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RESEARCH ARTICLE



The predictors of Māori electoral roll choice and knowledge: rangatahi Māori voter enrolment in a representative New Zealand youth survey

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ABSTRACT

Every five years and when initially enrolling to vote, Māori have the choice between the Māori roll or the general roll. Research has explored the predictors of roll choice for older adults, but this paper presents the first exploration of roll choice for rangatahi Māori (Māori youth; aged 13–18), and the predictors of rangatahi not understanding the difference between rolls. We draw on Māori data ($n = 1528$) from Youth19 which surveyed students from a random sample of schools from Tai Tokerau, Tāmaki Makaurau, and Waikato. We find those Māori who also identify as Pākehā (New Zealand European) are less likely to opt for the Māori roll, but those who know their lwi, are comfortable in Māori social surroundings, feel a spiritual connection to land and the presence of their ancestors in their lives, or feel the drive to be respected as Indigenous, are more likely to choose the Māori roll. Older rangatahi are more likely to say they understand the question, as are those with study plans post-secondary school, and who say they are comfortable in Māori social settings. These results contribute to a body of knowledge valuable for those seeking to increase voter enrolment and enrolment on the Māori roll.

Glossary of Māori words: Hapū: kinship group, generally smaller than lwi; sometimes translated to sub-tribe; hui: meeting; lwi: broader tribal unit or grouping; nation; kaitiaki: guardian, steward, trustee; kanohi-ki-te-kanohi: face to face/in person; kapa haka: Māori performing arts; traditional performance; Kura Kaupapa Māori: Māori language/Māori medium schools; mana whenua: Māori group(s) who have authority, power, or rights over a certain area of land; marae: meeting house and the area surrounding it; mātauranga Māori: Māori ways of knowing/knowledge; Pākehā: New Zealanders of European descent; rangatahi: youth; rohe: area, region; tangata whenua: Indigenous peoples of Aotearoa New Zealand; people(s) of the land; te reo Māori: the Māori language; te

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Tiriti o Waitangi: the Māori language version of the Treaty of Waitangi; tipuna/tupuna: ancestors; waka ama: canoe sport; wānanga: meetings for discussion, deliberation, forums; whanau: family, extended family, or family-like group; whanaungatanga relationship, kinship, sense of family-like connections between people.

Every five years, voters of Māori descent¹ have had the option: Māori or general roll? Over a four-month period known as the Māori option, mass advertising campaigns and postal mailing present the roll choice to Māori (Electoral Commission, [n.d.](#)). The most recent campaign for the 2018 option included the now-classic shifting sands advertisement (StopPress [2013](#)) and a Te Puni Kōkiri ([2018](#); Ministry of Māori Development) funded #FFSChoose campaign, aimed at those aged 18–29. What is often overlooked in research and policy about the electoral option, however, is the decision that rangatahi Māori (Māori youth) make when they initially enrol to vote. It is at this point that rangatahi are first asked to choose between rolls, but do rangatahi Māori know what the Māori roll is when they first choose? And what are the differences between those who choose the Māori roll and those who choose the general roll?

This paper uses a representative survey of high school students in the Northern regions of New Zealand to explore roll choice for rangatahi Māori (aged 13–18). The Youth19 survey primarily gathers data relating to the health and social issues that influence youth well-being. In 2019, however, questions were added about rangatahi understandings of voter enrolment. A perennial problem for politics research is that voters (rather than non-voters) tend to fill out surveys, meaning research under-represents those who are more disenfranchised (Greaves et al. [2020](#)). An advantage of embedding politics questions into a survey in schools, is that it presents an opportunity to recruit people to a survey *before* they become voters (or non-voters). Therefore, not only is this paper the first to explore rangatahi Māori electoral roll choice, but a key strength of the data is the representative group of potential non-voters that we recruited. Examining rangatahi choices is all the more important given the population age distribution of Māori: around half of Māori are under 25; compared to less than a third of Pākehā (Statistics NZ [n.d.](#)). In this paper, we explore the frequencies of those who are enrolled or intending to join the Māori roll, and the demographic and identity predictors of this choice. We also explore the correlates of those who selected ‘don’t understand the question’ in relation to the roll choice option, to identify rangatahi who do not understand the differences in the rolls, or the process of enrolment. This data will be valuable for those seeking to promote enrolment to rangatahi.

The Māori electoral roll

First, it is important to provide an overview of the history of the Māori electoral roll and roll choice. Despite the significance of the Māori roll, administration of the roll has a chequered history which should not be overlooked when considering roll choice today. By

the 1860s, most Māori were excluded from the electoral franchise because they did not own freehold land. In 1867, the Māori Representation Act enfranchised Māori without a property requirement. It created four Māori electorates which covered all of New Zealand: three in the North Island and one in the South Island. The Act defined Māori as ‘a male aboriginal native inhabitant of New Zealand of the age of twenty-one years and upwards’ which included ‘half-castes’. Anyone fitting that description had no choice but to be on the Māori roll and to vote in the Māori electorates. Various explanations are given for the passing of the 1867 Act (Geddis 2006; Iorns Magallanes 2005; Ward 1995), but rather than being a matter of high principle regarding Māori representation, it was likely a pragmatic *quid pro quo* for the increased South Island representation required by the goldfields population surge (Sorrenson 1986). At the same time as enfranchising Māori, the electorates muted the potential impact of Māori voters and the number of Māori elected to Parliament. When first created, approximately 50,000 Māori were represented across the four electorates (an average of 12,500 voters per electorate) compared to a population of 250,000 across 72 European electorates (an average of 3,500 per electorate; Durie 1998).

