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Voting in Māori Governance Entities

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Résumé de l'article

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Voting in Māori Governance Entities

Abstract

Internationally, declining voter turnout is a topic of considerable concern in many liberal democracies. In this article, we investigate whether these similar trends can be discerned in the voter turnout for Māori governance entities. We first explore some of the demographic contexts within which Māori governance entities operate with a specific focus on population, residence, and age. We then provide a detailed descriptive analysis of voting data from one particular entity: Te Rūnanga o Ngāti Awa, with whom we worked to understand how their elections inform their aspirations for continuing connectedness with tribal members. In the final section of the article, we present findings from an analysis of publicly available tribal voting data to see whether the trend of declining voter turnout is observable and whether online voting is shown to impact turnout.

Keywords

Māori voting, online voting, self-determination, Kaupapa Māori research, iwi elections, post-settlement governance entities

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Voting in Māori Governance Entities

Internationally declining voter turnout is a topic of considerable concern in many liberal democracies (Franklin, 2004; Parvin, 2018). Various causes of declining voter turnout have been hypothesized, including electoral systems, age, ethnicity, and costs (Blais, 2006; Blais et al., 2004). In New Zealand (Aotearoa), the voter turnout of the Indigenous Peoples, Māori, is already significantly lower than non-Indigenous New Zealanders in general and local government elections (Bargh, 2016; Bargh, 2017).

In this article, we investigate whether these similar trends can be discerned in the voter turnout for Māori governance entities. There are more than 100 different Māori iwi (tribes) in Aotearoa. The structure and form of iwi governance entities varies. Some are charitable trusts and others a mix of commercial and charitable entities. Nearly 80 percent of iwi have completed settlements with the Crown regarding Crown breaches of the Treaty of Waitangi or Te Tiriti o Waitangi in Māori. These iwi have established post-settlement governance entities to politically represent their people. Post-settlement governance entities also vary in form from each other, given they are established under different legislation. There is no central database of iwi election data and they are not under any obligation to share their data with anyone other than their members, and even then that responsibility varies according to iwi Constitutions or Trust Deeds. The collection of data about iwi voter turnout and methods is therefore quite a manual and challenging task.

In this article, we first explore some of the demographic contexts within which iwi governance entities operate with a specific focus on population, residence, and age. We then provide a detailed descriptive analysis of voting data from one particular entity, Te Rūnanga o Ngāti Awa, with whom we worked to understand how their elections inform their aspirations for continuing connectedness with iwi members. In the final section of the article, we present findings from an analysis of publicly available iwi voting data to see whether the trend of declining voter turnout is observable and whether online voting is shown to impact turnout.

Literature Review

Iwi Electoral Systems and Influences

Most iwi hold regular elections, usually every three years, and most follow a first-past-the-post system where electors have one vote and the candidate with the most votes wins. There are a few variations in which voters have as many votes as there are vacancies, but the candidate with the most votes still wins. There are two examples that do not conform to this model, which deserve specific mention because of their uniqueness: Te Uru Taumatua (Tūhoe) and Te Rūnanganui o Ngāti Porou.

Te Uru Taumatua is the governance entity for the Tūhoe people with their Traditional Lands based in the eastern Bay of Plenty region in the North Island of New Zealand. Te Uru Taumatua is comprised of

¹ Signed between the British and Māori representatives in 1840, the Treaty reaffirmed Māori self-determination and allowed for British government.

² The Māori Fisheries Act 2004 sets out the criteria for Mānadated Iwi Organisations, which distribute assets and monies owed to iwi from the treaty settlement related to the fisheries industry. Individual iwi entities have their own specific legislation, such as Te Rūnanga o Ngāti Awa Act 2005.

seven representatives from four "tribal" groupings. Three tribal groupings are multi-member constituencies (two representatives each) and one tribal grouping has one representative. Appointments are made regularly every year with representatives serving "staggered" terms (Ngai Tūhoe, 2018a). There is no ballot, but rather a system of "collective consensus" (Ngai Tūhoe, n.d). The collective consensus system typically involves discussion amongst members at a meeting. They then reach an agreement on which candidates the whole group supports. Collective consensus enables Tūhoe members to engage at their sub-tribe ($hap\bar{u}$) level when candidates are first seeking nominations. Thereafter the Tribal Authority "appoints the highest ranked candidates to the Tūhoe- Te Uru Taumatua Board" (Ngai Tūhoe, 2018b). Eligibility to stand as a candidate follows common guidelines around age, registration, and membership. In addition, candidates are encouraged to hold a number of other attributes, including being strong in the Māori language and the culture of Tūhoe, alongside accountability and governance skills (Ngai Tūhoe, 2018a). There is no residence requirement and Tūhoe members who live away from the area may be nominated (Ngai Tūhoe, 2018b). The unique process of Te Uru Taumatua foregrounds the importance of Tūhoe values and expressing a "legitimate Tūhoe view" (Ngai Tūhoe, 2018b).

