927, *z*=14.402, *p*<.001) than National. There were no significant differences between National and NZ First voters in terms of educational attainment. Those identifying as LGB+ (Lesbian, Gay, or Bisexual) were 1.7 times more likely to vote for Labour (*b*=.552, *se*=.150, *OR*=1.737, *z*=3.674, *p*<.001) and 2.6 times more likely to vote for the Greens (*b*=.969, *se*=.141, *OR*=2.635, *z*=6.894, *p*<.001) over National. There were no significant differences in sexual orientation between National and NZ First voters.

Personality

Significant effects were found for personality across intended party vote. There were statistically significant differences between Green and National voters on all six personality traits. Green voters had lower levels of Extraversion (*b*=-.751, *se*=.202, OR=.472, *z*=-3.724, *p*<.001) and Conscientiousness (*b*=-1.791, *se*=.218, *OR*=.167, *z*=-8.214, *p*<.001), but higher levels of Agreeableness (*b*=.850, *se*=.262, *OR*=2.340, *z*=3.250, *p*=.001), Neuroticism (*b*=.992, *se*=.210, *OR*= 2.696, *z*=4.715, p<.001), Openness to Experience (*b*=2.834, *se*=.230, *OR*=17.009, *z*=12.334, *p*<.001), and Honesty Humility (*b*=2.391, *se*=.216 *OR*=10.924, *z*=11.049, *p*<.001). Results for the differences in personality between Labour and National voters followed a similar pattern to that of the Greens and National. The only difference being that levels of Extraversion were unassociated with choosing Labour over National. There were relatively few personality differences between National and NZ First voters, though NZ First voters tended to have lower Conscientiousness (*b*=-1.126, *se*=.417, *OR*=.324, *z*=- 2.702, *p*=.007), and higher Openness to Experience (*b*=1.161, *se*=.414, *OR*=3.193, *z*=2.803, *p*=.005), than National voters.

Patriotism and Nationalism

Participants who were intending to vote for Labour (*b*=-1.062 *se*=.238, *OR*=.346, *z*=-4.459, *p*<.001), the Greens (*b*=-1.290, *se*=.252, *OR*=.275, z=-5.124, p<.001), or NZ First (*b*=-1.503, se=.477, *OR*= .222, z=-3.152, *p*=.002) had lower levels of Patriotism than those intending to vote for the National Party. Likewise, intended Green voters (*b*=-1.140, *se*=.195, *OR*=.320, *z*=-5.855, *p*<.001) and Labour voters (*b*=-.649, *se*=.180, *OR*=.523, *z*=-3.604, *p*<.001) had lower levels of Nationalism. There was, however, no significant difference in Nationalism between intended National and NZ First voters.

Table 4. Multinomial logistic regressions for Study 2 (NZAVS data), predicting the likelihood of voter preference for the Labour Party (reference category is intending to vote for the National Party).

	b	se	OR	95% CI of OR	z
Labour					
Intercept/Threshold	-1.039	.425			
Gender (0 women, 1 men)	-.132	.065	.877	[.772, .996]	-2.024
Age (0 lower to 1 higher)	.843	.243	2.322	[1.442, 3.740]	3.465*
Māori (0 no, 1 yes)	.470	.117	1.600	[1.273, 2.010]	4.030**
Pacific Islander (0 no, 1 yes)	1.779	.173	5.922	[4.222, 8.307]	10.300**
Asian (0 no, 1 yes)	.121	.140	1.128	[.857, 1.485]	.861
Income above $30k (0 no, 1 yes)	-.226	.128	.798	[.621, 1.026]	-1.763
Income above $70k (0 no, 1 yes)	-.143	.085	.866	[.733, 1.024]	-1.686
Income above $100k (0 no, 1 yes)	-.434	.076	.648	[.559, .751]	-5.739**
NZDep Index 2013 (0 low to 1 high)	1.411	.116	4.100	[3.265, 5.150]	12.139**
Born in New Zealand (0 no, 1 yes)	-.182	.078	.834	[.716, .972]	-2.328
Religious (0 no, 1 yes)	-.175	.061	.839	[.744, .947]	-2.857*
Parent (0 no, 1 yes)	-.041	.079	.960	[.822, 1.120]	-.520
Relationship (0 no, 1 yes)	-.278	.076	.757	[.652, .879]	-3.657**
Employment (0 no, 1 yes)	-.131	.075	.877	[.757. 1.017]	-1.732
Urban neighbourhood (0 no, 1 yes)	.292	.063	1.339	[1.183, 1.516]	4.614**
Māori roll (0 no, 1 yes)	1.470	.189	4.348	[3.004, 6.294]	7.789**
Education (0 low to 1 high)	.829	.115	2.291	[1.829, 2.869]	7.218**
LGB (0 no, 1 yes)	.552	.150	1.737	[1.294, 2.333]	3.674**
Extraversion (0 low to 1 high)	-.484	.193	.616	[.422, .899]	-2.512
Agreeableness (0 low to 1 high)	.958	.250	2.607	[1.597, 4.254]	3.833**
Conscientiousness (0 low to 1 high)	-1.228	.207	.293	[.195, .439]	-5.939**
Neuroticism (0 low to 1 high)	.682	.196	1.977	[1.346, 2.904]	3.476*
Openness to Experience (0 low to 1 high)	.787	.203	2.198	[1.476, 3.272]	3.878**
Honesty-Humility (0 low to 1 high)	.500	.181	1.649	[1.157, 2.351]	2.764*
Patriotism (0 low to 1 high)	-1.062	.238	.346	[.217, .551]	-4.459**
Nationalism (0 low to 1 high)	-.649	.180	.523	[.367, .744]	-3.604**

Note. * *p*<.01, ** *p*<.001. Study 2 Ns for intended vote: National = 5,345, Labour = 2,631. Model loglikelihood = -120203.19, AIC = 20568.38, BIC = 21156.50.

Discussion

Our second study utilised data from the NZAVS, a postal-based national probability sample. Although this second, larger sample recruited participants through a different method and controlled for a larger range of demographic and psychological variables, we replicated many of the effects identified in Study 1.

Table 5. Multinomial logistic regressions for Study 2 (NZAVS data), predicting the likelihood of voter preference for the Green Party (reference category is intending to vote for the National Party).