The Māori electorates were originally a temporary measure for five years, but were made permanent in 1872. The electorates were differently administered through time; Atkinson describes these disparities as ‘careless, if not convenient, neglect’ (Atkinson 2003, p. 172). Their number remained fixed at four until 1993, despite increases in the number of European electorates through the years. Almost all advances in election and roll administration, such as the formal roll and the private ballot, were implemented in the Māori electorates long after they first appeared in the general electorates – often decades later (Atkinson 2003). Developments in roll choice began in 1967, with a law change that made it possible for non-Māori to stand in the Māori electorates, and likewise for Māori to contest the general electorates (Bargh 2020b). In 1975, the definition of ‘Māori’ for electoral purposes was changed to mean ‘a person of the Maori race of New Zealand; and includes any descendant of such a person’ (Electoral Amendment Act 1975, s 2). At the same time, an option was introduced for Māori to register ‘either as an elector of a Maori electoral district or as an elector of a General electoral district’ (Electoral Amendment Act 1975, s 17). For the first time since the seats were established, Māori could choose which roll they wanted to vote from. This pre-registration of electors on either the general or Māori roll would occur every five years with the national census (Electoral Amendment Act 1975, s 20). But the inequity between the number of voters registered in Māori and general electorates persisted. Regardless of movement between rolls, the number of Māori electorates remained fixed at four. By 1984, the average number of Māori per electorate was 72,000, compared to just 32,500 in the general electorates (Durie 1998). Despite this history, the Māori electorates have delivered the vast majority of Māori MPs to Parliament: by 1993, only four Māori men had been elected to Parliament through the European/general electorates (Sullivan and Hayward 2019).

In 1993, with the introduction of the Mixed Member Proportional (MMP) electoral system, parity was finally achieved between the number of electors voting in Māori and general electorates. The Electoral Act 1993 ensured that the number of Māori electorates would be determined by the number of voters on the Māori roll: the same way the general electorates were determined (Geddis 2014). Between 1994 and 2002, the Māori

roll increased from around 100,000 voters to almost 195,000, and the number of Māori electorates had increased from four to seven (Bargh 2020a).

At the time of data collection, the Māori Electoral Option (MEO) was conducted over four months every five years following the national census. After each MEO, the number of Māori electorates was adjusted accordingly (Geddis 2014). Following the 2018 option, the majority of Māori were on the Māori roll (52%; Bargh 2020a). In late 2022, a government bill passed into law, allowing Māori to change rolls any time, except in a three month period before a General of Local election, or before a by-election (NZ Parliament 2022).

Who enrolls on the Māori roll?

Although some published research has explored Māori roll choice, this has all been drawn from adult samples. Banducci et al. (2004) found that Māori on the Māori roll had lower incomes than those on the general roll, but Māori roll participants were more likely to vote and were more interested in politics, had higher political efficacy, and felt better represented. Fitzgerald et al. (2007) found that Māori who scored higher on a cultural identity measure were more likely to be on the Māori roll. When asked why they were on the Māori roll, a subsample ($n = 69$) suggested that it was ‘an expression of being Māori’ (p. 40). Past work by Greaves, Osborne, et al. (2017) found that identity variables rather than demographics explain intention to enrol. Identifying as Pākehā as well as Māori was associated with a reduced likelihood of being on the Māori roll (Greaves, Osborne, et al. 2017). Broadly speaking, those who believe that being Māori is a positive and important part of their identities, who believe in the continued importance of past injustices and te Tiriti o Waitangi (the Māori language version of the Treaty of Waitangi), and those who feel they stand up for Māori rights, tend to choose the Māori roll (Greaves, Osborne, et al. 2017). In addition, Riambau (2020) explored geographic data and supported past work which found that ‘cultural allegiances and socioeconomic status’ – in particular living in an area with a higher proportion of te reo Māori (the Māori language) speakers – were predictive of choosing the Māori roll. Bargh (2020a) surveyed Māori on the general roll ($n = 118$) and presented a series of statements around general roll choice and what would make people change to the Māori roll. Eighty percent of the participants endorsed statements that they were on the general roll due to a greater perceived choice in candidates, and a statement that it is good to have Māori on both rolls as not all Māori think the same way. Participants indicated they would be more likely to change to the Māori roll to increase the number Māori MPs, if the electorates were geographically smaller, or to support more ideologically diverse candidates. These works show the importance of Māori identity in roll choice, suggesting that Māori choose rolls for various identity and political reasons.

We are unaware of any published work that explores roll choice on initial enrolment or that includes rangatahi Māori. In an unpublished master’s thesis, Kearney-Parata (2021) explored roll choice and the process of enrolling for rangatahi (defined as age 18–40) through a series of six qualitative interviews and a ‘big data’ approach using electoral roll and geographic (meshblock) data. Kearney-Parata discussed three key barriers to accessing the Māori electoral roll and the broader system with the participants: access to education, enrolling to vote, and the five-yearly option. Kearney-Parata’s interviews found that

misinformation, alongside a lack of information, is a barrier for initial rangatahi enrolment on the Māori roll, but that increasing Māori representation, perceived connections to representatives, and geographic location may be important in roll decision-making. While their big data approach relied on those already enrolled, it showed that those younger than 40 were more likely to choose and remain on the Māori roll. In addition, those from the ‘unemployed’, ‘home work’, ‘students’, ‘apprentices’, and ‘unskilled workers’ occupation groups, and those who lived in areas with a higher proportion of Māori were more likely to enrol onto and stay on the Māori roll. In summary, there is a body of research emerging around electoral roll choice for Māori, but little work has explored rangatahi attitudes, and none has utilised data from a large sample of rangatahi Māori.

Overview and hypotheses

The overall purpose of this paper is to show: (1) which demographic and attitudinal variables relate to enrolment on the Māori versus general roll; and (2) the differences between rangatahi who understood this question and those who did not. Such data has not been collected before and will be valuable for policy-makers and those working in organisations that make efforts to increase youth voter enrolment.

