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
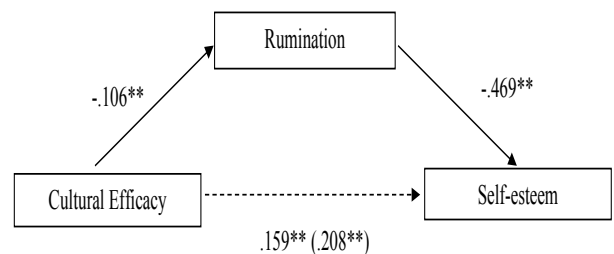

Figure 1. Unstandardised regression coefficients for the correlation between cultural efficacy and Self-esteem partially mediated by rumination. The unstandardised regression coefficient between cultural efficacy and Self-esteem when not adjusting for rumination is in parentheses. **p < .01.

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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