	b	*se*	*OR*	*95% CI of OR*	*z*
Green					
Intercept/Threshold	-2.322	.458			
Gender (0 women, 1 men)	-.181	.072	.834	[.725, .960]	-2.532
Age (0 lower to 1 higher)	-1.666	.269	.189	[.112, .321]	-6.182**
Māori (0 no, 1 yes)	.326	.143	1.385	[1.047, 1.832]	2.281
Pacific Islander (0 no, 1 yes)	.638	.238	1.892	[1.186, 3.019]	2.676*
Asian (0 no, 1 yes)	-.671	.177	.511	[.361, .723]	-3.795**
Income above $30k (0 no, 1 yes)	-.217	.154	.805	[.595, 1.088]	-1.413
Income above $70k (0 no, 1 yes)	-.232	.095	.793	[.658, .956]	-2.436
Income above $100k (0 no, 1 yes)	-.373	.081	.689	[.587, .808]	-4.582**
NZDep Index 2013 (0 low to 1 high)	.918	.128	2.504	[1.950, 3.216]	7.187**
Born in New Zealand (0 no, 1 yes)	-.130	.084	.878	[.745, 1.034]	-1.558
Religious (0 no, 1 yes)	-.591	.071	.554	[.482, .636]	-8.322**
Parent (0 no, 1 yes)	-.177	.084	.838	[.711, .987]	-2.117
Relationship (0 no, 1 yes)	-.029	.086	.971	[.821, 1.149]	-.340
Employment (0 no, 1 yes)	-.020	.089	.980	[.822, 1.167]	-.229
Urban neighbourhood (0 no, 1 yes)	.218	.069	1.244	[1.086, 1.425]	3.143*
Māori roll (0 no, 1 yes)	1.509	.229	4.523	[2.889. 7.079]	6.601**
Education (0 low to 1 high)	1.935	.134	6.927	[5.323, 9.015]	14.402**
LGB (0 no, 1 yes)	.969	.141	2.635	[2.000, 3.470]	6.894**
Extraversion (0 low to 1 high)	-.751	.202	.472	[.318, .701]	-3.724**
Agreeableness (0 low to 1 high)	.850	.262	2.340	[1.401, 3.907]	3.250*
Conscientiousness (0 low to 1 high)	-1.791	.218	.167	[.109, .256]	-8.214**
Neuroticism (0 low to 1 high)	.992	.210	2.696	[1.785, 4.072]	4.715**
Openness to Experience (0 low to 1 high)	2.834	.230	17.009	[10.842, 26.684]	12.334**
Honesty-Humility (0 low to 1 high)	2.391	.216	10.924	[7.148, 16.695]	11.049**
Patriotism (0 low to 1 high)	-1.290	.252	.275	[.168, .451]	-5.124**
Nationalism (0 low to 1 high)	-1.140	.195	.320	[.218, .468]	-5.855**

Note. * *p*<.01, ** *p*<.001. 2 Ns for intended vote: National = 5,345, Greens = 2,153. Model loglikelihood = -120203.19, AIC = 20568.38, BIC = 21156.50.

Table 6. Multinomial logistic regressions for Study 2 (NZAVS data), predicting the likelihood of voter preference for the NZ First Party (reference category is intending to vote for the National Party).

	b	*se*	*OR*	*95% CI of OR*	*z*
NZ First					
Intercept/Threshold	-4.375	.793			
Gender (0 women, 1 men)	.545	.126	1.724	[1.348, 2.205]	4.337**
Age (0 lower to 1 higher)	2.912	.497	18.401	[6.940, 48.787]	5.854**
Māori (0 no, 1 yes)	1.152	.174	3.166	[2.253, 4.449]	6.639**
Pacific Islander (0 no, 1 yes)	1.174	.332	3.235	[1.687, 6.201]	3.535**
Asian (0 no, 1 yes)	-1.979	.758	.138	[.031, .610]	-2.611*
Income above $30k (0 no, 1 yes)	-.180	.205	.835	[.559, 1.247]	-.880
Income above $70k (0 no, 1 yes)	-.522	.153	.593	[.439, .801]	-3.412*
Income above $100k (0 no, 1 yes)	-.345	.162	.708	[.515, .974]	-2.122
NZDep Index 2013 (0 low to 1 high)	1.438	.221	4.210	[2.728, 6.498]	6.493**
Born in New Zealand (0 no, 1 yes)	.154	.172	1.167	[.833, 1.634]	.896
Religious (0 no, 1 yes)	.061	.118	1.063	[.844, 1.338]	.517
Parent (0 no, 1 yes)	.091	.174	1.095	[.778, 1.542]	.523
Relationship (0 no, 1 yes)	-.028	.149	.972	[.726, 1.302]	-.191
Employment (0 no, 1 yes)	-.229	.143	.795	[.601, 1.052]	-1.603
Urban neighbourhood (0 no, 1 yes)	.056	.121	1.058	[.835, 1.341]	.467
Māori roll (0 no, 1 yes)	1.107	.257	3.026	[1.829, 5.004]	4.312**
Education (ordinal 0 to 1)	.267	.227	1.305	[.836, 2.037]	1.174
LGB (0 no, 1 yes)	-.200	.353	.818	[.410, 1.633]	-.568
Extraversion (0 low to 1 high)	-.331	.374	.718	[.345, 1.495]	-.885
Agreeableness (0 low to 1 high)	-.184	.499	.832	[.313, 2.212]	-.369
Conscientiousness (0 low to 1 high)	-1.126	.417	.324	[.143, .734]	-2.702*
Neuroticism (0 low to 1 high)	.961	.402	2.616	[1.190, 5.750]	2.392
Openness to Experience (0 low to 1 high)	1.161	.414	3.193	[1.418, 7.191]	2.803*
Honesty-Humility (0 low to 1 high)	.516	.345	1.676	[.852, 3.297]	1.496
Patriotism (0 low to 1 high)	-1.503	.477	.222	[.087, .566]	-3.152*
Nationalism (0 low to 1 high)	.436	.347	1.546	[.784, 3.051]	1.257

Note. * p<.01, ** p<.001. Study 2 Ns for intended vote: National = 5345, NZ First = 389. Model loglikelihood = -120203.19, AIC = 20568.38, BIC = 21156.50.

However, there was no gender gap in voting for left-wing parties, and we found additional effects for Pasifika voting and the smaller parties. Replicating past NZES analyses, we found that National voters were less likely to live in economically deprived neighbourhoods, were less likely than other voters to be on the Māori electoral roll, and had a lower mean level of education than Labour and Green voters. In the first exploration of LGB voting in New Zealand, we found that LGB-identified individuals were more likely to intend to vote for Labour or the Greens than for National.

We have also shown that psychological variables predict political party preference in New Zealand. There were more personality differences than we hypothesized. We found significant differences between Green and National voters over each of the Big-Six personality traits, and between Labour and National voters in every trait except Extraversion. The personality differences between National and NZ First voters were less pronounced, although we found that NZ First voters tended to have lower levels of Conscientiousness and higher levels of Openness to Experience. There were also differences in Patriotism, with National voters displaying higher mean scores than all other voters. Likewise, National voters had higher levels of Nationalism than Labour or Green voters. There was, however, no significant difference in Nationalism between intended National and intended NZ First voters. In sum, we found that personality and psychological variables are useful correlates of vote preference in New Zealand, even after controlling for a range of demographic variables.

General Discussion

In the two studies presented here, we showed that there are reliable differences between voters across not only a number of demographic variables, but also over social psychological variables including personality, Patriotism, and Nationalism. Thus, our large sample size and extended list of predictor variables provided a nuanced picture of voter demographics in New Zealand. Many of our hypotheses were

supported and those of particular interest to the aims of the paper warrant further discussion. Our findings showed that Māori were more likely to be intended voters for the Labour, Green (Colmar Brunton sample only), and NZ First parties, over the National Party. We found results consistent with previous research showing that Pasifika prefer the Labour Party in far higher rates than they support National, but also found that they prefer NZ First and the Greens over National in the NZAVS (Iusitini & Crothers, 2013). We did not, however, find significant differences in support for the NZ First party in Study 1. Our ability to detect this effect may be due to the large effort researchers in the NZAVS have put in to recruiting a large Pasifika sample, a notoriously hard-to-sample population. Asian peoples[2] were less likely to intend to vote for the Greens and NZ First relative to National, although they were not significantly more or less likely to vote for Labour. This result replicates past findings from Park (2006) who used data collected around the 2002 election, and found that Chinese and Korean voters preferred the two larger parties. The reasons behind these vote choices is something that future research should explore.