The first aim of this paper is to explore the predictors of roll choice. Past work leads us to expect those who also identify their ethnicity as Pākehā will be less likely to choose the Māori roll (Fitzgerald et al. 2007; Greaves, Osborne, et al. 2017). Past work has also led us to predictions for what will relate to a higher likelihood of choosing the Māori roll, such as: living in a more economically deprived area, having a stronger cultural identity, such as knowing one’s Iwi, knowledge of te reo, comfort in Māori social surroundings, pride in being Māori and tangata whenua (Indigenous) status, and potentially, having stronger environmental and spiritual links (Bargh 2020a; Fitzgerald et al. 2007; Greaves, Osborne, et al. 2017; Riambau 2020).

The second aim is to explore differences between those who chose a roll versus those who did not understand the question. It is rare to capture data from non-voters relating to their understanding of elections and voting; political science surveys tend to overrepresent those who actively participate (Greaves et al. 2020). In the Youth19 survey, we included an option for participants to indicate that they do not know about roll types. Here, we compare those who did not know to those who said they would choose/had chosen the Māori or general rolls. Although there has not been any specific work exploring rangatahi Māori knowledge of roll choice, we can draw upon a broader youth (and even adult) enrolment and turnout literature (e.g. Greaves et al. 2018; Hooghe and Dasselonneville 2013; Kitanova 2020; Vowles 2012). We expect that those who are younger will be less likely to know about roll types (as they have had less time to learn, and are further from enrolment age), as will those who do not intend to continue their education (reflecting different knowledge and strengths).

Method

Survey, sampling and procedure

The data were drawn from the Youth19 Rangatahi Smart Survey (Fleming et al. 2020). Youth19 is a regional survey that followed three nationally representative surveys of

high school students in New Zealand conducted in 2001, 2007, 2012. A two-staged clustered sampling design was used across the four waves. Earlier survey waves recruited participants nationally, however, the 2019 wave recruited participants from Te Tai Tokerau, Tāmaki Makaurau and Waikato regions by randomly selecting one third of schools in those regions and then randomly selecting 50% of the student school roll and inviting them to participate. All schools with >50 students in years 9–13 (aged 12–18) were included. In a separate sample, all students from seven of nine Kura Kaupapa Māori (Māori medium/language schools) from the region were invited to participate. Our overall response rate for invited students was 60% (comprising a response rate of 59% for ‘mainstream schools’ and 71.4% for Kura Kaupapa students; for full details see Fleming et al. 2020). Sample weights were calculated to accurately estimate parameters of the surveyed population using the sampled data; first, as inverse probability weights to adjust for the unequal probability of each individual being invited to participate. The anonymous survey questionnaire consisted of 285 questions regarding the health and social issues that influence youth well-being. The survey was hosted on Qualtrics XM via a multimedia computer-administered survey instrument (M-CASI) on internet tablets. Participants were offered the choice to complete the survey in te reo Māori or English.² Students consented to participate and passive parental consent was obtained from whānau. School principals and Boards of Trustees actively consented to participate in the survey. Ethics approval was granted by the University of Auckland Human Participants Ethics Committee (application #022244).

The Youth19 survey included questions designed specifically for rangatahi Māori, and was co-led and co-funded (through Health Research Council funding) by a senior Māori researcher. The current paper was led by a Māori author involved with the design of the survey, and includes two senior Māori academics, alongside two tauwiwi colleagues who provided contextual and analytical support. The Māori identity and voting questions in the survey were designed by the Māori researchers, then reviewed by a group of Māori and tauwiwi researchers involved with the broader project. While a quantitative survey, the work was part of a broader mixed-methods Kaupapa Māori project on whanaungatanga and other factors which lead rangatahi Māori to thrive. As per Youth19 data access policy (Youth19 2021), Te Mana Raraunga data sovereignty principles were adhered to for these data analyses and interpretation. Equity analyses considered the historical, contemporary and contextual factors that impact Māori wellbeing and self-determination. Finally, data is presented in a non-stigmatising manner to uplift the aspirations of Māori whānau.

Participants

Of the 7,721 participants in Youth19, 1,528 students (19.8%) were Māori, all of the following sample information is for the rangatahi Māori participants in the study only. Alongside Māori, 41.3% identified as Pākehā or European ($n = 631$), 17.0% with a Pacific ethnicity ($n = 259$), 4.0% with an Asian ethnicity ($n = 61$), 0.7% with a Middle Eastern, Latin American, or African (MELAA) ethnicity ($n = 11$), and 0.5% with another ethnicity ($n = 7$). Gender was identified across multiple variables, 53.1% identified as girls/women ($n = 812$), 45.4% as boys/men ($n = 693$), 1.1% did not answer ($n =$

17) and 0.4% did not identify with a binary gender ($n = 6$). Rangatahi aged 13 or under comprised 20.9% of the participants ($n = 320$), 25.0% were 14 ($n = 382$), 23.0% were 15 ($n = 351$), 16.2% were 16 ($n = 247$) and 14.9% were 17 or older ($n = 228$). By region, 45.7% of participants lived in Auckland/Tāmaki Makaurau ($n = 699$), 23.7% lived in Te Tai Tokerau ($n = 362$), and 30.6% lived in Waikato ($n = 467$). Half (50.6%) lived in areas of high deprivation (NZDep2018 of 8–10, $n = 624$), 33.1% lived in areas of medium deprivation (NZDep2018 of 4–7, $n = 408$), and 16.3% lived in areas of low deprivation (NZDep2018 of 1–3, $n = 201$). The majority of participants lived in urban regions, with 76.7% located in urban areas ($n = 946$) and 23.3% in a rural area ($n = 287$). All questions were voluntary and participants could skip questions. As such, 1,194 (78%) Māori participants answered the first enrolment question (whether they were enrolled or intended to), which could reflect that it was in the final block of the survey, or lower interest in this question.

