

# IDENTITY AND DEMOGRAPHICS PREDICT VOTER ENROLMENT ON THE MĀORI ELECTORAL ROLL

---

## Findings from a national sample

*Lara M. Greaves\**

*Danny Osborne†*

*Carla A. Houkamau‡*

*Chris G. Sibley§*

### Abstract

Statistics from the New Zealand Electoral Commission (2013) show that only 55% of those who indicate they are of Māori descent are enrolled on the Māori electoral roll. In this paper, we aim to find the statistical predictors of being enrolled to vote on the Māori roll versus being enrolled on the general roll. We present two models analysing demographic and psychological aspects of people's subjective identification as Māori to predict enrolment on the Māori roll. In model 1, demographic variables from participants of Māori ancestry involved in a national probability sample ( $N=1,961$ ) were analysed to predict enrolment on the Māori roll. In model 2, data from a subsample of people who identify as Māori ( $N=662$ ) were analysed to assess the impact of both demographics and identity on electoral roll choice. The dimensions Higher Group Membership Evaluation (the extent to which someone thinks that being Māori is positive and part of their self-concept) and Higher Socio-Political Consciousness (engagement with Māori political issues)

\* Ngāti Kuri, Ngāpuhi. PhD Candidate, School of Psychology, University of Auckland, New Zealand. Email: lara.greaves@auckland.ac.nz

† Senior Lecturer, School of Psychology, University of Auckland, New Zealand.

‡ Ngāi Tahu, Ngāti Porou. Senior Lecturer, School of Management and International Business, University of Auckland, New Zealand.

§ Professor, School of Psychology, University of Auckland, New Zealand.

predicted enrolment on the Māori roll. Our findings will be useful for those looking to increase Māori roll enrolment and may also help to combat deficit-based arguments for the abolition of the Māori seats.

## Keywords

voter enrolment, Māori electoral roll, Māori politics, Māori identity, NZAVS

## Introduction

Those with Māori ancestry can choose to be on either of two electoral rolls: the general roll or the Māori roll. Yet, only 55% of those who identify as being of Māori descent opt to vote in one of the seven Māori electorates (Electoral Commission, 2013). To be clear, electoral roll choice has substantive political implications. If everyone in Aotearoa New Zealand with Māori whakapapa who was eligible to vote had been enrolled on the Māori roll and voted in the 2002 general election, for example, there would have been a total of 15 Māori seats, which would have likely increased Māori political power (Xanthaki & O'Sullivan, 2009).

The idea for this paper was conceived by the first author, who identifies as Māori (Ngāti Kuri, Ngāpuhi)-Pākehā. Originally she was enrolled on the general roll but chose to switch to the Māori roll during the five-yearly, four-month-long Māori Electoral Option (MEO) window. Her enrolment pack arrived late, and not at the address she was living at: instead, it went to her parents' house (research shows that Māori are a mobile population; Statistics New Zealand, 2006). By the time she had received the forms, completed them and posted them back, the MEO window had closed; subsequently she received a letter informing her she was to remain on the general roll. This meant waiting another five years, and two elections. Upon reflection, the first author wondered, if a student of political psychology such as she had not found the time or motivation to change rolls, how likely were others to do so?

Encouraged by her PhD supervisors (and co-authors), she then started to think of a way to answer a broader research question about what predicts electoral roll choice for Māori.

Our aim in this paper is to consider ways to increase Māori political representation within the current political system. We hope that these findings may be useful for those looking to implement policies to increase Māori enrolment. Alongside the potential for an increase in Māori seats, understanding the factors that contribute to enrolment choice is important, as every few years a political party or movement gains national attention through arguing for the abolition of the Māori seats—which would likely decrease Māori political representation (Barber, 2008; Xanthaki & O'Sullivan, 2009). It is important to note that while the holders of Māori seats do not have to be Māori, historically those elected have been.

We take a post-positivist quantitative approach, acknowledging that our positions and values have influenced the knowledge generated. Statistics are often used as a way to disempower Māori and other Indigenous peoples (Kukutai & Walter, 2015; Walter & Andersen, 2013) and are often cited as a reason to abolish the Māori seats. However, our aim here is to use statistics to show patterns of enrolment behaviour across a wide range of Māori (from a sample randomly selected from the electoral rolls). We sought to identify the factors that predict enrolment type. In our first model, we tested a range of key demographic variables (e.g., age, income, being urban/rural, ethnic affiliation as Pākehā) and in

our second model we extended our analyses to include a subjective measure of Māori identity, the revised Multidimensional Model of Māori Identity and Cultural Engagement (MMM-ICE2; Houkamau & Sibley, 2014a). In these ways this paper contributes to the literature that explores why Māori choose to be on the Māori or general roll.

### The Māori electoral roll

It is beyond the scope of this paper to provide a detailed survey of the literature on the history of the Māori seats; for our purposes here a brief summary will suffice. The Māori electorates were established in 1867 as a geographically superimposed, dual-constituency system alongside what were called “European” seats. The Māori seats were originally a temporary measure to provide guaranteed representation for Māori since Māori men were theoretically allowed to vote. However, land ownership restrictions for voting meant that those who collectively owned land (as Māori did through *iwi*) were unable to participate in elections (Royal Commission, 1986).

The Māori electorates were an attempt to solve this land-ownership-based disenfranchisement where Māori were paying taxes and living under government laws but unable to vote (Geddis, 2006; Parliamentary Library, 2009). Parliament originally believed that the Māori electorates would only be needed until Māori assimilated and converted Māori land to individual ownership (Parliamentary Library, 2009). However, in 1876 it was resolved to keep the seats indefinitely as such presumed “assimilation” was not occurring (Parliamentary Library, 2009; Xanthaki & O’Sullivan, 2009).