Our paper also provides a rare insight into the voting behaviour of LGB individuals. Those who identify as lesbian, gay, bisexual, or of another minority sexual orientation were more likely to support the Green or Labour parties (for coding information see Greaves et al., 2016). Our results coincide with the international literature from the United States, which shows that the LGBT community are more likely to vote for the Democratic Party than they are to vote for the Republican Party (Edelman, 1993; Egan, 2008; Herek et al., 2010; Hertzog, 1996; Schaffner & Senic, 2006; a similar pattern has been found in Canada, too: Perrella et al., 2012). In the New Zealand Parliament, voting on LGBT issues has been split less rigidly along party lines. Although, on the Marriage Equality conscience vote, the majority of National Party Members of Parliament (MPs)—and all of the NZ First MPs—voted against the bill, a watershed event in LGBT rights in NZ (Singh & Ball, 2013). However, it is unclear whether LGBT issues (versus economic or other social policies) are the main driver of vote choice among LGBT-identified people, and the relative weighting of different issues when an LGBT individual is deciding who to vote for warrants further investigation.

This paper provides data from two independent samples that replicates many of the past findings from the NZES, giving researchers across all three studies confidence that their findings for demographics and vote choice are robust. One curious difference between past studies and the two models presented here was the lack of a gender gap in voting (Coffé, 2013; Curtin, 2014). In the NZAVS, when controlling for a wider range of demographic and with the addition of psychological variables, we found no evidence of women being more likely to vote for the Labour or Green parties over National (although they were significantly more likely to prefer National over NZ First). This is a finding that should be followed up in future iterations of the NZAVS. Additionally, in future studies,

the NZAVS, due to its large sample size, could extend our analyses further by probing the interactions between various demographic variables. For example, we have shown here that Pasifika voters prefer Labour, but we have also shown that Pasifika are more likely to vote for NZ First and the Greens than National. Thus, an interesting future research question would be to see if the age pattern found in the general population is found for Pasifika too, and if similar effects are found across ethnic groups for SES and so on.

The model in Study 2 showed that there were personality differences across *all* six personality traits between National and Green Party voters and five of the six traits when looking at differences between Labour and National Party voters. Thus, a basic personality profile emerged. Specifically, the political left (when compared to National voters) in New Zealand showed higher Agreeableness (also see Osborne, Wootton, & Sibley, 2013). We also found that intended Green voters had lower Extraversion, and that Green and Labour intended voters had lower Conscientiousness, higher Neuroticism, higher Openness to Experience and higher Honesty-Humility. In short, psychological factors may be important when people head to polls or, more likely, when they form partisan attachments (Green, Palmquist, & Schickler, 2004). However, these results diverge from the typical Openness to Experience and Consciousness findings from most political contexts (Gerber, Huber, Doherty, & Dowling, 2011; Sibley et al., 2012). As such, it is clear that the relationship between the development of personality and who one chooses to vote for warrants further investigation over time, especially in a multi-party system.

Also as expected, there were differences in Patriotism and Nationalism across party voters. Intended National Party voters were higher in Patriotism than all other voters. This effect shows that National supporters may have a higher attachment to, and love for, New Zealand. However, National voters, alongside NZ First voters, were also higher in Nationalism than Green and Labour voters. Nationalism indexes an uncritical acceptance of one's nation and derogation of other nations/outsiders (Adorno et al., 1950; Kosterman & Feshbach, 1989; Schatz et al., 1999; Skitka, 2005). This may mean that National and NZ First voters are less supportive of immigration, although we are unsure of the causal direction here. For example, it is not clear whether those high on Nationalism are attracted to National and NZ First, or whether those who prefer National and NZ First become more Nationalistic over time to closer reflect their party's policies. Future research could explore Nationalism, Patriotism, and politics in New Zealand longitudinally and in finer detail, including the interactions between these attitudes and other variables including demographics.

Limitations and Future Research Directions

Firstly, we wish to mention a few variables that were not assessed in this paper. A key limitation of this research is that the One News Colmar Brunton polls measured the party that participants *would* vote for at the time of the poll. Similarly, the NZAVS measured intended party vote *before* the election. Therefore, we measured either voter preference or anticipated vote choice rather than the party for whom participants actually voted. It is unclear how stable peoples' vote choices were over the course of the campaign, as research using both

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2 Our gratitude goes to Dr Sam Manuela who vigorously recruited a large number of Pasifika to complete the Pacific Identity and Wellbeing Scale, these participants now regularly participate in the NZAVS. For more information, see: Manuela and Sibley (2015).

sets of data used here show the overall party vote tends to change by small amounts month-by-month (Sibley et al., 2017). We also did not examine electorate vote. As such, it is unknown if the same demographics predict candidate choice as party choice, especially with the possibility of strategic voting. In future, we aim to use the NZAVS to identify the correlates of being a strategic voter. Another key research area to pursue is to look at those who change from their intended vote, for example, people who later report voting for a different party than their intended vote before the election.

Another limitation to this study is that we only examined intended votes for the four largest parties (those who reached the 5% threshold in the 2014 election) in the 2014 General Election. That is, we assessed the correlates of preference for the National, Labour, Green, or NZ First parties. Because only a small proportion of the samples intended to vote for the remaining smaller parties, we did not have an adequate sample size needed to examine the demographic correlates of these minor party supporters. There may be a number of interesting demographic and psychological differences between those who vote for these larger parties and those who choose to stick with the smaller parties, even at the risk of their preferred party not gaining Parliamentary seats. These are questions we wish to follow up with in future research.

Concluding Statement

In this paper, we sought to document the demographic and psychological differences between voters of the four largest parties in New Zealand. This enabled us to examine the replicability of findings from international studies in our unique context, while also validating previous findings from smaller convenience samples and the NZES. Across two large samples collected through different methods, we found many of the previously documented demographic differences (Studies 1 and 2) and added to the literature by including sexual orientation. Moreover, Study 2 demonstrated that many of these demographic differences held while controlling for a range of psychological variables. We also confirmed the utility of personality, Nationalism, and Patriotism in New Zealand as correlates of voter preference. We hope this paper will serve as a synchronised source of information, and will provide a useful resource for political scientists, pollsters, political practitioners, and the media in future discussions about the various demographic *and* psychological differences (and similarities) between voters.