Measures

In the ‘Community and Beliefs’ section of the survey, a number of questions were included to explore participants’ voter enrolment. Given some of the sample were aged over 17 (the minimum age to enrol, although 18 is the voting age), the survey was designed to branch/display questions based on both age (‘How old are you?’) and ethnicity (depending on whether someone answered with Māori as one of their ethnic groups) which were displayed near the start of the survey. Only those who had indicated Māori ethnicity were given the Māori roll questions ($n = 1,528$), the breakdowns of those included in the sample are presented in [Table 1](#). Those aged 17 or older were first asked if they were enrolled to vote ($n = 70$ or 35.7% were); if they were both enrolled and Māori they were then asked ‘Are you enrolled to vote on the Māori roll or on the general roll?’ with the options ‘Māori roll’, ‘general roll’ and ‘I don’t understand the question’. If they were not enrolled to vote ($n = 126$ or 64.3% of those 17+), or under 17, they were asked ‘Do you plan to enrol to vote in New Zealand elections?’. If they were Māori and answered yes ($17 + n = 44$; $< 17 n = 621$), they were asked: ‘Do you intend to enrol to vote on the Māori roll or on the general roll?’ with the same yes/no/don’t understand options as those currently enrolled. To avoid participants simply choosing ‘don’t know’ rather than indicating they do not understand the question, participants were only given the three options (discussed later as a possible limitation). We excluded 542 participants who did not intend to enrol (regardless of age): differences in intentions to enrol and enrolment rates across the full sample are explored in Greaves et al. ([In preparation](#)). In total, 330 participants did not answer the voting questions (21.6% of the Māori sample).

We used a variety of questions in the regressions to predict roll choice and understanding of the roll choice question. We used a range of demographics, including: whether one identified their ethnicity as Pākehā (alongside Māori, that is contrasting all those who identified at least one of their ethnicities as Pākehā compared to those who did not), age categories (13 and under through to 17+), and whether someone’s gender was boy/man (0 no, 1 yes). Some variables were based on addresses (collected separately from survey data), including: NZ Deprivation index score (bands of 1–3, 4–7, and 8–10), whether they lived in an urban or rural area, and geographic region

Table 1. A breakdown of the various enrolment categories across the Māori sample. The totals for the regression analyses are presented at the bottom of the table.

Question and answers	Frequency % (n)
Age 17+, 'Are you enrolled to vote in New Zealand elections?'	
Yes	35.7% (70)
No	64.3% (126)
Age 17 + and not enrolled, 'Do you plan to enrol to vote in New Zealand elections?'	
Yes	78.2% (101)
No	21.7% (28)
Age 17 + and enrolled, 'Are you enrolled to vote on the Māori roll or on the General roll?'	
Māori roll	55.1% (38)
General roll	37.7% (26)
Don't understand the question	7.2% (5)
Age 17 + and not enrolled 'Do you intend to enrol to vote on the Māori roll or on the General roll?'	
Māori roll	44.4% (44)
General roll	34.3% (34)
Don't understand the question	21.2% (21)
Age ≤16 'Do you plan to enrol to vote in New Zealand elections?'	
Yes	62.4% (621)
No	37.6% (374)
Age ≤16 and will enrol, 'Do you intend to enrol to vote on the Māori roll or on the General roll?'	
Māori roll	45.5% (267)
General roll	29.5% (173)
Don't understand the question	25.0% (147)
Total	
Māori roll	46.5% (305)
General roll	30.3% (199)
Don't understand the question	23.1% (152)
Missing Data	
Do not intend to enrol	402
Did not answer the questions	470

(Te Tai Tokerau, Tāmaki Makaurau or Waikato). We also asked if they had plans for further education post-secondary school (0 no, 1 yes) and if they were religious (0 no, 1 yes). As cultural identity has been shown to be a factor in roll choice, we included a number of Māori cultural identity items, selected due to their presence in past work: whether one knew their Iwi, had good knowledge of te reo, or felt comfortable in Māori social surroundings. We also included agreement to four domains based on items from the survey's cultural identity scale (Greaves et al. 2020): (1) 'It is important to me that others respect and value our status as tangata whenua' (tangata whenua status); (2) the average of 'I am proud to be Māori' and 'When I participate in activities like kapa haka, waka ama, sports, wānanga and other activities with Māori friends and whānau, I feel a sense of pride' (pride; kapa haka translates to Māori performing arts, waka ama to canoe sport, wānanga to meetings or forums, and whānau to family); (3) 'I believe it is important to be kaitiaki to protect our environment for future generations (e.g. keep our sea clean so we can swim and safely collect seafood to eat in the future)' (environment; kaitiaki refers to custodian/guardian) and (4) the average of 'I have a strong spiritual connection and sense of belonging to certain places (e.g. mountain, river, sea, etc.)' and 'I often feel the presence of my tūpuna or tūpuna (my ancestors and my whānau who have died)' (spirituality).

Analysis procedure

This paper uses binomial logistic regression models with multiple predictors. We first compare the differences between those who are enrolled/intend to enrol on the Māori roll with those who are not/do not. Our second analyses compare differences between those who responded with an intention to enrol on either roll versus those who said they did not understand the question. Multiple regression models allow us to model the effects of one variable while controlling for all others. To use a concrete example, someone's age may be associated with both their pride in being Māori and whether they select the Māori roll. Not controlling for this may introduce a spurious effect where pride in being Māori seems to be associated with a higher probability of choosing the Māori roll, but this association is a consequence of older rangatahi being more likely to be proud and to choose the Māori roll and not a direct effect of pride alone. Such a model means we can more accurately determine which specific variables relate to roll choice and whether someone understands the difference between rolls.

Results

Table 1 displays the frequency of the different responses across the four questions. Overall, when we remove those who did not understand the question (23.1%) in order to compare this to the adult population numbers, we find that 60.5% of participants had chosen/would choose the Māori roll and 39.5% had chosen/would choose the general roll. Although our participants are younger than the voting population, the last Māori electoral roll option (Electoral Commission [n.d.](#)) meant 52% of those of Māori descent were on the Māori roll (note that the current survey also used Māori ethnicity, rather than descent, which may have contributed to the higher percentage of Māori choosing the Māori roll).