Prior to 1975, enrolment on the Māori electoral roll was by so-called “blood quantum” (Geddis, 2006). To enrol on the Māori roll, one had to be a “full Māori”, a “half-caste”, or “a person intermediate between half-caste and a person from that race” (Metge, 1976,

p. 41). Only those who were “half-caste” were able to choose to be on either the Māori roll or the “European” roll. After 1975, the legal minimum requirement became being descended from Māori. Thus, those with Māori ancestry were able to choose between the Māori and the newly named “general” roll (Geddis, 2006). From 1993, the change to a Mixed Member Proportional (MMP) electoral system in Aotearoa New Zealand likely made the decision to change from the general to the Māori roll easier. With the change in voting system came a change in proportionality: more Māori on the roll would increase the number of Māori seats (Sullivan, 2003). Additionally, under MMP voters received an electorate vote *and* a party vote. At the time, the Māori seats were considered safe Labour seats, and the switch to MMP meant that Māori roll voters were able to cast an additional party vote with a wider range of choice (Sullivan, 2003).

One thing that has not changed over the years is the controversy over the Māori seats, as many attempts have been made to abolish them. In the contemporary setting, low levels of enrolment on the Māori roll have been cited as a reason for eliminating these seats (Geddis, 2006), although enrolment has actually been *increasing* over the years (Electoral Commission, 2013). Other recent arguments for abolishing the Māori seats include wanting to remove the Māori seats because they constitute “positive discrimination” (Barber, 2008), which is said to be inconsistent with modern New Zealand values (Brash, 2004). Some have argued that the Māori seats are no longer needed due to the adoption of MMP and the existence of the Māori Party (for a summary of arguments, see Geddis, 2006). Indeed, Māori now comprise one-fifth of the Members of Parliament (Parliamentary Library, 2015), although the extent to which these politicians represent Māori interests is debatable.

In practice, voters who indicate that they are of Māori descent when enrolling can choose to enrol on either the general roll or

the Māori roll (Electoral Commission, 2014). Once enrolled, voters can only change between the rolls every five years when the MEO window is open for approximately four months (Electoral Commission, 2014). The MEO itself has not been without controversy. In 1994, it was alleged that the government did not provide enough funding to promote the option (Waitangi Tribunal, 1994). Underfunding could have consequences for Māori political power. Indeed, as noted above the number of Māori seats is based on how many Māori choose the Māori roll (Comrie, Gillies, & Day, 2002).

### Past survey research on the Māori roll

Two survey studies have elucidated the factors that influence Māori enrolment choice. Banducci, Donovan, and Karp (2004) found that those on the Māori roll tended to have lower incomes than Māori on the general roll. Banducci and colleagues also explored Māori representation and found that voters enrolled on the Māori roll had greater feelings of political efficacy, were more likely to vote, had a higher political interest, and felt they had more representation. Those on the Māori roll were also more critical of Māori Members of Parliament. Banducci et al. argued that those on the Māori roll may have purposefully chosen to enrol to further the representation of Māori in Parliament by increasing the number of Māori seats.

In a report to the Electoral Commission, Fitzgerald, Stevenson, and Tapiata (2007) explored various aspects of Māori political participation, including cultural identity, as predictors of enrolment on the Māori roll. They measured cultural identity by totalling a score based on self-identification, te reo ability, involvement with whānau, knowledge of whakapapa, contact with other Māori, marae participation, and Māori land interests. Māori who scored higher in this measure were more likely to be on the Māori roll. Participants of

a subsample ( $n=69$ ) were asked to report why they were on the Māori roll. Most said it was “an expression of being Māori” (Fitzgerald et al., 2007, p. 40). Thus, a key reason cited for choosing to be on the Māori roll was active engagement with other Māori and Māori culture. However, there has yet to be an in-depth analysis into the aspects of Māori identity that may affect electoral roll choice.

### The Multidimensional Model of Māori Identity and Cultural Engagement

Fitzgerald et al.’s (2007) research is an example of quantitative efforts to “measure” Māori identity. Past research has done this in two ways. First, Māori are normally identified through an ethnic group affiliation question (counting who is Māori and who is not) and treated as a homogeneous group in terms of identity and perspectives (Greaves, Houkamau, & Sibley, 2015; Kukutai & Walter, 2015). Second, past measures have quantified Māori identity through measures of enculturation—the extent to which Māori engage with culture. However, the identities of Māori vary across more than affiliation and cultural engagement. As such, we use a measure that quantifies these similarities and differences in more depth, across a number of dimensions.

In this paper, we use the revised Multidimensional Model of Māori Identity and Cultural Engagement (MMM-ICE2) to examine the identity predictors of enrolment choice. The MMM-ICE2 is a seven-dimension, public domain, Likert-style self-report measure created *for Māori by Māori* (Houkamau & Sibley, 2014a). The main purpose of the scale is to measure one’s subjective identification as Māori in a culturally specific and nuanced way. The scale is situated within Western theoretical paradigms; however, the development of the scale was motivated by a pro-Māori agenda. Initially, the scale creators drew upon past research on Māori identity, qualitative Māori

research, and similar international research to create a pool of survey questions to create six (later seven due to community feedback) subscales that represented common themes found in the literature. These were tested with a sample of Māori and reviewed many times by Māori academics and the community.