Te Rūnanganui o Ngāti Porou is the governance entity for the Ngāti Porou people, and their Traditional Lands are based in the east coast region of the North Island of New Zealand. Te Rūnanganui o Ngāti Porou are one of the few iwi with a system where members receive two votes (Te Rūnanganui o Ngāti Porou, 2015). For each of the seven *Rohenga Tipuna* (electorates), two representatives are elected, at least one of whom must be *Noho Kaenga* (someone who lives within the tribal boundaries). In addition, the Chair must be *Noho Kaenga*, thereby ensuring that the unique viewpoint of those living within the Ngāti Porou *rohe* (the geographical area where the iwi has a traditional connection) is not only represented but also held by the majority of elected representatives.

We now consider a number of features that influence the context within which iwi governance entity elections occur.

Iwi Demographic Variability

Looking at the top five largest iwi from New Zealand's Census 2013 (see Table 1), the pattern of regionally based iwi having a high proportion of members living "away from home" is clear. Along with Ngāti Porou (discussed above), Ngāpuhi and Ngāti Tūwharetoa also had less than a quarter of their affiliates living within the region most closely aligned with their iwi territory. In contrast, over one-third of Waikato affiliates and over one-half of Ngāi Tahu affiliates resided within the region(s) most closely approximating their Tribal Territories, due in no small part to the fact that these territories encompass major cities.

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³ In order to be eligible to stand, candidates must be 18 or older and registered with Te Uru Taumatua, belong to the hapū from which they seek a nomination, have two other hapū members verify them as a hapū member, and they must agree to abide by the rules and values of Te Uru Taumatua (Ngai Tūhoe, 2018a).

Table 1. Population of Top Five Largest Iwi and Percentage Living in Area Approximating Their Tribal Rohe

Top 5 Largest Iwi	Area Approximating Tribal Rohe	Population	Percentage Living in Area Approximating Tribal Rohe
Ngā Puhi	Northland region	125,601	19.93%
Ngāti Porou	Gisborne region	71,049	16.86%
Ngãi Tahu	South Island	54,819	54.30%
Waikato	Waikato region	40,083	34.86%
Ngāti Tūwharetoa	Waikato region	35,874	22.42%

Note. Source: Data from New Zealand Census 2013.

The distinct point of view and authority of those living "at home" is valued and prioritised within many iwi (Mead, 2003). The electoral system of Te Rūnanganui o Ngāti Porou ensures that at least 8 out of 15 (57.14%) of representatives reside within the iwi rohe. However, the rapid urbanisation of Māori in the twentieth century, along with the continuing emptying of New Zealand's regions, has resulted in only 16.86% of those who affiliated with Ngāti Porou residing within the Gisborne Region, according to Census 2013. The boundaries of the Gisborne region do not map perfectly onto the tribal boundaries of Ngāti Porou, and those who affiliated with Ngāti Porou through the Census will differ from those registered with Te Rūnanganui o Ngāti Porou. However, these figures are indicative of a common scenario: Iwi entities are strongly rooted in the regions, while the majority of registered members live outside the tribal rohe. It is worth noting that, despite only 1 in 6 affiliates of Ngāti Porou living in the Gisborne region, a motion to remove the Noho Kaenga distinction from the Trust Deed was lost when put to the vote in 2018 (Te Runanganui o Ngati Porou, 2018), and in reality the share of elected representatives living at home often exceeds the 8 out of 15 (57.14%) minimum. In 2017, for example, 12 out of 15 (80%) representatives resided within the Ngāti Porou rohe (Te Runanganui o Ngati Porou, 2017). Nevertheless, the "home and away divide" presents an issue for many iwi, particularly those distal to major cities. Those living at home may differ from those living away from home in terms of their access to and engagement with their iwi governance entity. To explore this further, we present data from a case study with Te Rūnanga o Ngāti Awa below to examine how residential location may be associated with voter turnout.

In addition to proximity to major cities and geographic spread, iwi differ in their size. As presented in Table 1, Ngāpuhi, the largest iwi recorded in Census 2013, had 125,601 affiliates. In stark contrast, 13 iwi

listed in the Census had less than 500 affiliates (out of the 100 possible responses listed in the iwi statistical standard, when both iwi and region are recorded). Iwi size likely influences turnout, which has been observed in local government elections where "as councils become larger, turnout declines on average" (Local Government New Zealand, 2019, p. 2). Iwi size likely influences the number of constituents elected members represent, which has been found in local government elections to be inversely correlated to voter turnout (Drage, 2018). In our analysis of publicly available iwi voting data, we explore a possible association between iwi register size and voter turnout.