We conducted two multiple binomial logistic regressions. The first compared those enrolled on/intending to enrol on the Māori roll (hereafter referred to as choosing the Māori roll) with those enrolled on/intending to enrol on the general roll. The results are displayed in Table 2 (*Pseudo R*² = .35). There were six significant predictors of roll choice. One demographic variable predicted roll choice: those who identified as Pākehā alongside Māori ethnicity were less likely to choose the Māori roll ($b = -.853$, $se = .273$, $OR = .426$, $t = -3.130$, $p = .002$). Relative to those who did not identify as Pākehā alongside Māori (and perhaps other ethnicities), those who identified as Pākehā were .43 times as likely to choose the Māori roll. Several cultural identity items were significant predictors of choosing the Māori roll. Knowing your Iwi ($b = .664$, $se = .312$, $OR = 1.942$, $t = 2.128$, $p = .034$), good self-rated knowledge of te reo Māori ($b = .674$, $se = .286$, $OR = 1.962$, $t = 2.358$, $p = .019$), and being comfortable in Māori social surroundings ($b = 1.017$, $se = .349$, $OR = 2.764$, $t = 2.916$, $p < .004$) led to a higher likelihood of choosing the Māori roll. For instance, those who feel comfortable in Māori social settings were almost 3 times more likely to choose the Māori roll than those who were not comfortable. Agreement with the item that it is important others respect and value our status as tangata whenua ($b = .710$, $se = .328$, $OR = 2.034$, $t =$

Table 2. Binomial logistic regression predicting choosing the Māori roll (versus the general roll) for rangatahi Māori.

	<i>B</i>	<i>OR</i>	<i>95% CI of OR</i>	<i>se</i>	<i>t</i>	<i>p</i>
Intercept	−1.812			.880	−2.059	.040*
Māori + Pākehā ethnicity (0 no, 1 yes)	−.853	.426	[.250, .727]	.273	−3.130	.002**
14 (vs. 13)	−.282	.754	[.254, 2.239]	.555	−.508	.612
15 (vs. 13)	−.113	.893	[.305, 2.613]	.548	−.207	.836
16 (vs. 13)	−.146	.864	[.290, 2.577]	.558	−.262	.793
17 (vs. 13)	−.430	.651	[.212, 1.998]	.572	−.751	.453
Boy/man (0 no, 1 yes)	−.321	.725	[.426, 1.235]	.271	−1.183	.237
NZ Deprivation Index 4–7 (vs. 1–3)	.269	1.308	[.683, 2.505]	.332	.810	.418
NZ Deprivation Index 8–10 (vs. 1–3)	.611	1.842	[.917, 3.698]	.356	1.718	.087
Rural (vs. Urban)	−.035	.966	[.529, 1.763]	.307	−.113	.910
Te Tai Tokerau (vs. Auckland)	−.295	.745	[.388, 1.429]	.332	−.886	.376
Waikato (vs. Auckland)	−.445	.641	[.319, 1.285]	.355	−1.253	.211
Education plans post-secondary school (0 no, 1 yes)	.384	1.468	[.686, 3.145]	.389	.989	.323
Religious (0 no, 1 yes)	.242	1.274	[.763, 2.127]	.262	.924	.356
Knows Iwi (0 no, 1 yes)	.664	1.942	[.054, 3.578]	.312	2.128	.034*
Good knowledge of Te Reo (0 no, 1 yes)	.674	1.962	[.120, 3.436]	.286	2.358	.019*
Comfortable in Māori social surroundings (0 no, 1 yes)	1.017	2.764	[.396, 5.475]	.349	2.916	.004**
Tangata Whenua Status (0 no, 1 agree)	.710	2.034	[.070, 3.868]	.328	2.165	.031*
Pride (0 no, 1 agree)	.364	1.440	[.527, 3.930]	.512	.711	.477
Environment (0 no, 1 agree)	−.783	.457	[.170, 1.227]	.504	−1.554	.121
Spirituality (0 no, 1 agree)	.649	1.913	[.066, 3.433]	.298	2.175	.030*

Notes. Bold denotes a significant effect. Pseudo $R^2 = .35$, $N = 460$; * $p < .05$, ** $p < .01$, *** $p < .001$.

2.165, $p = .031$) and agreeing that one had a strong spiritual connection to places and *tīpuna/tīpuna* ($b = .649$, $se = .298$, $OR = 1.913$, $t = 2.175$, $p = .030$) also led to a higher likelihood of choosing the Māori roll. A range of variables were not significant predictors of roll choice: age, gender, deprivation, urban/rural location, region, desire for further education, being religious, greater pride in being Māori, and placing importance on being *kaitiaki* of the environment.

The second model compared those who understood the question (i.e. selected Māori or general roll) with those who selected ‘I don’t understand the question’. The full results are displayed in Table 3 (*Pseudo R*² = .20). There were significant results across six variables, four of these were for differences across age groups: those aged 14 ($b = 1.600$, $se = .345$, $OR = 4.955$, $t = 4.633$, $p < .001$), 15 ($b = 1.577$, $se = .342$, $OR = 4.842$, $t = 4.615$, $p < .001$), 16 ($b = 1.995$, $se = .386$, $OR = 7.353$, $t = 5.173$, $p < .001$), and 17 or older ($b = 1.875$, $se = .431$, $OR = 6.518$, $t = 4.345$, $p < .001$) were all more likely than the reference group (those aged 13 and under) to understand the question. These odds ratios show that different age groups were 4.8–7.4 times more likely to understand the question than those aged 13 and under. Indeed, Table 4 shows a crosstabulation of age by answer. It is clear that younger rangatahi (13 and under) are less likely to understand the question (57.5% did) than older age groups (all 77.4%–84.5%).

Returning to Table 3, rangatahi who had plans for further education after school were more likely to understand the question ($b = .784$, $se = .304$, $OR = 2.190$, $t = 2.581$, $p = .010$), as were those who felt comfortable in Māori social situations ($b = 1.911$, $se = .291$, $OR = 1.911$, $t = 2.223$, $p = .027$). There were no significant differences across the other cultural identity or demographic variables.