The scale attempts to extend the capacity of a quantitative measure to tell us about Māori as a diverse group—that is, it gives expression to as many different perspectives of being Māori that is possible using a psychometric tool. The MMM-ICE2 is premised on the view that Māori live in diverse cultural worlds and there is no one measure that will ever encompass Māori identity (Durie, 1998). Indeed, data from the latest census (Statistics New Zealand, 2013) shows remarkable diversity among Māori in terms of how they define themselves (e.g., 45.6% of Māori also identified with one other ethnicity—most commonly Pākehā). The measure accounts for diversity (as far as is possible with a quantitative measure) by assessing personal perceptions on a range of potential identity aspects. It makes no assumption about the right way to be Māori and treats being Māori as one aspect of a person’s self-concept (other identifications and other group memberships may be salient to individuals and have more importance to people in certain contexts and times in their lives).

The scale has seven dimensions: Group Membership Evaluation relates to having positive feelings about being Māori and the extent to which being Māori is personally important; Socio-Political Consciousness relates to a belief in the continued importance of colonial history, the injustices experienced by Māori, and how much someone actively “stands up” for Māori political rights; Cultural Efficacy and Active Identity Engagement (CEAIE) assesses the extent to which someone believes they have the personal resources to engage with other Māori confidently in cultural contexts; Spirituality measures engagement with traditional Māori concepts of spirituality like recognising the

importance of tīpuna and tapu; Interdependent Self-Concept assesses the extent to which the concept of the self-as-Māori is defined by virtue of relationships with other Māori; Authenticity Beliefs assesses the degree to which someone believes that Māori have to do certain things or look/act certain ways to be authentic Māori; and, finally, Perceived Appearance assesses the extent to which someone believes that they have prototypical Māori physical features, in other words how much they think they “look” Māori.

## Overview and hypotheses

We present two models. In the first model, we analysed the demographic predictors of being on the Māori electoral roll with data from the wider New Zealand Attitudes and Values Study (NZAVS;  $N=1,961$ ). In the second model, we analysed data from a subsample who completed the MMM-ICE2 questionnaire ( $N=662$ ) to uncover the aspects of Māori identity, above and beyond demographic variables, that may predict voter enrolment. Our hypotheses for model 1 were that those who identify their ethnicity as Pākehā would be less likely to be on the Māori roll, given that Houkamau and Sibley (2014b) have found that Māori-Pākehā individuals tend to have patterns of policy and party support that are more similar to Pākehā. We also hypothesised that participants enrolled in the Māori electorates would have a lower likelihood of being employed, have a higher likelihood of being from more economically deprived neighbourhoods, and have a higher level of education (Banducci et al., 2004). We were unable to make predictions for the other demographics variables due to a lack of research in the area (a gap that we hope to partially fill with this paper).

Turning to our second model, Fitzgerald and colleagues (2007) found that the more engaged Māori were in their cultural identity, the more likely they were to be on the Māori roll. The dimension in the MMM-ICE2 that is

most analogous to their measure is CEAIE; thus we expected higher CEAIE scores to lead to a higher likelihood of being on the Māori roll. Furthermore, the Socio-Political Consciousness dimension indexes the extent to which Māori feel that political/intergroup history is important in modern politics and actively stand up for Māori rights; thus we expected that those with higher scores would have a higher likelihood of being on the Māori roll. This prediction is based on previous literature showing that being on the Māori roll is related to belief in these two aspects of Māori rights (Banducci et al., 2004; Fitzgerald et al., 2007).

## Method

### *Participants and procedure*

The NZAVS is an ongoing 20-year longitudinal national probability study of social attitudes, personality, and health outcomes that started in 2009. The data for this paper were drawn from the 2012/2013 (Time 4) wave. Detailed information about the NZAVS questionnaires and sampling is provided on the NZAVS website (Sibley, 2014).

### *Model 1*

Participants were those in the NZAVS who indicated they were of Māori descent ( $N=1,961$ ). We matched the contact details from each participant to the 2014 electoral roll. We included only participants who had answered “yes” to the question on the roll “Are you a New Zealand Māori or a descendant of a New Zealand Māori?” We chose to use this as an indicator of Māori descent because answering yes to this question is what is required by the Electoral Act for someone to be on the Māori roll. We collected information from the electoral roll on whether the participants were on the Māori ( $n=995$ ; 50.7%) or general roll ( $n=966$ ; 49.3%). The resulting sample was made up of

1,271 women and 690 men whose mean age was 46.16 (standard deviation [SD]=13.46). Only 90.9% of the sample (who indicated being of Māori descent on the electoral roll) identified Māori ( $n=1,782$ ) as their ethnic group(s) in our survey. Participants were often from more than one ethnic group: 63.2% of the sample identified as Pākehā ( $n=1,240$ ), 5.5% identified as Pasifika ( $n=107$ ), 1.2% identified as an Asian ethnicity ( $n=23$ ), and 2.7% identified as another ethnicity or did not answer ( $n=53$ ).

Additionally, 68.3% of the sample ( $n=1,339$ ) were employed, 82.2% were parents ( $n=1,611$ ), and 62.4% were in a serious romantic relationship ( $n=1,223$ ). Less than half of participants (45.8%,  $n=898$ ) identified with a religion or spiritual group. Education was coded according to the New Zealand Qualifications Authority education level the participant had attained (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 3.69 (SD=2.78), or a sample average of a Level 4 certificate. The mean score for the NZ Deprivation Index in our sample was 6.43 (SD=2.91; Atkinson, Salmond, & Crampton, 2014). People living in urban areas constituted 54.8% of the sample ( $n=1,075$ ).