Iwi also differ in age structure. The median age of the total Māori descent population was 24.4 years. However, Waikato iwi (located in an area where the total population is relatively young) had a median age of 22.3 years, while Ngāti Maru in Hauraki (an area with a relatively old total population) had a median age 27.2 years. The age structure of registered members is likely to vary even more between iwi because registration is not mandatory and benefits of registration tied to particular age groups (e.g., provisions for newborns, education scholarships) differ from iwi to iwi. In local and general elections, voter turnout tends to increase with age (Local Government New Zealand, 2019). While data on iwi register age structure was not publicly available, in our case study with Te Rūnanga o Ngāti Awa, we assess the effect of age on voter turnout in the elections of a specific iwi.

Voting Methods

The final feature influencing iwi elections is the voting method. The conduct of iwi elections tends to be outsourced by iwi to private companies that specialise in election services. Most iwi use postal voting for their elections or a combination of postal and online voting.

While the New Zealand Department of Internal Affairs and local authorities continue to debate the risks and benefits of online voting, such as increasing voter turnout, many Māori governance entities have been using a combination of postal and online voting for many years. The use of online voting has been increasing because iwi see it as an option to reduce costs, particularly for large iwi and those with a high portion of members living overseas (Bargh, 2016). Many iwi lack the resources to actively manage their tribal registers and out-of-date physical address details pose an issue when only postal voting is offered. This is particularly true for younger adults who move more often than older adults (Statistics New Zealand, 2017).

Important to the discussion here is the suggestion that the use of online voting is a strategy to increase voter turnout (Goodman, 2019). The results of trials and experiences internationally are mixed on whether online voting does increase turnout. Goodman and Stokes (2018) argued that local election results in Ontario, Canada, show that "internet voting can increase turnout by 3.5 percentage points" (p. 1155). However, Goodman and Smith (2017) argued that online voting does not guarantee increased voter turnout, and Molineaux (2018) explained that it may simply make voting more convenient for those who already tend to vote: older, wealthier, already engaged constituents. To further complicate the discussion, research on Estonian elections, where there exists perhaps the most longstanding experience

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⁴ General elections are held every three years to elect the New Zealand Parliament.

⁵ By *online* or *internet voting*, we are referring to a vote that is cast using a personal computer and over the internet. We note that in some jurisdictions the term *online voting* is also used to define voting using a machine at a polling booth.

of online voting, shows that the use of online voting changes over time, possibly making online voting more inclusive than initial studies suggested (Vassil et al., 2016).

The other issue around online voting is whether it is more or less effective on its own or in combination with other options. Goodman et al. (2018) recommended caution around using *only* online voting methods. Their research from locations in Canada where the option for paper ballot voting has been removed showed that a "digital divide" potentially replicates societal inequalities. They argued:

Absent a paper option, there is evidence that some electors with poor access and digital literacy might be less likely to vote, though the effect is delayed until after the first election after paper is eliminated. After the "newness" of online voting dissipates, the segment of the population that would normally be drawn to paper voting, on the basis of digital access and literacy, forms a smaller portion of the voting population. Our results suggest that the elimination of paper ballots may indeed be disenfranchising some electors on the basis of the digital divide. (p. 178)

Research with First Nations communities in Canada has shown an appetite for online voting (Gabel et al., 2016). More than 100 First Nations and Métis communities now use online voting and see key benefits to "enhance local participation, self-determination, and governance," suggesting that online voting is "a tool to improve voting accessibility and engagement for members living off-reserve" (Gabel & Goodman, 2019a, p. 5). However, while online voting promises potential benefits, its implementation does not always yield the intended results (Gabel et al., 2016). Concerns also exist around the cultural appropriateness of online voting, "whether the technology is consistent with community visions of self-determination and local decision-making" (Gabel & Goodman, 2019a, p. 5), internet access, digital literacy, security, and the impact on culture (Gabel et al., 2016).

As exploratory first steps towards understanding iwi voting and whether declining turnout trends exist, in this article, we present findings from a case study of iwi voting within Te Rūnanga o Ngāti Awa based in the Bay of Plenty region of the North Island, before turning to an analysis of publicly available iwi voting data.

Methodology and Methods

The methodology and methods for this research were mixed but interconnected. We used Kaupapa Māori methodology and directly met with iwi representatives to ensure our research objectives were complementary and analysed previously collected election results with their permission.

