CANDIDATES’ ETHNIC BACKGROUNDS AND VOTER CHOICE IN ELECTIONS

by

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Abstract

Do candidates’ ethnic backgrounds matter in elections? More precisely, do they change voters’ perceptions about the candidates, and ultimately change their vote choice? If so, in what way and how much? And perhaps more importantly, why? This doctoral thesis attempts to answer these questions using experimental and observational election surveys in Japan and Canada. In the experiments, I aim to estimate causal effects of candidates’ ethnic minority status on vote choice, test three relevant theories by examining three moderated effects, and propose two causal mechanisms. With a Canadian Federal election survey merged with candidate background data, I examine whether the findings in the experiments hold in real electoral contexts.

This research points to three major findings. First, the estimated average causal effects of candidates’ ethnic minority backgrounds were negative. The experiments suggest an approximately 6 percentage point drop when the ethnicity of the target candidate changes from majority to minority backgrounds. Second, two important voter heterogeneities for this effect are repeatedly found. As implied by the two relevant theories, voters who have negative affect and attitudes towards ethnic minorities, and those who oppose ethnically relevant policies that benefit ethnic minority groups, were much less likely to vote for an ethnic minority candidate. Third, in the experiments, some evidence for a trait or affect-driven mechanism was found, while more consistent support for a relevant policy preference cue mechanism was observed in both countries. The former mechanism highlights the importance of multiple candidate contests in the experiments, as voters improved their candidate impressions and affective reactions to the opponent(s) rather than devaluing the ethnic minority candidate. The latter mechanism identifies specifically what the candidates’ ethnic minority status means to voters. It suggests that some voters do not vote for an ethnic minority candidate because they use ethnicity to estimate the policy preference of the candidate on the ethnically relevant policy dimension. Thus
overall, candidates’ ethnicity influences vote choice at a modest level, but its effect size varies across voters with different affective orientations and attitudes, and so the process is more complex than straightforward.
Preface

This dissertation is based on three original survey experiments in Japan, two original survey experiments, and one election survey, the Canadian Election Study (CES), in Canada. I was involved in data collection for all of the experiments. The relevant ethics review certificates for Chapter 3 (Japan) are H10-02857 and H11-00001, and H08-2305, H11-00123, and H13-02358 for Chapter 4 (Canada), all provided by Behavioural Research Ethics Board.

First, the survey experiment at the Chuo University (Study 1) in Japan is organized and conducted by Professor Kiichiro Arai, while I programmed the survey. Both of us managed the experiment sessions. The other two online survey experiments on eligible Japanese voters (Study 2 and 3) were conducted by Professor Kiichiro Arai and Professor Masaru Kohno as a part of their larger research projects. I provided the protocol of the experiment programs, which were computer-programmed by Professor Kiichiro Arai (Study 2) and a survey company, Nikkei Research (Study 3). In Canada, the first experiment on the UBC students was conducted in the Political Science Subject Pool program directed by Professor Paul Quirk. The Subject Pool program included several other experiments by the UBC researchers. I programmed the entire part of my survey experiment, and managed several experiment sessions. Lastly, I programmed and conducted the second study of the online survey experiment on eligible Canadian voters. The participants were recruited and provided by a survey company, Research Now.

Second on the observational data, I used the CES for the survey part, which is a publicly available dataset, conducted by the Institute for Social Research at York University. The candidate backgrounds data is original, which a team of undergraduate research assistants and I coded using various sources.
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Abbreviations

ACME: Average causal mediation effect
ADE: Average direct effect
ATE: Average treatment effect
BQ: Bloc Quebecois
CERD: The Committee on the Elimination of Racial Discrimination
CES: Canadian Election Study
DK: Don’t know
DPJ: Democratic Party of Japan
FPS: Faculty of Policy Studies
HoC: House of Councillors
HoR: House of Representatives
IIA: Independence of irrelevant alternatives
LDP: Liberal Democratic Party
MIC: Ministry of Internal Affairs and Communications
MIPEX: Migration Integration Policy Index
MC: Members of Congress
MP: Members of Parliament
NDP: New Democratic Party
OLS: Ordinary least squares
PES: Post-election study
SD: Standard deviation
UBC: University of British Columbia
VMCs: Visible minority candidates
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Dedication

To Ms. Joan Fisher,

who kindly supported seven years of my life in graduate school,
and especially, allowed me to cook and sing at two o’clock in the morning.
1 Introduction