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Cultural Efficacy Predicts Increased Self Esteem for Māori: The Mediating Effect of Rumination

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Previous research suggests that for Māori (the Indigenous peoples of New Zealand), Cultural Efficacy is associated with increased life satisfaction and may act as a buffer against stressful events and factors that can cause psychological distress. Here, we test a mediation model derived from this general culture-as-cure kaupapa (theme) using data from Māori who participated in the New Zealand Attitudes and Values Study (*N* = 676). Our model indicates that Cultural Efficacy, or one's confidence to competently engage in *te ao Māori* (the Māori world), was significantly linked with Self-Esteem and that this positive association was partially mediated by the negative association between Cultural Efficacy and rumination. Our model suggests that this protective or buffering effect occurs—at least in part—because Māori with a higher Cultural Efficacy tend to experience lower levels of rumination, and a lower level rumination is, in turn, linked with increased Self-Esteem. These findings support a general culture-as-cure *kaupapa* for Māori, and add to the emerging literature linking Cultural Efficacy and active identity engagement with positive psychological and health outcomes for Māori.

Keywords: Māori, Cultural Efficacy, Culture as Cure, Rumination, Self-Esteem, Mediation.

"*Toi tu te kupu, toi tu te mana, toi tu te whenua*"

- Tinirau of Whanganui

In the above *whakatauki* (proverb), Tinirau of Whanganui implored Māori, the Indigenous peoples of New Zealand (NZ), to be strong in their culture, *kupu* (language), *mana* (integrity) and *whenua* (land) as these make up a strong part of Māori identity (see Turia, 2012). From Tinirau's perspective, one of the key strengths upon which Māori peoples can draw is their culture. Our research is guided by this *korero* (discourse). Indeed, a body of emerging research supports a general 'culture-as-cure' *kaupapa* (theme) in which engagement with Māori culture, pride and confidence in speaking or learning *te reo* (Māori language), feeling at home on *marae* – central spaces for *iwi* (tribes) and *hapu* (sub-tribes), and feeling a sense of efficacy in Māori cultural contexts, are linked with positive psychological and health benefits for Māori (Houkamau & Sibley, 2011; Muriwai, Houkamau & Sibley, 2015). The converging research supporting this model is wide-spread in methodology, and draws on qualitative or interview studies (e.g., Borell, 2005; Boulton, Gifford, Kauika & Parata, 2011; Wilson, 2008; Cram, Smith & Johnstone, 2003), longitudinal studies (Marie, Fergusson, & Boden, 2008; Stuart & Jose, 2014), modelling of population trends and national-level indicators (Statistics New Zealand, 2015) as well as statistical modelling of large-scale self-report questionnaire surveys (e.g., Houkamau & Sibley, 2011; Muriwai et al., 2015).

A growing corpus of international findings indicate that enculturation and ethnic identity are associated with positive outcomes in terms of Self-Esteem and protective factors for mental well-being more generally (see Bals, Turi, Skre & Kvernmo, 2011; Umaña-Taylor, Diversi & Fine, 2002; Wexler, 2014; Yoon et al., 2013). Phinney and Alipuria (1990) found that the extent to which minority group members (Asian-American, Black and Mexican-American) had deliberated and settled ethnic identity issues was related to Self-Esteem.

Smith and Silva (2011) found through meta-analyses that, for people of colour, ethnic identity was more strongly associated with Self-Esteem and positive well-being than negative well-being. Research with First Nations people of Canada also supports this general ideology, with findings indicating that communities that have more cultural continuity markers tend to have less suicides (Chandler & Lalonde, 1998). These cross-cultural studies suggest that for people who are vulnerable and more often negatively represented in society, 'healing' and resilience to harmful influences can come from having positive experiences of cultural identity and by an increase in confidence to navigate one's cultural contexts.

There has been a growing movement in New Zealand focusing on the links between Māori culture and health (Durie, 1985; Durie, 1995; Pere & Nicholson, 1991). Research in this area indicates that — for Māori — cultural identity and well-being are linked (Durie, 1997; Durie, 2006; Moeke-Pickering, 1996). Boulton and colleagues (2011) observed that parents of children involved in a Māori health initiative reported increased self-confidence in the children, stemming from strengthened cultural identity. However, the specific mechanisms underlying the link between Māori cultural identity and well-being remain relatively unexplored. The consensus that a secure identity for Māori is linked with positive health is consistent with a general 'culture-as-cure' *kaupapa* (Houkamau & Sibley, 2011). This is the idea that positive views and engagement of ones' cultural identity can have a range of health benefits for Indigenous peoples.

Māori are a diverse peoples that experience diverse realities. It is therefore perhaps inappropriate to try and determine a single identity that all Māori reflect. However, to make comparisons with prior research we could draw similarities between terms used to describe certain group types, such as non-Western, interdependent and collectivist, based on values that are inherent and specific to Māori culture. As Selin states, "[t]he term non-Western is not a geographical

designation; it is a cultural one. We use it to describe people outside of the Euro-American sphere" (2003, p. v). As Māori are more often than not outside the Euro-American sphere it seems suitable to indicate Māori as non-Western. Selin also acknowledges the power imbalance that the term itself implies, since the rest of the world in this usage is defined simply by "non-Western."

Previous research has often compared non-Western groups with Western ones, such as Grossmann and Kross' (2010) study that looked at cultures like interdependent Russians in contrast to independent Americans. Markus and Kitayama (1991) describe interdependence as being collectivist oriented or placing importance on human connectedness whereas independence is more individualistic and places importance on inherent separateness and human distinction. Māori specific constructs such as *whakapapa*, knowledge of and sharing of genealogical links (Te Rito, 2007; Te Whāiti, McCarthy, & Durie, 1997) and *whanaungatanga*, "the process by which whanau ties and responsibilities are strengthened" (p. 2) suggest that Māori would be positioned on the interdependent and collectivist side of the continuum. Although it also needs to be acknowledged that through processes like urbanisation and the shifting responsibilities of Māori in modern times, traditional practices such as reciting *whakapapa* and resources being prioritised for *whanaungatanga* may not be reflective of all Māori and their experiences (Te Whāiti et al., 1997).

Within a Māori cultural context, identity and culture are often associated with positive outcomes. Research by Statistics New Zealand (2015) indicate that Māori who feel that their culture is more important tend to also report higher levels of life satisfaction. Similarly, research by Bennett (2003) found that for Māori tertiary students, a high level of in-group identity and collective Self-Esteem served a buffering or protective function when looking at effects of student hardship on education outcomes. Bennett's (2003) results suggested that those with a lower level of in-group identity and collective Self-Esteem had lower grade point averages when reporting greater student problems, whilst a buffering effect was found for those that reported a stronger cultural identity. Similarly, Stuart and Jose (2014) found that ethnic engagement and identity were crucial factors for positive well-being in Māori youth over time. These findings indicate that not only is in-group identity important for Māori but that the opportunity to positively experience one's culture is related to positive outcomes.

The Multi-Dimensional Model of Māori Identity and Cultural Engagement

To attempt to further understand Māori identity, Houkamau and Sibley (2015) created the revised Multi-Dimensional Model of Māori Identity and Cultural Engagement (MMM-ICE 2) to capture some specific aspects of Māori identity. The model includes seven dimensions: Group Membership Evaluation, Socio-political Awareness, Interdependent Self-concept, Spirituality, Authenticity Beliefs, Perceived Appearance and, most crucial for this research, Cultural Efficacy and Active Identity Engagement. The elements of the Cultural Efficacy dimension are well-supported by research and measures things like pride and confidence in speaking or learning te

reo (Ngaha, 2011) and an individual's engagement with Māori culture (Rata, 2012). A key strength of the MMM-ICE2 is that the scale is developed specifically for use with Māori, and in a Māori cultural context. The scale thus provides a measure of Cultural Efficacy uniquely tailored for the Māori cultural context, and in reference to Māori cultural values and practices.