Underpinning the research is a Kaupapa Māori methodology, which advocates research by Māori, for Māori (Bishop, 1999). A second key element of Kaupapa Māori research is ensuring that research supports iwi aspirations and is mutually beneficial rather than extractive, with strong similarities to community-engaged research conducted with other Indigenous communities (Gabel & Goodman 2019b; Gaudry, 2011; Smith, 1999). We used existing connections with Te Rūnanga o Ngāti Awa (one of co-authors is a member and previously worked for the iwi) to collaborate with them to consider what sorts of research about their elections and governance might prove mutually beneficial. Funding from the Ministry of Business, Innovation and Employment allowed us to connect with the iwi and supported the data analysis phase.

Over a period of two years, we collected iwi election data from publicly available sources and collated it in an evolving database. This involved creating a list of all iwi organisations across the country and checking their websites for election data. Unfortunately, this project did not have the resources to enable the research team to engage with all iwi on a more personal basis, as we would have liked. The aim therefore of this dimension of the research was to collate some baseline data, which could then be used to begin discussions with iwi at a regional and a national level about the ways research about electoral systems and processes might support iwi aspirations for self-determination and greater connectedness with their people.

Case Study: Te Rūnanga o Ngāti Awa

Te Rūnanga o Ngāti Awa was first established in the 1980s but re-formed with the Te Rūnanga o Ngāti Awa Act 2005 as the mandated entity managing the affairs of Ngāti Awa. There are 22 representatives on the Rūnanga representing hapū located in the Whakatane district and Bay of Plenty, as well as one in Auckland and one in Wellington. We studied the Rūnanga's official documents, including their Constitution, then met several times with the Chief Executive of the Rūnanga over the course of the research. We agreed on research aims that would complement their aspiration to foster greater connection with their members and our aspiration to know more about how and why people are voting. We provided the Rūnanga with a summary report and an infographic briefing of our findings. The results from several elections of Te Rūnanga o Ngāti Awa provide insights into iwi voting methods and turnout. We examined data from the 2010, 2013, and 2016 elections. Data collected by Electionz Ltd. in their role as returning officer was requested by Te Rūnanga o Ngāti Awa and supplied to us. The number of votingaged registered members was 1,531 in 2010; 2,341 in 2013; and 4,590 in 2016. The individual-level data included the following variables: unique identifier, residential region, voted (yes or no), voting method for those who voted (postal or online), and age. As age was not normally distributed, we chose to analyse age by five- and ten-year categories using non-parametric tests. Descriptive statistics are presented in Table 2 below and described in the following sections.

Residential Location

At all three time points, the regions with the largest share of Ngāti Awa registered members were the Bay of Plenty (the region most closely approximating the tribal rohe, 51.0% to 57.8%), Auckland (13.4% to 18.8%), Wellington (5.4% to 11.5%), and the Waikato (8.0% to 9.8%). Over half of registered members lived in the Bay of Plenty at all time points, and the share of those living in the Bay of Plenty tended to increase over time. However, the share of registered members living in Auckland tended to decrease, the share living in Wellington almost halved, and the share living in the Waikato was relatively stable.

Voter Turnout

Voter turnout in Ngāti Awa elections dropped from over one-third (36.3%) in 2010 to just over a quarter (27.4%) in 2013; it remained stable in 2016 (26.9%).

Table 2. Descriptive Statistics for Te Rūnanga o Ngāti Awa Elections, 2010-2016

Variable	2010	2013	2016
Voting-aged registered members	1,531	2,341	4,590
Age (years)			
Minimum	18	18	18
Maximum	89	92	93
Mean	40.10	40.19	40.59
Standard deviation	15.29	15.95	16.29
Proportion of members in top 4 residential regions (%)			
Bay of Plenty	50.65	57.81	56.88
Auckland	18.76	17.55	13.35
Wellington	11.50	5.36	6.94
Waikato	9.80	8.03	9.01
Voter turnout (%)	36.29	27.39	26.95
Voting method, for those who voted (%)			
Postal	85.04	83.78	72.92
Online	14.96	16.22	27.08

Voting Method

Out of those who voted, online voting grew from just over 1 in 7 (15.0%) in 2010 to over one-quarter (27.1%) in 2016. This equated to an 80.7% increase in online voting over the six-year period. The increase in the share of votes cast online coincided with a decrease in voter turnout over this period. However, the decrease in voter turnout may have been related to other factors, such as the campaigns that were run in the lead up to the election, the register size at the time of the election, or the proportion of newly registered members (which will be discussed below).

Voter Turnout by Age

Associations between variables were assessed using chi-square (χ^2) tests, where p values less than .05 indicate a significant association. An association between age and voter turnout was detected at all three time points. Older registered members of Ngāti Awa were more likely to vote than younger members in 2010 ($\chi^2(9) = 58.43, p < .001$), 2013 ($\chi^2(9) = 73.87, p < .001$), and 2016 ($\chi^2(9) = 54.01, p < .001$).