### *Model 2*

Participants in the second model were those who completed the MMM-ICE2 questions as part of the Māori Identity Focus Questionnaire ( $N=662$ ). These participants were also included in the first model. As part of the Time 4 NZAVS sampling design, we included a booster sample aimed at recruiting Māori participants. This sample consisted of 9,000 people randomly selected from those who indicated on the 2012 electoral roll that they were of Māori descent. A total of 690 participants responded; adjusting for the address accuracy of the electoral roll, this represented a response rate of 7.78%.

The questionnaire was similar to the standard NZAVS questionnaire, except it included additional questions designed for Māori, and the cover letter introduced the survey as the Māori Identity Focus Questionnaire. The lead researcher and point of contact was Māori, and was introduced to participants in the cover letter by listing iwi affiliations.

As with model 1, we matched the participants to the 2014 electoral roll, finding contact details for 662 participants; 256 (38.7%) were on the general roll and 406 (61.3%) on the Māori roll. The sample consisted of 417 women and 245 men with a mean age of 44.22 (SD=12.98). The participants identified as Māori; however, 55.1% also identified as Pākehā ( $n=365$ ), 5.9% as Pasifika ( $n=39$ ), 1.4% as Asian ( $n=9$ ), and 1.4% as another ethnicity ( $n=9$ ). Turning to other demographics, 45.8% of the sample identified as religious ( $n=303$ ), 66.6% were employed ( $n=441$ ), 85.8% were parents ( $n=568$ ), 57.1% were in a committed romantic partnership ( $n=378$ ), and 53.6% lived in urban areas. The mean education level for this sample was 3.48 (SD=2.63), with a mean NZ Deprivation Index score of 6.74 (SD=2.77).

Participants included in model 2 completed the full 54-item MMM-ICE2 (Houkamau & Sibley, 2014a). Group Membership Evaluation was assessed by eight items (alpha coefficient [ $\alpha$ ]=.843). These included “I love the fact I am Māori” and “Being Māori is NOT important to who I am as a person” (reverse-coded). The CEAIE subscale also used eight items ( $\alpha=.858$ ), including “I can’t do Māori cultural stuff properly” (reverse-coded). The subscale for Interdependent Self-Concept used seven items ( $\alpha=.810$ ), including “My Māori identity is fundamentally about my relationships with other Māori” and “My relationships with other Māori people (friends and family) are what make me Māori.” Spirituality was assessed using eight items ( $\alpha=.810$ ), including “I feel a strong spiritual association with the land” and “I don’t believe in that Māori spiritual stuff” (reverse-coded). We assessed Socio-Political

Consciousness with eight items ( $\alpha=.882$ ), including “I stand up for Māori rights” and “Māori would be heaps better off if they just forgot about the past and moved on” (reverse-coded). Authenticity Beliefs were assessed using the eight items ( $\alpha=.603$ ), including “You can tell a true Māori just by looking at them” and “Real Māori put their whānau first.” The final dimension, Perceived Appearance, was assessed with seven items ( $\alpha=.918$ ), including “You only need to look at me to see that I am Māori.”

### **Analytic strategy**

The data were analysed using binomial logistic regression. In logistic regression, the outcome variable is categorical (in our case, whether someone is enrolled to vote on the Māori roll or on the general roll). Our logistic regressions model the likelihood of someone being on the Māori roll versus being on the general roll across a number of predictor variables (e.g., age, gender, economic deprivation, MMM-ICE2 scores). These analyses are also a type of multiple regression because more than one predictor variable is used to predict the outcome variable while controlling for the shared variance between the predictor variables. This means that each unstandardised beta coefficient (b) represents the unique effect of each predictor (e.g., age) on the outcome variable (the likelihood of being on the Māori roll) while taking the effects of the other predictor variables that could somehow affect the relationship between variables (e.g., economic deprivation, living in an urban or rural area, or is a parent/partnered) into account (for more on regression, see Field, 2012, chap. 8).

## **Results**

### **Model 1: Demographics**

We conducted a binomial logistic regression to examine which demographic variables were

associated with being enrolled to vote on the Māori electoral roll. As shown in Table 1, the demographic model predicting the likelihood of being on the Māori electoral roll explained 15.4% of the variance in electoral roll choice (coefficient of determination [ $R^2$ ]=.154, standard error [SE]=.018, standard score [ $z$ ]=8.587, probability [ $p$ ] $<.001$ ). A number of demographic variables were significant predictors of enrolment. Age was negatively associated with being on the Māori roll ( $b=-.013$ ,  $SE=.004$ ,  $z=-3.299$ , odds ratio [OR]=.987,  $p<.01$ ), suggesting that those on the Māori roll tended to be younger. Education, meanwhile, was positively associated with enrolment on the Māori roll ( $b=.056$ ,  $SE=.020$ ,  $z=2.847$ ,  $OR=1.058$ ,  $p<.01$ ), indicating that people who had attained a higher level of education were more likely to be on the Māori roll.

Being a parent was positively associated with being on the Māori roll ( $b=.357$ ,  $SE=.144$ ,  $z=2.474$ ,  $OR=1.429$ ,  $p<.05$ ), and participants from more deprived areas had a higher likelihood of being on the Māori roll ( $b=.090$ ,  $SE=.019$ ,  $z=4.876$ ,  $OR=1.095$ ,  $p<.001$ ). Finally,

people who also identified their ethnicity as Pākehā were less likely to be on the Māori electoral roll ( $b=-1.246$ ,  $SE=.108$ ,  $z=-11.537$ ,  $OR=.288$ ,  $p<.001$ ). Stating one's ethnicity as Pākehā (either alone or in addition to being Māori) meant that someone was only .29 times as likely as those who did not identify as Pākehā to be on the Māori roll. Gender, employment status, whether one was religious, relationship status, and whether someone was from an urban or rural neighbourhood were unassociated with roll choice.