Table 3. Binomial logistic regression model predicting understanding the Māori roll choice question (choosing the Māori or general roll) versus selecting 'do not understand the question'.

	<i>B</i>	<i>OR</i>	<i>95% CI of OR</i>	<i>se</i>	<i>t</i>	<i>p</i>
Intercept	−1.314			.618	−2.126	.034*
Māori + Pākehā ethnicity (0 no, 1 yes)	−.073	.930	[.569, 1.520]	.251	−.290	.772
14 (vs. 13)	1.600	4.955	[2.518, 9.752]	.345	4.633	<.001***
15 (vs. 13)	1.577	4.842	[2.478, 9.460]	.342	4.615	<.001***
16 (vs. 13)	1.995	7.353	[3.453, 15.660]	.386	5.173	<.001***
17 (vs. 13)	1.875	6.518	[2.798, 15.182]	.431	4.345	<.001***
Boy/man (0 no, 1 yes)	−.422	.656	[.404, 1.065]	.247	−1.705	.089
NZ Deprivation Index 4–7 (vs. 1–3)	−.100	.905	[.486, 1.685]	.317	−.316	.752
NZ Deprivation Index 8–10 (vs. 1–3)	−.078	.925	[.468, 1.828]	.347	−.223	.823
Rural (vs. Urban)	.526	1.692	[.945, 3.030]	.297	1.769	.077
Te Tai Tokerau (vs. Auckland)	.377	1.458	[.779, 2.727]	.320	1.179	.239
Waikato (vs. Auckland)	−.179	.836	[.482, 1.452]	.282	−.635	.526
Education plans post-secondary school (0 no, 1 yes)	.784	2.19	[.208, 3.971]	.304	2.581	.010*
Religious (0 no, 1 yes)	.302	1.352	[.825, 2.216]	.252	1.197	.232
Knows Iwi (0 no, 1 yes)	−.016	.984	[.575, 1.684]	.274	−.058	.953
Good knowledge of Te Reo (0 no, 1 yes)	.362	1.435	[.780, 2.641]	.311	1.162	.246
Comfortable in Māori social surroundings (0 no, 1 yes)	.648	1.911	[.080, 3.383]	.291	2.223	.027*
Tangata Whenua Status (0 no, 1 agree)	−.107	.899	[.463, 1.743]	.338	−.316	.752
Pride (0 no, 1 agree)	−.366	.693	[.301, 1.599]	.426	−.859	.391
Environment (0 no, 1 agree)	−.009	.991	[.459, 2.141]	.393	−.022	.982
Spirituality (0 no, 1 agree)	.167	1.182	[.679, 2.057]	.283	.591	.555

Notes. Bold denotes a significant effect. $Pseudo R^2 = .20$, $N = 611$; * $p < .05$, ** $p < .01$, *** $p < .001$.

Discussion

This paper explored the relationship between demographic and cultural identity variables and (1) choosing the Māori roll over the general roll, and (2) the differences between rangatahi who understood this question and did not. Many studies have covered Māori roll choice from big data, survey, and qualitative perspectives (Banducci et al. 2004; Bargh 2020a; Fitzgerald et al. 2007; Greaves, Osborne, et al. 2017; Riambau 2020), but there is very little research on rangatahi (except for an unpublished master's thesis by Kearney-Parata) and none on rangatahi with a representative sample. This is also the first study we know of to explore knowledge of the roll option in rangatahi; this is important, as past work has identified that access to knowledge is a barrier to roll choice (Kearney-Parata 2021). These findings have implications for how best to present roll choice options to rangatahi Māori and also provide information to policy-makers and agencies as to where to target campaign efforts. We now discuss the results in relation to past work and provide a discussion of the policy implications of each finding.

Table 4. Crosstabulation of age and 'do not understand the question'.

	Understands the question <i>n</i> (%)	Does not understand <i>n</i> (%)
13 and under	64 (57.7%)	47 (42.3%)
14	142 (80.2%)	35 (19.8%)
15	123 (77.4%)	36 (22.6%)
16	111 (79.3%)	29 (20.7%)
17 and over	142 (84.5%)	26 (15.5%)
Total	440 (75.0%)	147 (25.0%)

Māori roll choice

A consistent finding across the literature – which our results support – is that Māori who also identify as Pākehā are less likely to choose the Māori roll. This finding is well-replicated across adults (e.g. Fitzgerald et al. 2007; Greaves, Osborne, et al. 2017). There are many potential reasons for this result. First, the choice of ethnic identity labels is in itself a political decision (Carter et al. 2009; Kukutai 2004). That is, identifying as Pākehā alongside Māori may be a conscious choice for some, and alongside an acknowledgement of their whakapapa, it may reflect other factors, some of which are related to roll choice. For instance, those who identify as Pākehā alongside Māori are likely to have political values closer to Pākehā (Houkamau and Sibley 2014) or may have a lower level of interest in Māori politics. Second, there are also many myths which might also impact roll choice, such as the myth that one needs to be registered with their Iwi to join the Māori roll. Finally, in relation to roll choice, Māori may feel as though they need to meet a variety of cultural markers to feel like an authentic group member (Barnes et al. 2012; Gillon et al. 2019; Houkamau and Sibley 2010). These results emphasise the need for trusted, reliable and accurate information for rangatahi Māori about the rolls to overcome mistrust and misunderstanding created by the Crown (Atkinson 2003; Fitzgerald et al. 2007).