Voting Method by Age

There was no significant difference in voting method (online vs. postal) across age groups in 2010 and in 2013. However, in 2016, there was a marginally significant association between age and voting method ($\chi^2(9) = 16.06$, p = .07), suggesting that older registered members may have been slightly less likely to vote online than younger members.

Voter Turnout by Residential Region

Voter turnout was significantly different across residential regions (Bay of Plenty, Auckland, Waikato, Wellington, Other; 2010: $\chi^2(7) = 73.62$, p < .001; 2013: $\chi^2(4) = 85.61$, p < .001; 2016: $\chi^2(4) = 154.41$, p < .001). The Bay of Plenty consistently had a higher voter turnout than other regions, despite voter turnout dropping there from 45.2% in 2010 to 33.4% in 2016. The decrease in voter turnout between 2010 and 2016 was evident across the four regions with the largest share of the Ngāti Awa members, with turnout dropping steadily from one election to the next in Auckland and fluctuating from election to election but trending downwards in Wellington and the Waikato. Voter turnout tended to be lower outside of the four main regions but remained relatively stable across elections. The lower turnout in *Other* residential locations could suggest that engagement with Ngāti Awa (as indicated by voting behaviour) is stronger in regions where large populations of Ngāti Awa reside.

Voting Method by Residential Region

Voting method (online vs. postal) varied significantly across regions in 2010 ($\chi^2(4) = 12.65$, p < .05), as Auckland voters were most likely to have voted online. However, a significant association between residential region and voting method was not detected for subsequent elections. Online voting in most regions increased between 2010 and 2016, but did not increase in Auckland, suggesting Ngāti Awa members in Auckland may have been early to adopt online voting, but were not more likely than other Ngāti Awa populations to vote online once the method had been adopted in those regions.

Voter Turnout, Register Size, and Duration of Registration

The drop in voter turnout from 2010 to 2016 coincided with a rapid increase in register size. This decreased turnout may have been due to the absolute register size (see Drage, 2018), or to low participation from the large share of newly registered members: over half of those registered for the 2016 election (56.0%) had not been registered for the 2013 election. Data from New Zealand general elections shows that newly arrived migrants are less likely than others to vote (Statistics New Zealand, 2018). It is possible that newly registered members of iwi have low voter turnout, as they take time to engage with iwi politics and familiarise themselves with candidates.

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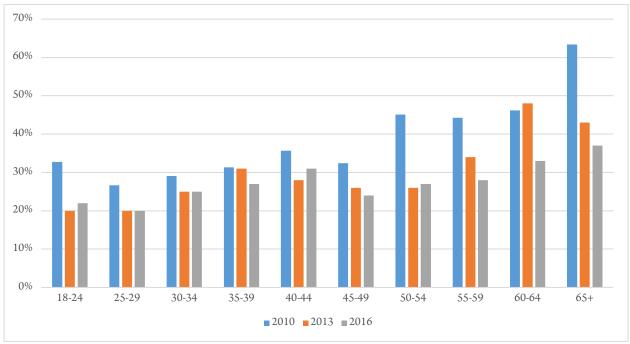


Figure 1. Percentage of eligible registered members who voted by age 2010-2016.

To test this assumption, we used register identification numbers to link data from the 2013 election to the 2016 dataset. We then compared the voting behaviour of newly registered members (i.e., those registered in 2016 but not 2013) with those who were registered for both elections. There was no association between duration of registration (whether or not a person was new to the register) and voting method for the 2016 election. However, duration of registration was associated with voter turnout ($\chi^2(1) = 14.48$, p < .001). Newly registered members in 2016 had a lower turnout (24.9%) than previously registered members (29.9%).

Voter Turnout and Subsequent Voting

We also tested whether voting in 2013 was associated with subsequent voting in 2016. Taking only those registered for both elections, we found that voter turnout in 2016 was much higher for those who had voted in 2013 (61.6%) than for those who had not voted in 2013 (17.7%; $\chi^2(1) = 347.88$, p < .001).

Voting Method and Subsequent Voting Behaviour

Finally, we tested for associations between voting method and subsequent voting behaviour. There was no association between voting method (online vs. postal) in 2013 and whether or not a person voted in the subsequent election. However, an association was detected between voting method in 2013 and

voting method in 2016 ($\chi^2(1) = 67.33$, p < .001). Taking only those who had voted in both elections, online voting in 2016 was higher for those who had used online voting in 2013 (64.0%), than for those who had used postal voting in 2013 (12.8%), suggesting some degree of stability in voting method preferences over time.