Research using the MMM-ICE has shown that for Māori, Cultural Efficacy is linked with increased life satisfaction (Houkamau & Sibley, 2011) and can provide a protective function against psychological distress (Muriwai et al., 2015). These relevant findings suggest there may be a positive relationship between Cultural Efficacy and Self-Esteem and a negative relationship between Cultural Efficacy and adverse psychological processes like rumination. Here, we propose that higher levels of Cultural Efficacy serve as a protective function and decrease the likelihood of engaging in rumination. This decreased tendency to ruminate, should in turn, be linked with increased levels of Self-Esteem amongst Māori.

Rumination

What is rumination, and why should it be linked to Self-Esteem for Māori? Rumination is the process of recurring contemplations about feelings and problems (Nolen-Hoeksema, Wisco & Lyubomirsky, 2008) and is often linked with negative behaviours. Feinstein, Bhatia and Davila (2014) found that individuals who felt threatened or embarrassed via online or text-messaging (cyber-victimisation), experienced increased depressive symptoms through an increase in ruminative thoughts. In a study that examined obsessive passion in the workplace, it was found that rumination mediated the positive relationship between obsessive passion for coaching and emotional exhaustion (Donahue, Forest, Vallerand, Lemyre, Crevier-Braud & Bergeron 2012). This suggests that rumination could be linked with decreased Self-Esteem and perhaps even low Cultural Efficacy. Indeed in a study by Di Paula and Campbell (2002) individuals with low Self-Esteem ruminated more than individuals with high Self-Esteem. However, there is little research that examines cultural competence and ruminative tendencies. The current study aims to add to the literature by examining the association rumination has with psychological behaviours, Cultural Efficacy and Self-Esteem, in Māori.

To the best of our knowledge, Cultural Efficacy and rumination have not yet been examined together, however, cultural differences in rumination have been found. Non-Western cultures tend to ruminate less (Bonanno, Papa, Lalande, Zhang & Noll, 2005; Eshun, Chang & Owusu, 1998; Grossmann, & Kross, 2010) suggesting that Māori high in Cultural Efficacy may also ruminate less. This tendency to ruminate less may be a protective and useful mechanism for mental health and well-being. Furthermore, Grossmann and Kross suggest that interdependent cultures (e.g., Russians) tend to 'self-distance' themselves from issues and regulate their responses in comparison to independent cultures like European Americans that tend to engage themselves into matters. This might suggest that Māori as an interdependent culture, would also be less likely to ruminate *on average*. In addition, what Māori and non-Māori ruminate about may

differ in both content and frequency. For example, from what we can infer from Māori experiences and history (see Reid, Taylor-Moore, & Varona, 2014), we could expect that Māori ruminate about historical injustice, racial discrimination and health inequalities on average more than *Pākehā* (Europeans). The differences in rumination content and psychological tendencies of Māori are yet to be empirically explored.

The association between negative psychological behaviours and rumination has been thoroughly studied internationally from a range of cultures. In support of Nolen-Hoeksema's (1987) theory that women are more likely to ruminate than men, Turan and Erdur-Baker (2014) found that female Turkish university students tended to ruminate more than their male counterparts. They also found that females who had higher levels of rumination reported negative psychological help seeking attitudes but help seeking attitudes for males were not significantly affected by rumination. This highlights the possibility of gender differences within cultures in how individuals experience rumination. Hong and colleagues (2010) however, did not find gender differences in their sample of Beijing secondary school students, suggesting that there are probably differences between cultures and their experiences of rumination.

Rumination has been shown to be linked with adverse psychological tendencies in Indigenous American Indian and Alaskan Native peoples. American Indian and Alaskan Native peoples have suffered significant historical trauma (Brave Heart, Chase, Elkins & Altschul, 2011). Tucker, Wingate, O'Keefe, Hollingsworth and Cole (2015) examined how frequent American Indian and Alaskan Native peoples thought about these historical losses. They discovered that individuals who more frequently thought about historical losses, were more vulnerable to have suicidal ideation through an increase in negative ruminative tendencies (or brooding). This is especially relevant to Māori peoples who also suffered similar historical hardship through colonisation and continuing issues with land loss and treaty disputes (Ward, 1999).

Overall, the research regarding rumination implies that an increase in rumination increases or exacerbates negative tendencies or behaviours such as depression (Hong et al., 2010), depressive symptoms (Feinstein et al., 2014), negative help seeking attitudes (Turan et al., 2014), emotional exhaustion (Donahue et al., 2012) and suicidal ideation (Tucker et al., 2015). Clearly, a better understanding of how different cultures experience rumination is crucial in the hopes of increasing resilience against maladaptive behaviours and outcomes. Based on these findings, at a more general level, it is likely that individual differences in rumination in non-clinical population should be linked with differences in levels of overall Self-Esteem. In this regard, we view Self-Esteem as an important measure of individual differences in general well-being in the overall (non-clinical) population.

Self-Esteem

Self-Esteem is often conceptualised as an individual's personal evaluation of their self-worth and many have theorised how different levels of Self-Esteem occur. Harter (1993) inferred that "the low Self-Esteem individual is one who feels incompetent or inadequate in domains where

success is valued, leading to a large discrepancy between high importance and low competence." (p. 110). Similarly, James (1892) explained that for individuals with low Self-Esteem to gain self-enhancement they must either increase their competency or lower their ambitions. These perspectives suggest that when an individual's level of competency meets or exceeds their goals the individual will experience high Self-Esteem. For the current study, this would suggest that Māori who have high Cultural Efficacy may have high Self-Esteem because they are able to competently engage in *te ao Māori*.

In the longitudinal Dunedin Multidisciplinary Health and Development Study (DMHDS), it was found that low self-esteem in preadolescent years predicted suicidal ideation at adolescent age (McGee & Williams, 2000) and anxiety or depression problems at adolescent age (Trzesniewski, Donnellan, Moffitt, Robins, Poulton, & Caspi, 2006). From 2005 to 2014, government statistics show that Māori suicide rates were constantly higher than non-Māori (Ministry of Health, 2016) and in 2013, Māori adults were 1.6 times more likely to indicate a high likelihood of having a depression or anxiety problem than non-Māori adults (Ministry of Health, 2014). Studies looking into the possible processes of self-esteem for Māori then seem crucial to further research and understand. In one of the few studies to focus specifically on individualism and collectivism amongst Māori, Harrington and Liu (2002) found in their student sample that Māori were significantly higher in Self-Esteem than their (individualist) European counterparts. On the other hand, Ward (2006) found that sole-identified Māori had lower Self-Esteem than *Pākehā* (European) and Māori-Pākehā (dual heritage European and Māori). This incongruence in previous research and potential links to serious psychological health issues highlights the need to study Māori Self-Esteem further.