As the racial and ethnic backgrounds of citizens grow more diverse in many advanced democracies, citizens more frequently encounter candidates with different ethnic backgrounds in their districts as well. Compared to the rapid increase in the number and share of the ethnic minority population, the growth of ethnic minority political leaders seems slow (Bird, Saalfeld and Wüst 2011). One possible reason for this is that ethnic minority candidates may be suffering an extra disadvantage at the polls, considering their marginalized positions in their society. What is puzzling however, is that existing studies that have examined the effect of candidates' ethnicity show only mixed evidence for such a claim at best. This leads to several questions that this dissertation addresses: does candidates' ethnicity matter in the first place? More specifically, does it change voters' perception of, and choice among candidates? If we do not observe any influence of ethnicity on candidate choice in real elections, despite strong predictions by several theories that explain group relations, why not? Do intervening contextual factors suppress the potential effect? Or do existing studies miss some important features on this question? On the other hand, if we predict a strong effect on voters' perceptions about the candidates and on their vote choice, under what conditions will we observe the influence? Which voters might be more or less likely to be affected? And ultimately, through what kinds of mechanisms do candidates’ ethnic backgrounds influence voters' choices?

The purpose of this thesis is to examine the effect of candidates' ethnicity on voters' perceptions and vote choice, informed by and contributing to theory on this topic. More specifically, by using both survey experiments and observational data in two starkly different settings, Japan and Canada, I aim to estimate the causal effect of minority candidate status on vote choice and I attempt to examine the validity of three theories that can explain this effect and two types of causal mechanisms derived from the theories.
The major findings of this thesis can be summarized in the following:

1. I find a negative effect of candidates' ethnic minority backgrounds on vote choice in survey experiments both in Japan and Canada. The effect size varies across different samples, conditions and countries, but a conservative estimate of overall effect is approximately a 6 percentage point lower probability of voting for the minority candidate. This was not observed in the observational studies.

2. This small average negative effect is in fact the product of aggregating heterogeneous voters. The effect sizes for different types of voters are moderated significantly by two theoretically important variables: the degree of negative affects and attitudes towards ethnic minority groups and the attitudes on ethnically relevant, group-threatening policy. Two moderated effects were repeatedly found across all the studies, which lend very strong support to two theories.

3. In the experiments, a trait or affect-driven causal mechanism is supported to some extent, whereby perceived traits (candidate impressions) and affective reactions to the candidates mediate the effect of candidates' ethnicity. Surprisingly, the observed mediation was not through worsening the perceived traits of or affective reactions to the target candidate whose ethnicity is manipulated, but rather through improving those of the opponent, non-minority candidate(s).

4. An alternative mechanism that posits that candidate ethnicity functions as a specific policy preference heuristic was more robustly supported in the experiments in Japan and Canada. This mechanism is that when voters receive the ethnicity cue, the perceived policy preference distance between the candidate and voters is enlarged, which reduces voters’
likelihood of voting for the ethnic minority candidate.

This thesis contains six chapters. In the next chapter, I start by discussing the substantive importance of studying this topic in political science. Then I provide an overview the major findings of and problems with existing studies, and pull out three theories and two mechanisms to guide the inquiry in the remainder of this thesis. In this chapter’s final section, I also explain the research strategy adopted in the dissertation. Chapters 3 and 4 are empirical tests, where I derive and test several hypotheses from three theories using survey experiment data from Japan and Canada. Chapter 5 is another empirical examination, where I use observational data from the Canadian Federal election of 2008 to see if the patterns observed in the previous two chapters also hold in actual elections. Then in the final chapter I summarize the result and conclude with some broader implications and agendas for future research.
2 Literature review and theories

2.1 Why is studying the effect of candidates' ethnicity on voting important?

Before exploring existing empirical studies on the effect of candidates' ethnicity on voting, I provide two justifications for studying this topic in political science. They are: 1) minority participation in the democratic processes has unique values; and 2) they contribute to better understanding of voters’ capacity in electoral democracy.

2.1.1 Positive implications of electing ethnic minority candidates

The first justification for studying the effect of candidates' ethnicity on voters’ decisions is that electing ethnic minority legislators produces several positive political consequences. There are two pillars to this positive effect. The first argument is that ethnic minority candidates, if elected, are more likely to represent political preferences of ethnic minority citizens. Second, election or even the mere presence of ethnic minority candidates improves the quality of electoral participation of not only the ethnic minority, but also the ethnic majority citizens.

First, studies suggest that the presence or absence of political elites with ethnic minority backgrounds is structurally related to the degree of substantive representation of their political preferences. If representing the voices of minorities has an intrinsic value in democracy (Lijphart 2004), or if “[t]he opposite of representation is exclusion” (Plotke 1997: 19), failure to elect ethnic minority candidates in legislative institutions implies an exclusion of minority interests. Thus in this context, studying causal effects of candidates' ethnicity on citizens' vote choice has important policy implications for electoral democracy.