Regression Analyses

We conducted logistic regressions to determine the effect of each predictor variable on voter turnout, having partialled out the effect of the other predictor variables identified the bivariate analyses above. Voting in 2013 and being new to the register in 2016 were both associated with voting in 2016 (as outlined above). As these variables could not be included in the same regression (as a person could not have voted in 2013 if they were new to the register in 2016), two separate logistic regressions were run. For both regressions, missing values were handled using listwise deletion.

For the first logistic regression, we considered the effects of age (using dummy variables for each 10-year age category), region (whether or not someone lived in the Bay of Plenty), and being newly registered (whether or not the 2016 election was the first election they had been registered for) on whether or not someone voted in 2016. All three predictor variables were associated with voting in 2016 ($\chi^2(7)$ = 156.85, p < .001, N = 4,319). A Pearson goodness-of-fit test showed good overall model fit ($\chi^2(16)$ = 7.93, p = .95).

As outlined in Table 3, the likelihood of voting increased with age. In addition, those who were registered for the previous election were approximately 18% more likely to vote than those who were new to the register. The strongest effect, however, was for region. Those who lived in the Bay of Plenty were more than twice as likely to vote as those who lived outside of the region.

For the second logistic regression, we considered the effects of age, region, and voting in 2013 on whether or not someone voted in 2016. This time only region and voting in 2013 were associated with voting in 2016 ($\chi^2(7) = 359.62$, p < .001, N = 1,872). A Pearson goodness-of-fit test showed good overall model fit ($\chi^2(16) = 15.88$, p = .46).

As outlined in Table 4, once the effects of previous voting behaviour and residential region had been partialled out, age was no longer associated with voting. Those who lived in the Bay of Plenty were approximately 74% more likely to vote than those who lived outside of the region. The strongest association was for previous voting behaviour. Those who voted in 2013 were almost 7 times more likely to vote in 2016 than those who had not voted in 2013.

Table 3. Logistic Regression Model 1 to Predict Voting in the 2016 Te Rūnanga o Ngāta Awa Election

Voted 2016	Odds Ratio	P	95% Confidence Interval				
Age (Under 30 years base)							
30 - 39 years	1.26	.022	1.03	1.54			
40 - 49 years	1.35	.006	1.09	1.66			
50 - 59 years	1.37	.004	1.11	1.70			
60 - 69 years	1.87	.000	1.46	2.41			
70+ years	2.12	.000	1.56	2.88			
Region (Outside Bay of Plenty base)							
Within Bay of Plenty	2.05	.000	1.77	2.37			
Newly registered (<i>No</i> base)							
Yes	.82	.006	.71	.95			
Constant	.24	.000	.18	.32			

Table 4. Logistic Regression Model 2 to Predict Voting in the 2016 Te Rūnanga o Ngāta Awa Election

Voted 2016	Odds Ratio	P	95% Confidence Interval	
Age (<i>Under 30 years</i> base)				
30 - 39 years	1.06	.735	.76	1.47
40 - 49 years	1.13	.475	.80	1.60
50 - 59 years	1.24	.221	.88	1.76
60 - 69 years	1.14	.516	.76	1.71
70+ years	1.10	.721	.66	1.82
Region (Outside Bay of Plenty base)				
Within Bay of Plenty	1.74	.000	1.37	2.22
Voted in 2013 (No base)				
Yes	6.97	.000	5.53	8.79
Constant	.14	.000	.10	.18

Discussion of Case Study Results

Our case study on Te Rūnanga o Ngāti Awa using data from the 2010, 2013, and 2016 elections revealed a rapid increase in registered members over the period, which coincided with a decrease in voter turnout and an increase in the proportion of votes being cast online.

Older registered members were consistently more likely to vote than younger members over this period. However, age was not significantly associated with voting method (online vs. postal voting).

Over half of registered members lived in the Bay of Plenty region, which loosely approximates Ngāti Awa tribal territories. Those living in the Bay of Plenty had a consistently higher voter turnout than those outside the region, suggesting an association between proximity to the centres of tribal authority and political engagement. While Auckland voters were more likely to vote online than others in 2010, residential region was not associated with voting method in subsequent elections.

Our analyses using linked data across the 2013 and 2016 elections showed that registration duration, and previous voting behaviour was also associated with subsequent voting behaviour. Those who were registered for both elections were more likely to vote in 2016 than those who had not been registered in 2013, possibly because newer members were taking time to fully engage with iwi political processes. In addition, for those who were registered for both elections, those who voted in 2013 were much more likely to vote in 2016 than those who had not voted in 2013.

Finally, our logistic regressions showed that age, residential region, and registration duration all contributed uniquely to predict whether or not members voted in 2016. However, when voting in 2013 was included, age no longer significantly predicted voting in 2016.