### Model 2: Demographics and identity

We also conducted a binomial logistic regression for model 2. However, in model 2, alongside demographic variables, we added the seven dimensions of the MMM-ICE2 (Houkamau & Sibley, 2014a). As shown in Table 2, the demographic-identity model predicted 30.5% of the variance in enrolment choice ( $R^2=.305$ ,  $SE=.040$ ,  $z=7.610$ ,  $p<.001$ ). Recall that the demographics-only model explained only 15.4% of the variance in electoral roll decision.

**TABLE 1** Logistic regression model of demographics predicting the likelihood of being on the Māori roll vs the general roll

	<b>b</b>	<b>SE</b>	<b>OR</b>	<b>95% CI of b</b>	<b>z</b>
Intercept/Threshold	-.467	.298			
Gender (0 women, 1 men)	-.012	.104	.988	[-.214, .191]	-.112
Age (years)	-.013	.004	.987	[-.021, -.005]	-3.299**
Education (0 to 10)	.056	.020	1.058	[.017, .095]	2.847**
Employment (0 no, 1 yes)	-.044	.112	.957	[-.263, .176]	-.390
Parent (0 no, 1 yes)	.357	.144	1.429	[.074, .640]	2.474*
Religious (0 no, 1 yes)	.193	.101	1.213	[-.006, .392]	1.904
Relationship (0 no, 1 yes)	-.167	.108	.846	[-.380, .045]	-1.545
Urban neighbourhood (0 no, 1 yes)	-.084	.100	.919	[-.280, .112]	-.839
NZDep Index 2013 (1 low-10 high)	.090	.019	1.095	[.054, .127]	4.876***
Pākehā (0 no, 1 yes)	-1.246	.108	.288	[-1.458, -1.034]	-11.537***

Note.  $R^2=.154$ ,  $SE=.018$ ,  $z=8.587$ ,  $p<.001$ . \*  $p<.05$ , \*\*  $p<.01$ , \*\*\*  $p<.001$ ,  $N=1,961$ . Missing data were estimated using multiple imputation. CI = confidence interval.



**TABLE 2** Logistic regression model using both demographic and the MMM-ICE2 to predict the likelihood of being on the Māori roll vs the general roll

	<b>b</b>	<b>SE</b>	<b>OR</b>	<b>95% CI of b</b>	<b>z</b>
Intercept/Threshold	3.654	.821			
Gender (0 women, 1 men)	.244	.203	1.237	[-.154, .642]	.1202
Age (years)	-.006	.009	.991	[-.023, .011]	-.712
Education (0 to 10)	-.030	.041	.924	[-.110, .050]	-.734
Employment (0 no, 1 yes)	-.018	.214	.883	[-.437, .400]	-.086
Parent (0 no, 1 yes)	.102	.349	1.252	[-.581, .786]	.293
Religious (0 no, 1 yes)	-.114	.202	.841	[-.510, .281]	-.567
Relationship (0 no, 1 yes)	-.058	.211	1.013	[-.471, .355]	-.276
Urban neighbourhood (0 no, 1 yes)	-.056	.189	.911	[-.427, .315]	-.294
NZDep Index 2013 (1 low–10 high)	.040	.038	1.047	[-.035, .114]	1.041
Pākehā (0 no, 1 yes)	-.635	.209	.461	[-1.046, -.225]	-3.034**
Group Membership Evaluation	.292	.130	1.131	[.038, .547]	2.251*
Cultural Efficacy	.160	.100	1.260	[-.037, .356]	1.593
Spirituality	.088	.091	1.089	[-.091, .266]	.959
Interdependent Self-Concept	.046	.089	1.129	[-.129, .220]	.514
Authenticity Beliefs	-.005	.105	.919	[-.210, .200]	-.045
Perceived Appearance	.068	.059	1.107	[-.048, .185]	1.152
Socio-Political Consciousness	.266	.086	1.324	[.096, .435]	3.075**

Note.  $R^2=.305$ ,  $SE=.040$ ,  $z=7.610$ ,  $p<.001$ . \*  $p<.05$ , \*\*  $p<.01$ , \*\*\*  $p<.001$ ,  $N=662$ . Missing data were estimated using multiple imputation. CI = confidence interval.

In this second model, with the addition of the seven dimensions of MMM-ICE2, the only demographic variable that was still significant was identifying as Pākehā ( $b=-.635$ ,  $SE=.209$ ,  $z=-3.034$ ,  $OR=.530$ ,  $p<.01$ ). Indeed, those identifying Pākehā as one of their ethnicities were around half (.53) as likely as those who did not to be on the Māori roll.

Two of the seven dimensions of MMM-ICE2 were significantly associated with a higher likelihood of being on the Māori roll. Increased Group Membership Evaluation was associated with having an increased likelihood of being on the Māori roll ( $b=.292$ ,  $SE=.130$ ,  $z=2.251$ ,  $OR=1.340$ ,  $p<.05$ ). The second dimension linked with an increased likelihood of being on the Māori roll was having a higher score

on Socio-Political Consciousness ( $b=.266$ ,  $SE=.086$ ,  $z=3.075$ ,  $OR=1.304$ ,  $p<.01$ ).