Cultural Efficacy

Cultural Efficacy, as measured by the MMM-ICE2 (Houkamau & Sibley, 2015), is based on subjective self-evaluation of an individual's capability to engage in Māori cultural contexts. Prior research has found a positive relationship between Cultural Efficacy and subjective well-being for Māori (Houkamau and Sibley, 2011). This could indicate a positive correlation between Cultural Efficacy and other beneficial psychological constructs like Self-Esteem. Muriwai and colleagues (2015) found that sole-identified Māori with low Cultural Efficacy reported higher psychological distress than sole-identified Māori with high Cultural Efficacy. This suggests there may be negative correlations between Cultural Efficacy and detrimental psychological behaviours like rumination.

Belonging to a collectivist culture and being able to competently engage in cultural norms may encourage positive feedback from members of the in-group (Tafarodi & Swann, 1996). The in-group being an ethnic minority may also emphasise the importance of cultural continuity. Lamy, Ward, and Liu (2013) examined Chinese, Jewish and Māori motivation for cultural continuity. While all three cultures are of collectivist nature, Māori and Jewish peoples valued ethnic continuity more than Chinese. Lamy and colleagues (2013) contend that this is because of the minority status of Jewish and Māori as

in comparison to Chinese who have an enormous population (and therefore greater population security and visibility). This same tendency to want to preserve cultural heritage predicted endogamous dating intentions in Jewish and Māori but not Chinese, supporting the notion that minority status can influence behaviour and thinking and that Māori value cultural continuity. Māori who are high in Cultural Efficacy and seen as contributing to Māori cultural continuity should thus more frequently receive positive feedback from in-group members and in turn have higher Self-Esteem. Branscombe, Schmitt and Harvey (1999) found that a drop in well-being caused by racial prejudice can be reconciled by identifying with the individuals' in-group, leading to a positive increase in well-being. For Māori, an increase in Cultural Efficacy would probably strongly correlate with in-group identification which could be associated with an increase in well-being including Self-Esteem.

Overview and Guiding Hypotheses

In this paper we analyse self-report questionnaire data from Māori participants in the New Zealand Attitudes and Values Study (NZAVS). We leverage this data to propose and test a model that (a) assesses the link between subjective levels of people's efficacy in Māori cultural contexts and higher levels of Self-Esteem. We then (b) extend this by testing a mediation model to identify an underlying psychological mechanism driving the relationship. We assess whether the relationship is mediated by concurrent individual differences in the tendency to engage in rumination (repetition of often uncontrollable negative thoughts). Our model tests the premise that Cultural Efficacy should serve a protective function psychologically, and hence be associated with decreased rumination, and that a lower tendency to ruminate should consequently be associated with higher levels of Self-Esteem.

We hypothesize that — for Māori — high levels of Cultural Efficacy should be associated with increased Self-Esteem (Hypothesis 1). Māori who have high Cultural Efficacy may have high Self-Esteem because they are able to competently engage in *te ao Māori* (Houkamau & Sibley, 2011). To the best of our knowledge, Cultural Efficacy and rumination have not yet been examined together, however the association between Cultural Efficacy and Self-Esteem should be mediated by variation in levels of rumination. We predict that, for Māori, being able to positively experience and engage with their cultural identity or high Cultural Efficacy, will serve as a protective function and decrease the likelihood of engaging in rumination (Hypothesis 2). This decrease in ruminative tendencies should then be associated with an increase in Self-Esteem and vice versa (Hypothesis 3; Di Paula & Campbell, 2002). Specifically, we test a mediation model in which Cultural Efficacy is associated with lower levels of rumination, and lower levels of rumination are in turn associated with higher levels of Self-Esteem. Hence, we argue that Cultural Efficacy may be linked with increased Self-Esteem for Māori because of its link with lower levels of rumination.

Method

Participants

We analysed data from 676 participants who completed the NZAVS Māori Focus (426 women, 250 men) and provided complete data for the measures we analysed here. Participants all answered "Yes" to the question "Do you identify as Māori and/or have ancestors who are Māori?" This follows the inclusion criteria for administering the MMM-ICE2 recommended by Houkamau and Sibley (2015). Participants ranged from 18 to 69 years (*M* =43.96, *SD* = 13.02) and had a median household income of $64,700 (*M* = $78,707, *SD* = $78,313).

Sampling Procedure

Participants were part of the Time 4 wave of the New Zealand Attitudes and Values Study (N =12,183). This phase of the NZAVS included a booster sample aimed specifically at recruiting Māori participants (Frame 5 of the Time 4 NZAVS). To recruit Māori into the sample 9,000 people were randomly selected from those who indicated on the 2012 Electoral Roll that they were of Māori ancestry. A total of 690 Māori participants responded to this booster sample.

When adjusting for the overall address accuracy of the electoral roll as a whole, this represents an (adjusted) response rate of 7.78%. It should be noted that this response rate is lower than that observed for the main (full random probability) sample frames used in the NZAVS, which give responses rates of approximately 16%. The low response rate for this sample likely indicates a combination of factors relating to Māori. Among the most influential of factors is the overall reduced likelihood of Māori participants responding to postal surveys in general, combined with the possibility that contact details for Māori in the electoral roll may (on average) have a lower level of accuracy. It is likely that this relatively low response rate was also partially affected by the longitudinal nature of the study as participants are asked to provide their contact details for the next 15 years and indicate that they were willing to be contacted to complete similar questionnaires in the future.

To efficiently test this target demographic group, questions specifically designed for Māori were administered for these participants amongst the general Time 4 Questionnaire. The cover letter introduced the survey as a 'The New Zealand Attitudes and Values Study – Māori Identity Focus Questionnaire.' The lead researcher and primary point of contact for this sample frame was the fourth author, who is of Māori descent, and was introduced to participants in the cover letter by listing iwi (tribal) affiliations. Māori participants were informed that they had been randomly sampled for this study from among those who indicated that they were of Māori descent on the electoral roll. The questionnaire was similar in format and content to the standard NZAVS questionnaire, with the exception that it included approximately 2 pages of questions revised specifically to assess aspects of identity and well-being specifically for Māori, and in Māori cultural context.

Questionnaire Measures

Participants completed the Cultural Efficacy subscale of the revised MMM-ICE2 (Houkamau & Sibley, 2015). The Cultural Efficacy subscale, formally named *Cultural Efficacy and Active Identity Engagement* (CEAIE) "refers to the extent to which the individual perceives they have the personal resources required... to engage appropriately with other Māori in Māori social and cultural contexts" (Houkamau & Sibley, 2010). This measure represents 'cultural competency' as an appropriate and important dimension of Māori identity which varies among different Māori and their various experiences. The Cultural Efficacy factor has been rigorously statistically validated using exploratory and confirmatory factor analysis as well as item response theory (Houkamau & Sibley, 2010; Sibley & Houkamau, 2013)

Cultural Efficacy was assessed by asking participants rated how strongly they agreed or disagreed with eight statements on a scale from 1 (strongly disagree) to 7 (strongly agree). Reverse-worded items were recoded, so that a higher score represented higher levels of Cultural Efficacy. Rating of each item were then averaged to give an overall scale score, with 1 representing a low level of Cultural Efficacy and 7 representing a high level. Items in the Cultural Efficacy and Active Identity Engagement subscale include 'I don't know how to act like a real Māori on a marae (reverse coded)', 'I can't do Māori cultural stuff properly (reverse coded)', 'I can't do Māori culture or speak Māori (reverse coded)', 'I know how to act the right way when I am on a marae', 'I'm comfortable doing Māori cultural stuff when I need to', 'I have a clear sense of my Māori heritage and what it means for me', 'I try to kōrero (speak) Māori whenever I can', 'I sometimes feel that I don't fit in with other Māori' (reverse coded). Items were averaged to give a scale score (*M* = 4.75, SD = 1.39, *α* = .86).