What cannot be ascertained from the case study data is whether the decrease in voter turnout and increase in online voting from 2010 to 2016 was due to a time effect, due to the corresponding increase in register size, or due to some other factor or factors. In order to begin placing the Ngāti Awa data in a broader context, we now turn to considering data we collected from publicly available sources.

Publicly Available Voting Data

Method

We searched iwi entity websites for data on voting in iwi elections, collating data from the most recent election for which entities had listed both the number of votes cast, and the number of eligible registered members at the time of voting. This resulted in the inclusion of data from 37 iwi entities spanning an 11-year period (2007-2018).

Election processes differ across iwi entities. Some entities elect entire boards every three years, while other entities use a staggered system, voting to replace exiting members every year. In some instances, the number of candidates is equal to the number of available seats, in which case voting may not be required.

As we collected data in early 2018, most of the data were from elections held in 2018 (n = 6) and 2017 (n = 18). Only one observation was from 2007, and the next oldest observations were from 2013 (n = 2).

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The entities with older data may well have held more recent elections without making the voting data publicly available.

Results

Voter Turnout

There was considerable variation in voter turnout across entities. Voter turnout ranged from 9.46% (for a fisheries trust) to 51.9% (for a small tribal trust). The mean voter turnout across the 37 entities was 29.64% (M = 0.30, SD = 0.09).

Voter Turnout by Register Size

We found a strong, negative correlation between register size and voter turnout (r= -.62, p < .001), despite our relatively small sample size. The larger the iwi register, the more likely the voter turnout was to be low (see Figure 2).

Data on the percentage of votes cast online was available from 25 entities, which ranged from 18.2% (for an election held in 2015) to 64.8% (also for an election held in 2015). The mean percentage of votes cast online across these observations was 43.6% (M= 0.44, SD= 0.12).

There was no linear relationship between register size and online voting, or between online voting and voter turnout.

Discussion of Publicly Available Data

Our results from the analysis of publicly available data on iwi voting showed that voter turnout varied substantially. Some of the variability in voter turnout that we observed may be explained by entity type (e.g. fisheries trusts, pre- and post-settlement entities), and by election type (e.g. by-election, annual voting, triennial voting). However, we did not collect data on these variables.

At a national level, voter turnout results for by-elections in New Zealand has tended to be much lower than for general elections. Voter turnout in general elections in New Zealand sits at around 80%. In the 2017 General Election, voter turnout was 79% (New Zealand Electoral Commission 2017b); in 2014 turnout was 76.7% (New Zealand Electoral Commission, 2014). The voter turnout for Māori electorates is significantly lower at 66.7% in the 2017 General Election and 65.1% in the 2014 General Election (New Zealand Electoral Commission, 2017b; Parliamentary Library, 2015). Over the past 10 years, by-elections averaged less than 45% voter turnout. Voter turnout for the Mt Albert by-election in 2017 was 30% (New Zealand Electoral Commission, 2017a), while the Mt Roskill by-election in 2016 was 38.5% (New Zealand Electoral Commission, 2016).

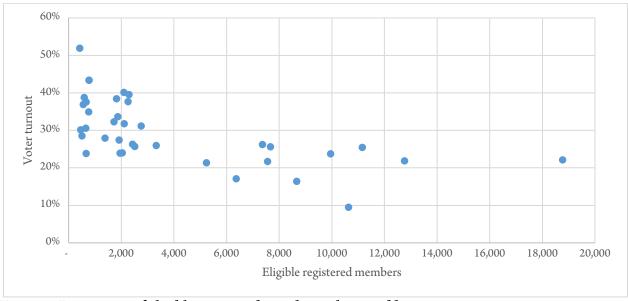


Figure 2. Percentage of eligible registered members who voted by iwi register size.

Size Matters

We found evidence that voter turnout tends to decrease the larger the iwi entity. While it is not clear what the driver of this correlation is, it may be the case that smaller iwi are better connected. Members of smaller iwi may be more likely to have relationships with those campaigning, making them more invested in elections, and therefore more likely to vote. It could also be a feature of Māori political organisation, which tends to still consolidate at a hapū level where members are all *whanaunga* (family; Mead, 2016). Hapū tend to have numbers of members in the hundreds rather than the thousands of some iwi alliances and therefore are in many ways closer-knit than iwi units (Mead, 2016). The inverse correlation between register size and voter turnout suggests larger entities may benefit from tailored strategies to enhance members' engagement with and participation in iwi elections.