Although ethnic minority political elites do not necessarily or always represent the policy preferences of
their co-ethnic citizens, according to several studies, they often do so in some specific ways. In Canada for example, both visible minority citizens and Members of Parliament (MPs) tend to be ideologically more liberal, and commonly favor policies to promote immigration intake and multiculturalism (Anderson and Black 2008: 60-61, 64; Black and Hicks 2006b; Black 2002: 361-368). In the US, both African-American voters and Members of Congress (MCs) tend to have more liberal views, and share similar policy preferences on race-related issues such as welfare, education, and racial relation programs, as compared to White counterparts (Lublin 1997: 72-76; Swain 1993: 10-11; Canon 1999: 26-31; 172-180; Whitby 1997: 91-109). These findings suggest that ethnic minority political elites can play an important role in channeling ethnic minority citizens' preferences as agents in electoral democracy.

But the significance of descriptive representation is not limited to representation of ideas. Williams (1998: 75-82) argues that, in addition to its symbolic value, electing ethnic minority elites often functions to compensate for historically unequal group relationships or unfair political conditions for minorities (Williams 1998: 75-82). Others argue that descriptive representation can facilitate better political engagement, trust, and integration of ethnic minority citizens into the democratic process (Mansbridge 1999; Dovi 2002). For example, when ethnic minority political elites share similar experiences as ethnic minority citizens, the minority political elites can send a positive social signal that “they can rule” to the ethnic minority citizens (Mansbridge 1999: 641-642; 648-649). For another instance, it facilitates political elites and citizens of the historically disadvantaged groups to mutually recognize, and through political communication the elites can effectively address otherwise overlooked political concerns (Dovi 2002: 735-737). The same level of political gains may not be achieved by political elites of the majority background. While I believe this logic involves a potential risk of ethnic essentialism, in large part these claims are empirically supported.

Gay (2001: 725-729) showed that African American voters were much more likely to contact their MCs
in their district in the US when the MC has an African American background. Other studies also suggest that electing ethnic minority candidates results in higher political efficacy, efficiency, and turnout of ethnic minority citizens (Bowler, Donovan and Brockington 2003: 108-111; Pantoja and Segura 2003: 448-455; Banducci, Donovan and Karp 2004: 546-551; Herron and Sekhon 2005; Washington 2006; Barreto 2007; Barreto 2010). Moreover, electing ethnic minority politicians has a further positive effect for participation by ethnic majority citizens. On a positive side, Hajnal (2001; 2007) finds that once an African American candidate was elected as a leader in a local election, racial tension in the area is dissipated as liberal White Americans moderate their attitudes and behavior. Once Whites learn that an African American leader is a “fair” politician, they no longer fear or hold racial concerns that African Americans citizens will get preferential treatment. On the other side of the ledger, however, Petrow (2010) proposes “the minimal cue hypothesis” whereby even the mere presence of an African American candidate in an election provokes racialized thinking among White Americans, which in turn leads them to turnout in greater numbers. Although racialized thinking can lead to greater racial tension through some processes, the higher level of political participation and more deliberation on racial issues among all citizens should be considered beneficial for the democracy in general.

2.1.2 Testing citizens' capacity in electoral democracy

The rationale for studying electoral fortune of ethnic minority candidates also derives from concerns about citizens' capacity for electoral democracy. In short, studying the effect of candidates' ethnicity on voting helps us understand the advantages and limits of the use of heuristics in electoral decision making. In a model of traditional liberal representation, the identities of political elites, including their ethnic background, should not matter: as long as political agents can represent ideas or preferences of citizens, it should not matter who delivers public goods. While many citizens would claim that their vote choice is based on policy preferences alone, and is not affected by candidates' ethnicity, might there be
psychological limits on their ability to ignore candidates’ ethnicity? If they are influenced by ethnicity, might they have a “good reason” to do so? To what extent do candidates’ ethnic backgrounds influence citizens’ political psychology and behavior? In a broader research agenda, this speaks to a question of citizens’ capacity of if they can “vote correctly” as they prefer in terms of policy (Lau and Redlawsk 1997; Lau and Redlawsk 2001).

Voting behavior research has focused in recent decades on use of heuristics. Even when citizens do not have enough substantive political knowledge (Converse 1964: 218-224), by using very simple decision rules and some key information, they can make a reasoned vote choice (Popkin 1991: 45-71; Lupia and McCubbins 1998; Lau and Redlawsk 2006). The decision rule can be very simple (Cutler 2002) or based on affective calculus using their own political preference (Sniderman, Brody and Tetlock 1991: 23-24; 93-119). Use of heuristics has a significant advantage for citizens, if it can approximate an informed choice in a “fast and frugal” manner without the cost of collecting and understanding complex political information (for a more general review of behavior using fast and frugal heuristics, see Gigerenzer and Todd 1999: 14-34; Gigerenzer and Brighton 2009).