## Discussion

This paper represents one of the few quantitative investigations into the statistical predictors of Māori being enrolled to vote on the Māori roll. Such studies are important, given relatively low enrolment numbers are often cited in reoccurring political discourses around abolition of the Māori seats. A key point of interest was that only 90.9% of the people who identified as being of Māori ancestry on the electoral roll actually identified Māori as their ethnicity (or one of their ethnicities) in the NZAVS. In other

words, 9.1% of people who said they had Māori whakapapa when enrolling to vote did not identify their ethnicity as Māori. We believe these people would be unlikely to enrol on the Māori roll, as they do not actively identify themselves as Māori. Although official statistics say 55% of Māori are enrolled on the general roll, this proportion would be higher when accounting for this 9.1%. This finding also indicates that identity is important in enrolment choice.

In our examination of the demographic predictors of being on the Māori roll, several variables were related to electoral roll decision. We found that being younger, more educated, a parent, or from a more economically deprived area meant people were more likely to be on the Māori roll. Participants who identified their ethnicity as Pākehā (solely, or alongside other ethnicities including Māori) were less likely to be on the Māori roll. Notably, these findings were largely consistent with our hypotheses.

The large array of demographic variables that were significant in model 1 were no longer associated with enrolment on the Māori roll when we controlled for the seven dimensions of MMM-ICE2. The exception to this finding concerned those with dual ethnic affiliations. Participants who identified their ethnicity as Māori-Pākehā were less likely to be on the Māori roll than their counterparts who solely identified as Māori. Research by Houkamau and Sibley (2014b) suggests that those who identify as Māori-Pākehā may have political views more similar to Pākehā. They found that compared to sole-identifying Māori, Māori-Pākehā had higher support for the National Party (which do not stand candidates in the Māori seats) and lower support for the Māori Party (which focus on the Māori seats).

In terms of identity-based predictions, higher scores on the Socio-Political Consciousness dimension were (as predicted) positively associated with being on the Māori roll. Additionally, a higher score on Group Membership Evaluation (the view that being Māori is an important and positive aspect of one's identity) was positively

associated with being on the Māori roll. Thus, the results from model 2 corroborate past research showing that believing in the importance of Māori political issues is a key predictor of enrolling to vote in a Māori electorate.

Unexpectedly, CEAIE was not a significant predictor of enrolment. The discrepancy between our findings and those of Fitzgerald et al. (2007) may be due to differences in measurement: they largely used indicators of behaviour, whereas we used a measure of ethnic identity. Nevertheless, CEAIE has been shown to predict engagement in aspects of culture like self-reported te reo fluency and marae visits (Houkamau & Sibley, 2010). It may be that the broad measure Fitzgerald and colleagues called "cultural identity" encompasses more aspects of identity than what CEAIE alone measures. We can see several dimensions of the MMM-ICE2 that could index similar aspects. In future, we expect that the MMM-ICE2 will be further tested on some of the cultural identity indicators that Fitzgerald and colleagues used.

Put simply, our results show that, if we exclusively examine demographic variables, younger people have a higher chance of being on the Māori roll. Likewise, those who (a) solely identify as Māori, (b) have a higher level of education, (c) have children, or (d) reside in an impoverished area are more likely to be on the Māori roll. These analyses have shown which demographic features might lead people to enrol on the Māori roll. Nevertheless, we thought that this approach may have been missing something. Therefore, we conducted a second set of analyses that included seven dimensions of a scale designed to measure different aspects of Māori identity. When we included these subscales, the demographic variables listed above were no longer significant predictors (the exception being identifying as Pākehā). This demonstrates that the scale of Māori identity better explains people's enrolment choice than basic demographic variables. Specifically, endorsing statements that one stands up for Māori rights and believes in the importance of

past injustices (Socio-Political Consciousness), and that being Māori is an important and positive part of one's identity (Group Membership Evaluation) relates to a higher likelihood of being on the Māori roll. This helps to answer our initial research question of what might lead people to enrol on the Māori roll. However, because these analyses are from one time point, we cannot say they reveal the cause of enrolment choice. Indeed, these analyses merely indicate that people who score higher in these dimensions, or who do not identify as Pākehā, tend to be on the Māori roll at higher rates than those who do not. Nevertheless, these analyses do provide valuable information on who is choosing to be on the Māori roll and establish a good starting point for future research.

### Limitations and future research directions

It is important to keep in mind that Māori voter enrolment, and ultimately voting, are perhaps less important parts of political participation for Māori. Bargh (2013) suggested that the definition of political participation for Māori should be broadened. It may be that many Māori are very politically active in tribal organisations and treaty settlement contexts, but that this participation is not often recognised by scholars. For example, Bargh (2013) observes that many Māori participate through volunteering at marae and informing friends and whānau about political matters concerning them. Additionally, Fitzgerald et al. (2007) posited that Māori who choose to enrol on the Māori electoral roll are more involved in iwi and Māori politics. This Māori-specific political engagement, alongside expressions of dissatisfaction at Westernised national politics, may explain the lower rate of voter turnout on the Māori roll: Māori are simply engaging with politics in their own way. Future quantitative research could explore this broader type of participation, and its frequency, for Māori.

This research was quantitative and aimed to explore the broader picture of Māori voter enrolment. While research on Māori identity is generally qualitative or interview-based, there is also a place for quantitative research that can encapsulate a wide range of Māori experience at a broader level. A key limitation of this research, however, is that by using a quantitative measure we may have missed some aspects of Māori identity that cannot be measured. Additionally, quantitative research cannot provide individual, personal stories that are rich in detail. However, it has allowed us to look at a broader group—in this case a national sample—albeit at a level that may lack certain in-depth explanations. Perhaps our research could be followed up with qualitative research that asks Māori why they choose to be on the Māori or general roll.