There is some comparability here with voting in local government elections where "rural councils have a higher turnout than provincial ones, which in turn have a higher turnout than metropolitan councils" (Molineaux, 2018, p. 8). Jean Drage (2018) cited Department of Internal Affairs data, which consistently shows "increased voter participation in local authorities where councillors represent fewer voters" (p. 6). She argued, "it is clear that knowing one's local representatives is an incentive for those registered to vote, to actually do so" (p. 6). She reasoned that there is a "widening gap between councillors and the growing number of constituents" (p. 6), and this represents ultimately an erosion of local democracy.

Online Voting

We also found evidence suggesting that online voting is common in more than 50% of iwi elections. What is unclear is whether the use of online voting is being driven by voter preference or the iwi entities themselves (who may use particular strategies to encourage voting by various means).

The move towards online voting raises potential challenges and opportunities for iwi to consider. Online voting would likely reduce the costs of running an election and may increase the participation of iwi members who move frequently (and may therefore have inaccurate residential address information stored in the iwi register but the same email). However, as our results indicate, a large proportion of votes are still being cast via post. A thorough assessment of the impacts of moving to an online-only voting process would be advisable before iwi entities make such moves. The 2018 New Zealand Census was held solely online and the turnout results were so low that Te Mana Raraunga (the Māori data sovereignty network) raised concerns about their validity (Te Mana Raraunga, 2018).

The other issue around online voting is whether it is more or less effective on its own or in combination with other options. Goodman et al. (2018) recommended caution around online-only voting methods based on their study. Where the option for paper ballot voting has been removed, the research shows that a "digital divide" replicates societal inequalities, as mentioned above.

In Canada, research about online voting indicates two main reasons why people prefer online voting: accessibility and convenience. In a study of online voting in the Whitefish River First Nation, Chelsea Gabel and others (2016) found that, while only a small number of votes were cast online in 2016, exit polling found that 60% of paper voters said they would make use of online voting in future. In a comparative analysis of Canada and Australia, Goodman and Smith (2017) concluded:

Given the high rates of reported satisfaction with remote online voting in both contexts, the trend to more government and non-government services moving online, and increased internet penetration, there is good reason to believe that voters themselves will support policy shifts toward online voting. (p. 175)

The same preference for accessibility and convenience may be true for Māori voters too and, if so, presents an opportunity for iwi to encourage political participation.

Security

Serious consideration should be given to the security of online voting. In 2014, the Norwegian government ended its online voting trials because of privacy concerns and a failure to increase voter turnout (Goodman & Smith, 2017). A 2019 online voting trial in New Zealand was halted, with Local Government New Zealand citing "rising costs" as the central reason (Radio New Zealand, 2018). At consultations throughout 2018, however, concerns were also raised about the rationale for online voting, the ongoing need for a postal option, security, and equity for Māori (Molineaux, 2018).

These reservations about internet voting reflect international experiences: Many jurisdictions that trialled online voting in the early 2000s have now suspended it because anticipated results were not achieved (Goodman & Smith, 2017). Research in Canada, which examined a possible correlation between online voting and higher voter turnout, concluded, "[it] encourages a certain proportion of nonvoters to partake electorally... yet, there are also distinctive issues in First Nations communities that may influence the adoption and effectiveness of digital technologies" (Gabel et al., 2017, pp. 115-116). In some First Nations communities in Canada, concerns were raised about trust, privacy, and a digital divide amongst electors with regards to internet access and quality (Gabel et al., 2017).

Analysis of data from Ontario by Goodman and Stokes (2017) indicated that "internet voters were typically older, wealthier and better educated" (p. 4), which, as Molineaux (2019) points out, makes internet voting more convenient for those already engaged.

Conclusion

The case study of Te Rūnanga o Ngāti Awa voting, coupled with the analysis of publicly available data, has provided a glimpse into voter behaviour in iwi elections. Taken together, our analyses suggest that voter turnout is associated with register size, as well as individual level variables such as age, residence within tribal territories, previous voting behaviour, and length of time registered. These findings have implications for other Indigenous communities that may be seeking to increase their voter turnout, including by using internet voting.

Many variables that may influence voter behaviour in iwi elections at the individual level (such as gender) and at the entity level (such as the stage of the Treaty settlement process the organisation is in) have not been captured here. More research is needed to better understand iwi voting behaviour, which could include case studies of particularly entities (coupling qualitative insights into organisational practice and quantitative data on voter turnout over successive elections) and quantitative analysis of voting data obtained from a larger number of iwi entities over successive elections.

While the data available for analysis, and therefore our findings, are modest, we have highlighted important considerations for iwi around engagement, particularly for larger organisations, and challenges and opportunities that online voting present. These findings also have implications for the New Zealand government and Electoral Commission as it seeks to better understand how to encourage greater levels of Māori voting in local and general elections. Given iwi Māori already have extensive experiences with managing their own elections and engaging in online voting, they should be central to the co-design of policy around election data collection and electoral system change.

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