Rumination was measured using the single item "During the last 30 days, how often did you have negative thoughts that repeated over and over?" Participants were asked to circle the number from 0 to 4 (0 being "none of the time and 4 being "all of the time") (*M* = .89, *SD* = 1.12).

Self-Esteem was measured using three items from the Rosenberg (1965) Self-Esteem inventory. The items were "On the whole am satisfied with myself", "Take a positive attitude toward myself" and "Am inclined to feel that I am a failure (reverse coded)." Participants were asked to circle the number from 1 to 7 (1 being "very inaccurate" and 7 being "very inaccurate") that best represented how accurate each statement described them. Items were averaged to give a scale score (*M* = 5.28, SD = 1.22, *α* = .69).

Results

We tested a path model assessing the direct and indirect (mediated by rumination) associations between concurrent levels of Cultural Efficacy and Self-Esteem. We estimated our model using Maximum Likelihood and included 5000 bootstrap resamples to calculate the bias-corrected confidence interval for the indirect association between Cultural Efficacy and Self-Esteem accounted for by rumination. Our path model is presented in Figure 1.

As shown in Figure 1, Cultural Efficacy was negatively associated with rumination (*b* = -.106, *se* = .030, 95% BCBOOT = [-.165, -.048], *β* = -.131, *z* = -3.57, *p* <.01). Hence, Māori with higher levels of Cultural Efficacy reported less rumination, and vice-versa. Rumination was, in turn, negatively associated with Self-Esteem (*b* = -.469, *se* = .045, 95% BCBOOT = [-.560, -.381], *β* = -.431, *z* = -10.32, *p* <.01). This indicates that Māori who ruminated more tended to have lower levels of Self-Esteem, and vice-versa.

The hypothesized indirect effect association of Cultural Efficacy with Self-Esteem mediated by rumination was significant (*b* = .050, *se* = .014, 95% BCBOOT = [.023, .079], *z* = 3.46, *p* < .01). This indirect effect represented partial mediation, as the direct association between Cultural Efficacy and Self-Esteem remained significant (*b* = .159, *se* = .031, 95% BCBOOT = [.098, .221], *z* = 5.04, *p* <.01). This indicates that the positive association between Cultural Efficacy and Self-Esteem is partially explained by the effect that Māori high in Cultural Efficacy tended to ruminate less, and lower levels of rumination tended to be linked to higher levels of Self-Esteem. However, rumination explains only part of the association, suggesting that there may also be other mechanisms through which Cultural Efficacy is associated with Self-Esteem not identified in our model.

Finally, the results remained directly comparable when we also adjusted for gender and age, with the indirect effect altering only trivially (*b* = .046, *se* = .014, 95% BCBOOT = [.021, .074], *z* = 3.41, *p* < .01).

Discussion

We analysed data from Māori participants in the large-scale national New Zealand Attitudes and Values Study to
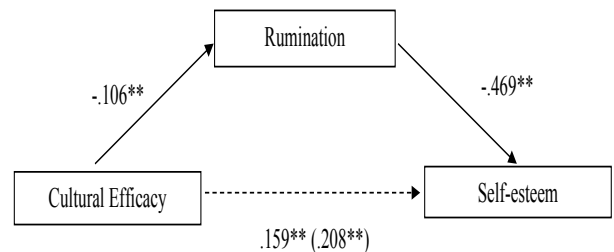

Figure 1. Unstandardised regression coefficients for the correlation between cultural efficacy and Self-esteem partially mediated by rumination. The unstandardised regression coefficient between cultural efficacy and Self-esteem when not adjusting for rumination is in parentheses. **p < .01.

further understand the link between culture and psychological behaviours. Previous research has shown that, for Māori, the extent to which an individual believes they are able to appropriately engage in cultural contexts (Cultural Efficacy) is linked with positive personal well-being (Houkamau & Sibley, 2011) and increased resilience to psychological distress (Muriwai et al., 2015). Extending past research, we hypothesized and found that, for Māori, higher levels of Cultural Efficacy were associated with increased Self-Esteem, and that this association was partially mediated by lower levels of rumination. The results of this study offer an explanation of why—for Māori—Cultural Efficacy is linked with increased

Self-Esteem, because of its link with lower levels of rumination. This supports a culture-as-cure *kaupapa*, suggesting that an increase in Cultural Efficacy provides protection against the detrimental psychological tendency to ruminate which then increases Self-Esteem.

The current study has two important strengths. Firstly, we avoided a limited sample by utilising participants from a large-scale national probability sample. This allows for a more representative understanding of how Māori experience of culture is related to mental well-being. A second strength of the current study is that the Cultural Efficacy scale is relevant and specifically tailored to Māori. This adds to Māori quantitative research and is fundamental in promoting the use of non-Western theory to measure non-Western populations. Indigenous peoples all over the world continue to be over-represented in negative indicators such as poverty (Eversole, McNeish, & Cimadamore, 2005), socioeconomic disadvantage (Durie, 2003a), high death rates (Ring & Brown, 2002) and having less education than non-Indigenous (Psacharopoulos & Patrinos, 1994). Although diverse, Indigenous cultures have similar patterns of susceptibility to negative health outcomes (Durie, 2003b). These recurring cross-cultural issues highlight the need for action and movement towards more culturally competent and culture-specific measures.

Our findings indicate the link between Cultural Efficacy and lower levels of rumination partially, but not fully, mediated the association between Cultural Efficacy and Self-Esteem. This partial mediating effect of rumination (repetitive negative thoughts) suggests that there are other unrelated factors that may also help explain why Cultural Efficacy is linked with Self-Esteem for Māori. Understanding the intermediary effect of rumination on this process is part of the puzzle, but only part. For instance, it may be that being able to competently engage in Māori cultural contexts encourages positive feedback and support from in-group members as the individual is seen as supporting shared values and contributing to cultural continuity. Thus perceived support may be a mediating factor of Cultural Efficacy, where increased Cultural Efficacy could be related to increased perceived support and, in turn, higher Self-Esteem. Another possible mediating factor could be satisfaction with life as research has shown that life satisfaction is positively correlated with Self-Esteem (Diener & Diener, 1995). It may be that, for Māori, having the personal capability to navigate Māori cultural contexts is linked with higher life satisfaction and thus higher Self-Esteem.