Feeling comfortable in Māori social surroundings was a predictor of choosing the Māori roll. It may be that these rangatahi spend more time with other Māori or have grown up/live in contexts where they are more exposed to Māori social situations. Indeed, previous research has found that in locations with proportionately more Māori, more Māori are on the Māori roll (Kearney-Parata 2021). Relatedly, our results show that those who knew their Iwi and rated their own knowledge of te reo as good or better were more likely to choose the Māori roll. This reinforces past work that shows the importance of cultural connection for choosing the Māori roll (Greaves, Osborne, et al. 2017), and further shows that te reo knowledge and fluency relates to roll choice (Riambau 2020). Put another way, enrolling on the Māori roll may be another indicator of strong cultural identification as Māori. These results suggest that, for those seeking to increase Māori roll enrolment, there needs to be reinforcement that *all* Māori can join the Māori roll. For those seeking to provide more neutral information, these results suggest that care needs to be taken to not incidentally send the message that Māori who look a certain way or engage in certain cultural behaviours are those who get to choose between rolls (see e.g. Barnes et al. 2012). Diverse Māori need to be represented in campaigns and information resources so that diverse Māori can be made aware that they have this choice. Future research also needs to explore what Māori think about the Māori roll, including generational differences in views.

We also found that agreement with the importance of others respecting Māori status as tangata whenua led to a higher likelihood of choosing the Māori roll. This is similar to Greaves, Osborne, et al.'s (2017) finding that those with higher socio-political consciousness (who believed in Te Tiriti, social justice and standing up for Māori political rights) were more likely to choose the Māori roll. Bargh (2020a) found similar results in a survey of why people make roll choices, but also found that some choose the general roll to vote for an ideologically diverse array of candidates. Roll choice can be motivated by political ideology – we know from past work that Māori roll voters tend to be more supportive of

left-wing parties than right-wing parties (Greaves and Hayward 2020; Greaves, Robertson, et al. 2017). For many years, right-wing parties like National and ACT, alongside New Zealand First, have not stood candidates in the Māori electorates. Recently, National has announced they will stand candidates in the Māori electorates in 2023 (Cooke 2021). It will be interesting to see how the relationship between support for political parties and pro-Māori policies changes as a more ideologically diverse range of candidates contest the Māori electorates.

Finally, participants who agreed that they often feel the presence of their tūpuna/tipuna with them were more likely to opt for the Māori roll. It is likely that rangatahi who agree with this item were raised in/live in contexts strong in mātauranga Māori (Māori ways of knowing/knowledge). Therefore, agreement with this statement, which is grounded solidly in Māori worldviews, indicates that rangatahi who are deeply immersed in mātauranga Māori are more likely to join the Māori roll. Put another way, this item could be a proxy for *strength* of cultural affiliation. We had one unexpected, and not unrelated, finding: past work in adults has found that pride in being Māori relates to being on the Māori roll (Greaves, Osborne, et al. 2017). However, we found no significant result here for pride. The participants in our survey were younger and this may speak to identity development processes still underway (e.g. Phinney 1990), including rangatahi experiences of racism and the resistant/resilient parts of identities still developing (Penehira et al. 2014). However, most (82%) participants in this study were proud to be Maori, indicating results likely reflect low variability in the question. Nevertheless, these results provide a snapshot of which variables relate to rangatahi Māori initially choosing the Māori roll, and largely support research with adults. Future research could explore these identity processes and political views or voter enrolment over time, in both adults and rangatahi.

Not understanding the question

We also explored the relationship between a range of demographics and identity variables and participants who said they did not understand the roll choice question. This option was used as a proxy for basic roll knowledge; an understanding that the question is about voting and that Māori have a choice between rolls. Almost a quarter (23%) of rangatahi surveyed said they did not understand the question, which indicates that a substantial minority of rangatahi Māori (and perhaps Māori more generally) may not have had the opportunity to learn about or engage with enrolment choice, how voting or enrolment works, and why this matters. Indeed, work is needed to see how this finding may replicate in adult populations. Beyond these overall results, we explored the predictors of not understanding the question, which are important to identify where to target knowledge interventions. Taken together, our findings indicate the need for education campaigns: as such, we discuss potential policy interventions alongside the results below. However, it is important to note that whatever may work for one cohort of youth may not work for others in future: work needs to be youth-led and evolve over time (Tawhai 2015).

We found that rangatahi aged 13 and under were far less likely to understand the question (57.5% understood) than the older age groups (77.4%–88.5%). This makes sense: younger rangatahi are further from enfranchisement and enrolment, and therefore are

less likely to be receptive to information they encounter about roll choice. Two current initiatives might enhance rangatahi access to information about the electoral rolls. First, from 2022, changes to the history curriculum to require the teaching of New Zealand history in schools, with the stated intention to encourage students to understand history from a range of perspectives, including those of Māori (Ministry of Education 2021). There is also an initiative underway to enhance civics education in the school curriculum (Education Central 2020). It remains to be seen whether these policies will have a positive impact on rangatahi knowledge of the electoral rolls at a younger age. Future research could also explore potential cohort effects over time by examining generational differences in identity and roll choice.

Rangatahi who had plans for further education were more likely to understand the question, reflecting research which shows those with higher education are more likely to vote (e.g. Vowles 2012), and the idea that some rangatahi Māori may feel actively discouraged by the current system (rather than simple apathy). Past work has heard from rangatahi Māori that they want information directed at them around how the system works, the effects it has for Māori, and delivered in multiple different formats, but that current efforts do not actively reinforce politics' relevance for young Māori (Tawhai 2009). We need to ensure that education about roll choice targets rangatahi across all levels of education and meets the needs of a broad variety of people, without reinforcing inequities based on those who have access to formal education. New Zealand history and the introduction of civics education in schools is not the solution for all. A broad and inclusive approach beyond formal education settings is needed. Future work could explore the best ways to reach different rangatahi with electoral roll information, for instance, whether the best format is through social media, specialised apps, or through influencer/celebrity-based marketing. Other options could specifically reflect tikanga Māori, and explore kanohi-ki-te-kanohi (in person), wānanga events, or other whānau-based approaches. Specific work needs to centre those who move into trades or other roles less reliant on tertiary education, in order to not reinforce inequities in political participation among Māori.