We did not explore attitudes towards the Māori seats themselves in this research. To what extent are these seen as relevant to Māori political advancement to a wide range of Māori? In the future, we intend to examine Māori and, more broadly, other New Zealanders' attitudes towards the Māori seats. It is unclear, other than from media reports and commentary, what the Māori seats *actually mean* to Māori. Previous research has hinted at their symbolic power and ability to spur political movements to advance Māori rights (McDowell, 2013). However, although crucial, the majority of research into Māori politics has asked the politically active for their views rather than the average person, probably due to issues of access. A broad survey of Māori views of the Māori seats would be an important undertaking, as would further research in the area.

A further limitation of our study is the possibility that there are systematic weaknesses in the Māori identity focus subsample. The sample had a relatively low response rate to the survey (7.78% when electoral roll address accuracy adjusted). Although the idea of opting into a 16-year longitudinal survey may have been off-putting for prospective participants,

survey response rates have been dropping over time and the effect is particularly pronounced for Māori (see Fink, Paine, Gander, Harris, & Purdie, 2011; Sibley 2014). One problem with this low response rate is that we cannot know if our sample differs in views or identity to non-respondents, although the sample is reasonably representative when compared with census data on Māori (notwithstanding gender; see Sibley, Muriwai, & Greaves, 2014). It may be that there is a group of Māori who are resistant to surveys, a Western concept that they may view as being linked to the government. Additionally, the survey was only sent in English and not te reo Māori. We hope to remedy these limitations in future iterations of the study.

### Concluding remarks

Research into what motivates Māori enrolment is important as the Māori seats hold both symbolic and real power in New Zealand politics (Geddis, 2006; McDowell, 2013). Everyone that makes the choice to enrol on the Māori roll not only has the option to “have their say” by voting for a Māori Member of Parliament on election day, but also “votes with their feet” by choosing to be on the Māori roll. Simply making the decision to be on the Māori roll is a vote in and of itself as the number of Māori enrolled can increase the number of Māori seats, which means an increase in Māori representation and perhaps an increase in Māori political power.

We wrote this paper intending to provide information on how to encourage more Māori to enrol on the Māori electoral roll. We hope that this information might be of assistance to those working on increasing enrolment (who may even today still lack the resources to carry out such research). We also believe that these findings provide statistics to help combat the discourses and official statistics used against Māori when it comes to arguing for abolition of the Māori seats. These findings provide a response to deficit-based (relatively

low enrolment) arguments for abolition of the Māori seats: around 10% of people that are eligible to be on the Māori roll do not actually identify as being Māori, and another key predictor of choosing the general roll is identifying as Pākehā. This means that a large proportion of those eligible for the Māori roll might not identify strongly enough with their Māori whakapapa to make the decision to enrol. This is especially pertinent since we have shown that for those who identify as Māori, feeling that one’s identity as Māori is positive and personally important is a key predictor of roll choice. Additionally, believing in the continued importance of Te Tiriti o Waitangi and standing up for Māori political rights was predictive of being on the Māori roll.

### Acknowledgements

This manuscript is based on part of Lara Greaves’s PhD thesis supervised by Chris Sibley and Carla Houkamau. Greaves was supported by a University of Auckland Doctoral Scholarship during the preparation of this manuscript, and was able to attend the 38th Annual Meeting of the International Society of Political Psychology in San Diego, California, to get valuable feedback on this paper with the help of a Ngā Pae o te Māramatanga Conference Attendance Grant in 2015. This research was also supported by a Te Whare Kura New Knowledge Acquisition Grant awarded to Houkamau and Sibley (#03903/1550). Data collection for the NZAVS was supported by a Templeton World Charity Foundation Grant (ID: 0077). The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript. As per the NZAVS data access statement, a copy of the anonymous data reported in each NZAVS publication is available from Sibley upon request from appropriately qualified researchers. Such data will be provided with the explicit understanding that it is used solely

for the purposes of replicating or otherwise checking the validity of analyses reported in scientific papers analysing NZAVS data.

## Glossary

Aotearoa	Māori name for New Zealand; lit., “land of the long white cloud”
iwi	tribe
marae	The open area in front of a Māori meeting house where formal greetings and discussions take place; often used to include the complex of buildings around the marae
Pākehā	New Zealanders of European descent
tapu	sacred
te reo Māori	the Māori language
tīpuna	ancestors
whakapapa	genealogy, lineage, descent
whānau	extended family or family group