Results from our study add to the culture-as-cure *kaupapa*, that cultural identity and engagement is a strength that Indigenous peoples can draw from. As mentioned previously, ethnic identity has been shown to be related to Self-Esteem. Umaña-Taylor and colleagues (2002) reported that, for Mexican-origin adolescents, ethnic identity and Self-Esteem were positively linked. Phinney and Chavira (1992) found longitudinal evidence that ethnic identity was positively related to Self-Esteem and vice versa. The findings from our study show that, for Māori, specifically the sense that one has the ability to engage in Māori cultural contexts is positively correlated with Self-Esteem. Additionally, this sense of cultural competence is negatively associated with the propensity to ruminate, suggesting that Cultural Efficacy may provide a protective buffer. The opportunity to engage in cultural contexts for Māori thus may have beneficial psychological outcomes.

Initiatives aimed at the validation of *tikanga Māori* (Māori practices and values) and revitalisation of *te reo* have provided some important foundations for current and future generations to engage with Māori culture (see Ngaha, 2011; Pihama, 2010; Rata, 2012; Reedy, 2000). However, the impacts of colonisation and cultural losses suffered by Māori are still apparent. Statistics New Zealand (2013) has shown that the Māori population that is able to converse about everyday things in te reo has decreased by almost 5%. More specifically, in 2006, 1 in 4 Māori were able to have conversations in *te reo,* but in 2013 only 1 in 5 Māori reported being able to converse in te reo. Reports by Te Kupenga (2013) show that 29% of Māori consider culture to be of little or no importance. Researchers acknowledge that Māori, like other Indigenous peoples around the world, continue to face hardship (Perry, 2009) and poor mental health (Baxter, Kingi, Tapsel & Durie, 2006) and that more understanding about Māori contexts is necessary to improve Māori lives (Durie, 2003a; Rochford, 1997; Kerehoma, Conner, Garrow & Young, 2013; Sachdev, 1990). Accordingly, culturally responsive research should aim to understand and promote cultural identity and the current study aims to do just that.

Our study integrates a Māori framework with traditionally Western psychological tools and methodologies. Houkamau & Sibley (submitted) suggest that by utilising an etic and emic approach, we are better able to capture dimensions unique to Māori whilst drawing on general models. The items used to measure Self-Esteem were directed at satisfaction with the self and positive judgments of the self, concepts that Māori individuals could recognise and evaluate. In the current study, the Cultural Efficacy measure was designed for quantitative use specifically with Māori, derived from qualitative interviews by Māori. By integrating Western and Māori models we are able to develop more culturally sound findings that contribute to Māori quantitative research.

Caveats and Future Research Directions

Māori conceptualisations of health are holistic and posit that factors like physical, spiritual, social and emotional well-being are inseparable interdependent dimensions (Durie, 1985; Pere & Nicholson, 1991). However, Māori (and other Indigenous peoples) experiences are often assessed using Western tools and models, with results interpreted under a Western framework (eg. Kessler, Andrews, Colpe, Hiripi, Mroczek, Normand, Walters, & Zaslavsky, 2002). Such models, although seemingly robust in general-purpose health surveys, have limited use with culturally diverse populations (Stolk, Kaplan, & Szwarc, 2014). Use of Western models on a Māori population may increase the chance of making erroneous conclusions about findings or risk overlooking possible sources and solutions for Māori well-being. Here, Self-Esteem as a personal psychological construct from a Western view however, may be a slightly inaccurate measure of self-worth for Māori. For example, Self-Esteem for Māori may be more appropriately thought of from a group evaluated concept, similar to the notion by Markus and Kitayama (1991) who

contend that interdependent cultures (like Japanese peoples) consider and value Self-Esteem as sufficiently contributing to group needs and ideals rather than enhancing the self. However, it would be unreasonable to assume that Māori individuals did not have conceptualisations about the self. By blending the use of Western models (rumination and Self-Esteem) and a measure tailored for Māori (Cultural Efficacy) we may be able to make more culturally conscious interpretations from our study. Future research could distinguish between individual Self-Esteem and collective Self-Esteem or perhaps include a more holistic approach to Self-Esteem. A more culturally competent and relevant measurement of self-esteem which encompasses Māori realities may provide a more accurate indication of how to treat self-esteem related illnesses for Māori.

More empirical evidence is required to further understand the specific mechanisms underlying the link between Māori cultural identity and health. As noted earlier, for Māori or any population which has suffered injustice, the tendency to ruminate may depend on the content of the ruminative thoughts. The historical trauma and transmission of cultural loss for Māori may be inherited without direct knowledge but still have very direct consequences on the lives and realities of diverse Māori. In other words, all Māori are affected by outcomes which are comparatively worse relative to their European counterparts, including those who say they have Māori ancestry but do not identify as Māori (see Houkamau & Sibley, 2014). We could infer that Māori experiences of intergenerational trauma (Reid et al., 2014) allude that Māori are likely to ruminate about historical injustice, racial discrimination and health inequalities on average more than *Pākehā* (Europeans). This same tendency to ruminate based on inequalities is likely to be higher cross-culturally in Indigenous and minority groups than non-Indigenous and majority groups. Unfortunately in our study we were not able to specify the content of ruminative thoughts as the item used referred to "negative thoughts" in general. Thus measuring distinct types of ruminative content cross-culturally would be a key direction for future research to understand cultural identity and ruminative tendencies.

Marginalisation, colonisation and historical trauma have impacted minority and Indigenous groups. Increasing ones' competency to engage in cultural norms may be a strategic approach to not only reconnect people with their cultural identity and revive traditional practices but also to fortify their resilience to negative health outcomes. Koole, Smeets, Van Knippenberg and Dijksterhuis (1999) concluded that self-affirmation may be an effective way to reduce ruminative processes. Therefore, it may be important to provide opportunities where Māori can be encouraged to increase their Cultural Efficacy so that they have an element of identity where they feel competent. Positive and successful experiences of navigating *te ao Māori* should help Māori to self-affirm their cultural competency, reduce rumination and in the process possibly increase Self-Esteem.

Concluding Comments

Our model indicates that Cultural Efficacy is significantly linked with increased Self-Esteem for Māori, and that this association is partially mediated by the effect of Cultural Efficacy reducing levels of rumination. These findings suggest that Māori who are confident to competently engage in *te ao Māori* (the Māori world), are likely to have high Self-Esteem, and that this protective or buffering effect occurs because Cultural Efficacy tends to decrease overall levels of rumination. These findings support a culture-as-cure *kaupapa* for Māori, and add to the emerging corpus of data showing that Cultural Efficacy and active identity engagement has positive psychological benefits for Māori. Future research should explore the links between different types of rumination content and psychological tendencies across cultures. Integrating cultural techniques may be another path to understanding diverse cultural behaviours, tendencies and outcomes. Importantly, future endeavours exploring the connection between culture and well-being should promote the use of culturally appropriate measures. As for today, growing research highlights the value of cultural identity and engagement for Māori well-being, thus individuals should be supported to embrace and become familiar with Māori cultural experiences.

Acknowledgements

Appendix: Glossary of Māori terms

Iwi	Tribe, tribal
Hapu	Sub-tribe
Kaupapa	Theme, topic, work
Kōrero	Discourse, discussion
Kupu	Language, words
Mana	Integrity, authority
Marae	Central spaces for iwi and hapu
Tikanga Māori	Māori practices and values
Te Reo	Māori language
Te Ao Māori	The Māori world
Whakataukī	Proverb
Whānau	Family
Whenua	Land

website: http://www.psych.auckland.ac.nz/uoa/NZAVS

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