The two findings discussed above relating to younger and less educated rangatahi were in line with our expectations. But we also found that rangatahi who felt comfortable in Māori social situations were more likely to understand the question. This potentially shows that Māori are talking about the Māori roll and politics in Māori social contexts, whether formally or informally. For instance, the 2020 New Zealand Election Study data indicates that there are ethnic group differences in talking about politics: Māori are more likely to talk about politics with a wider range of people, potentially reflecting different social/cultural norms (Vowles et al. 2020). Future work could explore conversations about the Māori roll and where Māori are getting their electoral roll information from, as these results may reinforce that Māori social contexts are a good place to disseminate political information (such as hui on marae; meetings at traditional meeting houses). These results also suggest that those who are not comfortable in Māori social settings may have less knowledge about roll choice, so there needs to be resources to meet the knowledge needs of these rangatahi. It may be that these rangatahi feel 'less' Māori and lean on other social identities; but they need to be considered in the creation of resources or information in order to be able to fully understand roll choice. Finally, it is important to consider that the results for not understanding the question are a subset of

those who were intending to enrol to vote. We did not explore results for those rangatahi at that next level of disenfranchisement – those who had already decided they would not enrol when they reached voting age. Future work could use the Youth19 data to explore electoral disenfranchisement for rangatahi Māori.

Future research directions and limitations

As mentioned, an important strength of this work is that it is not based on a politics survey, but utilises data from a health survey with a high response rate. Furthermore, the sample is representative of the Northern regions of Aotearoa, adding to the robustness of the findings. However, there are several limitations of this paper. Firstly, we used Māori ethnicity instead of Māori descent to identify the population of interest, but descent is the basis for enrolment on the Māori roll (Greaves and Hayward 2020). Thus, our results are limited to those who actively recognise their Māori whakapapa and choose their ethnicity as Māori. Past research has identified that those with Māori ancestry but not ethnicity may be less likely to enrol on the Māori roll (Greaves, Osborne, et al. 2017). Our results, therefore, likely overestimate the willingness of the eligible group to go on the Māori roll. We also know that ethnic identity develops and changes as people age (Houkamau et al. 2021; Phinney 1990), meaning that these results may not be as generalisable to the 18–25 age group: further work may be needed with older rangatahi. Another limitation within the survey was that there was no ‘don’t know’ option. Some of those already enrolled may not remember which roll they are on, others may simply not know which roll they will choose; but this forced choice was necessary to truly capture those who do not understand the question. The regional nature of the sample – although representative of those regions – limits national generalisability as we may be picking up on factors that relate to the specific regions surveyed and the unique political histories of mana whenua, hapū (groups with territorial rights), and Iwi from those regions (Rivera-Rodriguez et al. 2021). The regions sampled also include Auckland, a highly urban area, so the data may overrepresent rangatahi who live away from their hapū or Iwi rohe (region), and who could be less connected to Māori politics (Bargh and Rata 2020).

There is also a value judgement in the premise of this paper: that enrolling to vote is a normative behaviour that we should encourage. There are a multitude of reasons as to why people may not enrol to vote, or may not enrol to vote on the Māori roll. Galicki (2018) interviewed a variety of groups, including Māori, and highlighted that people may not want to give the government their information and may be afraid that the roll will be used against them or for debt collection. Indeed, a body of research shows that Māori may have reservations around engaging with the government, service providers, and researchers, which may be due to fears of safety and not having trusting relationships (Fink et al. 2011; Gibb et al. 2019; Smith 2021). For rangatahi, other forms of political participation, including online, through social media and protest/protection may be more fulfilling; which is something to keep in mind around the interpretation of our results (Waitoa et al. 2015). Nevertheless, our future work will seek to explore which rangatahi – across ethnic groups – are more likely to report willingness to enrol. In terms of the Māori roll, we outlined the various histories of the Māori roll earlier, but in summary, it is not clear why people choose the Māori or general roll, as

there has been little work probing this question beyond correlates in surveys or geographic or electoral roll data (c.f. Bargh 2020a; Kearney-Parata 2021). Future research should explore diverse Māori perspectives in the participants' own words. One of the authors of the current paper has a qualitative survey project underway to do just that: to ask a broad range of Māori why they have chosen the Māori roll or the general roll. Finally, while revising this paper the law was changed: Māori can now change rolls at any time except before a by-election, or General or Local election. Future work will need to monitor how roll choice changes over time given the law changes.

Conclusion

In conclusion, we found that rangatahi who did not also identify as Pākehā, who knew their Iwi, who had good knowledge of te reo, were comfortable in Māori social surroundings, believed in the importance of being recognised as tangata whenua, and who felt the presence of their tīpuna/tūpuna were more likely to opt for the Māori roll; showing that these identity indicators are important for the initial enrolment choice. We also examined the predictors of whether rangatahi said they understood the question: older age, intention to enrol in further education, and feeling comfortable in Māori social surroundings were related to understanding the question. These results build on past work in adults and show the importance of cultural connections for roll choice, but also for understanding different roll types. We hope that these results will be useful for policy-makers and those looking to increase youth political engagement, both in Aotearoa and for other jurisdictions with similar roll types.

Notes

1. Māori descent is the indicator used to determine whether one gets the choice of roll, rather than ethnicity, or Iwi enrolment. This is a rather broad definition of Māori, as many people have whakapapa and may not actively recognise it or identify their ethnicity as Māori. For a discussion see Kukutai (2004) and Greaves and Hayward (2020).
2. As participants could switch between languages, data on the language the survey was completed in was not recorded.

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Data access

As per the Youth19 Rangatahi Smart Survey Data Access Policy and the ethical approval for the study, data reported in this publication is available 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. The data access policy and application information is available at: <https://www.fmhs.auckland.ac.nz/en/faculty/adolescent-health-research-group/collaborations-and-access-to-datasets.html>.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the University of Auckland Human Participants Ethics Committee (#022244) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all individual participants included in the study.

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