## References

- Atkinson, J., Salmond, C. E., & Crampton, P. (2014). *NZDep2013 index of deprivation*. Wellington, New Zealand: Department of Public Health, University of Otago.
- Banducci, S. A., Donovan, T., & Karp, J. A. (2004). Minority representation, empowerment, and participation. *Journal of Politics*, 66(2), 534–556. <http://doi.org/dmdqdv>
- Barber, K. (2008). “Indigenous rights” or “racial privileges”: The rhetoric of “race” in New Zealand politics. *Asia Pacific Journal of Anthropology*, 9(2), 141–156. <http://doi.org/dt8z4q>
- Bargh, M. (2013). Multiple sites of Māori political participation. *Australian Journal of Political Science*, 48(4), 445–455. <http://doi.org/b5d2>
- Brash, D. (2004, January 27). *Nationhood*. Speech given to the Orewa Rotary Club, Orewa, New Zealand. Retrieved from <http://www.donbrash.com/national-party/orewa-2004-nationhood>
- Comrie, M., Gillies, A., & Day, M. (2002). The Māori Electoral Option campaign: Problems of measuring “success”. *Political Science*, 54(2), 45–57. <http://doi.org/br6rbz>
- Durie, M. H. (1998) *Whaiora Māori health development* (2nd ed.). Auckland, New Zealand: Oxford University Press.
- Electoral Commission. (2013). Results. Retrieved from <http://www.elections.org.nz/events/maori-electoral-option-2013/results>
- Electoral Commission. (2014). Enrol and vote as a New Zealand Māori. Retrieved from <http://www.elections.org.nz/voters/get-ready-enrol-and-vote/enrol-and-vote-new-zealand-maori-english>
- Field, A. (2012). *Discovering statistics using IBM SPSS Statistics*. London, England: Sage.
- Fink, J. W., Paine, S. J., Gander, P. H., Harris, R. B., & Purdie, G. (2011). Changing response rates from Māori and non-Māori in national sleep health surveys. *Journal of the New Zealand Medical Association*, 124(1328), 52–63.
- Fitzgerald, E., Stevenson, B., & Tapiata, J. (2007). *Māori electoral participation: A report produced for the Electoral Commission*. Palmerston North, New Zealand: Massey University School of Māori Studies.
- Geddis, A. (2006). A dual track democracy? The symbolic role of the Māori seats in New Zealand’s electoral system. *Election Law Journal*, 5(4), 347–371. <http://doi.org/b35vd4>
- Greaves, L. M., Houkamau, C., & Sibley, C. G.

- (2015). Māori identity signatures: A latent profile analysis of the types of Māori identity. *Cultural Diversity and Ethnic Minority Psychology*, 21(4), 541–549. <http://doi.org/f7vsgt>
- Houkamau, C. A., & Sibley, C. G. (2010). The multi-dimensional model of Māori identity and cultural engagement. *New Zealand Journal of Psychology*, 39(1), 8–28.
- Houkamau, C. A., & Sibley, C. G. (2014a). The revised multidimensional model of Māori identity and cultural engagement (MMM-ICE2). *Social Indicators Research*, 122(1), 279–296. <http://doi.org/f67wjr>
- Houkamau, C. A., & Sibley, C. G. (2014b). Social identity and differences in psychological and economic outcomes for mixed and sole-identified Māori. *International Journal of Intercultural Relations*, 40, 113–125. <http://doi.org/b5d3>
- Kukutai, T., & Walter, M. (2015). Recognition and indigenizing official statistics: Reflections from Aotearoa New Zealand and Australia. *Statistical Journal of the IAOS*, 31(2), 317–326. <http://doi.org/brwf>
- McDowell, T. (2013). *Te Ana o te Raiona: Māori political movements and the Māori seats in Parliament, 1867–2008* (Unpublished PhD thesis). University of Auckland, New Zealand.
- Metge, J. (1976). *The Māoris of New Zealand: Rautahi*. Boston, MA: Routledge and Keegan Paul.
- Parliamentary Library. (2009). *The origins of the Māori seats*. Retrieved from <http://www.victoria.ac.nz/stout-centre/about/events/events-past-conferences/publications/8th-Parlconference-Wilson.pdf>
- Parliamentary Library. (2015). *The 2014 New Zealand general election: Final results and voting statistics*. Retrieved from <http://www.parliament.nz/en-nz/parl-support/research-papers/00PLLawRP2015011/final-results-2014-general-election>
- Royal Commission. (1986). *Report of the Royal Commission on the electoral system: Towards a better democracy*. Retrieved from <http://www.elections.org.nz/voting-system/mmp-voting-system/report-royal-commission-electoral-system-1986>
- Sibley, C. G. (2014). *Sampling procedure and sample details for the New Zealand Attitudes and Values Study*. Retrieved from <https://cdn.auckland.ac.nz/assets/psych/about/our-research/nzavs/NZAVSTechnicalDocuments/NZAVS-Technical-Documents-e01-Sampling-Procedure-and-Sample-Details.pdf>
- Sibley, C. G., Muriwai, E., & Greaves, L., M. (2014). *Appendix of consecutive NZAVS sample frequencies and New Zealand census data*. Retrieved from <https://cdn.auckland.ac.nz/assets/psych/about/our-research/nzavs/NZAVSTechnicalDocuments/NZAVS-Technical-Documents-e04-Comparison-of-NZAVS-and-Census-Proportions.xlsx>
- Statistics New Zealand. (2006). Māori mobility in New Zealand. [http://www.stats.govt.nz/browse\\_for\\_stats/population/Migration/internal-migration/maori-mobility.aspx](http://www.stats.govt.nz/browse_for_stats/population/Migration/internal-migration/maori-mobility.aspx)
- Statistics New Zealand. (2013). 2013 Census QuickStats about Māori. Retrieved <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-Māori-english.aspx>
- Statistics New Zealand. (2016). Qualifications. Retrieved from <http://www.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/qualifications/classification-and-coding-process.aspx>
- Sullivan, A. (2003). Effecting change through electoral politics: Cultural identity and the Māori franchise. *Journal of the Polynesian Society*, 112(3), 219–237.
- Waitangi Tribunal. (1994). *Māori Electoral Option report (WAI 413)*. Retrieved from [http://www.justice.govt.nz/tribunals/waitangi-tribunal/Reports/wai0413/doc\\_001](http://www.justice.govt.nz/tribunals/waitangi-tribunal/Reports/wai0413/doc_001)
- Walter, M., & Andersen, C. (2013). *Indigenous statistics: A quantitative research methodology*. Walnut Creek, CA: Left Coast Press.
- Xanthaki, A., & O’Sullivan, D. (2009). Indigenous participation in elective bodies: The Māori in New Zealand. *International Journal on Minority and Group Rights*, 16(2), 181–207. <http://doi.org/brz8mp>