Heuristics however, do not guarantee accuracy in the quality of decisions as voters using them probably assume (Lau and Redlawsk 2001; Lau and Redlawsk 2006: 249-251; Kuklinski and Quirk 2000): heuristics can lead citizens astray. Furthermore, in some cases the use of specific types of heuristics can facilitate a biased memory search, and drive citizens to reach an invalid conclusion or evaluation as its consequence (Kunda 1990). As Kuklinski and Quirk (2000) point out, the kinds of information available to voters by the media is rarely bias-free or reliable in the first place, and when most voters are “hard-wired” in their cognitive capacity, such information often systematically leads then to false beliefs.
Race or ethnicity is one important and powerful cue that has been shown to matter (Valentino, Hutchings, and White 2002). When candidate ethnicity “tells” voters something about that candidate’s preferences or likely behavior, voters may base their choices on that inference. Because ethnic stereotypes can produce strong hard-wired reactions, studying citizens’ susceptibility to a mere ethnic background information can be a litmus test of their capacity in making “reasoned choice” in electoral democracies.

2.2 Effect of ethnic minority backgrounds on voting--What do we know so far?

In this section, I review the existing literature examining the effect of candidates' ethnicity on vote choice. Before answering the question in this section title, I first introduce an important distinction between two kinds, co-ethnic and cross-ethnic voting, because the answer is contingent on this distinction. A dyad of ethnic backgrounds between candidates and voters is of primary importance in predicting the direction of “ethnic voting”. After I explain that the scope of the inquiry in this dissertation is limited to cross-ethnic voting, I summarize the results of studies that have looked for evidence of this effect as “mixed at best.” In the following section however, I argue that a finding of no average effect misses the heterogeneous nature of this effect. In that section, I point out that a couple of recent studies suggest that voters' affects and attitudes to ethnic minorities are a key variable that moderates the effect. Then in the fourth section, I point out that the effect can also be conditional on the electoral context, most importantly the availability of candidates' partisanship. In the last section, I introduce the idea that the effect of candidates' ethnicity may also be mediated by a process of projecting a stereotypical image of the relevant ethnic minority group on the perceived characteristics of the ethnic minority candidates. Throughout the thesis, I assume an electoral system in which voters can choose one candidate among many, which includes at least one candidate with an ethnic minority background in that society. More specifically, a single member district or the first past the post system is a typical electoral system that provides the following argument.
2.2.1 Effect contingent on the dyad of ethnicity between candidates and voters

This section first introduces a distinction between two types of ethnic voting: co-ethnic and cross-ethnic voting. The ethnic backgrounds in a given candidates-voter dyad must be taken into account because the direction of “ethnic voting” can be opposite. As in the typical local setting in Canada, I assume one ethnic group usually forms a majority of electoral candidacies and voters (ethnic majority). When all the candidates are of the ethnic majority group, ethnic minority voters, which by definition, are a smaller proportion of the electorate, have no choice but to do cross-ethnic voting. Only when an ethnic minority candidate runs in an election, ethnic majority voters and a specific ethnic minority voter with an identical ethnicity as the candidate have a choice of co-ethnic voting or cross-ethnic voting. Below, I begin by reviewing the literature on co-ethnic voting among minorities.

Strong evidence for co-ethnic voting

Social psychology literature suggests that a distinction between an ingroup and outgroup brings about totally different perceptions and evaluations of its members (Tajfel and Turner 1979). Provided that humans favor ingroup members, we can expect that the direction of co-ethnic voting is positive. Observational studies strongly support this expectation. In Canada, two old field surveys by Kamin (1958; 1963) provide comparable evidence. First, Kamin (1958) asked voters in two (English and French Canadian) districts to vote for one among three hypothetical candidates with different family names, which imply either English or French origin backgrounds. There, he found a significant co-ethnic (or co-linguistic) voting, in which subjects supported a candidate that has a family name implying the same linguistic backgrounds as the subjects (English or French). Later, despite a smaller sample size, a strikingly similar result was obtained among Jewish voters (Kamin 1963). This finding is echoed by the early findings of co-ethnic (or co-racial) voting in the US (Wolfinger 1965; Hahn, Klingman and Pachon...
1976), in which African American voters predominantly support an African American candidate. In a related area more recently, similar findings are reported for African Americans and Latino voters: they recorded higher turnout, voted more efficiently, and disproportionately supported minority candidates in districts where a co-ethnic minority candidate ran (Herron and Sekhon 2005; Washington 2006; Barreto 2007; Barreto 2010). A generalized version of this finding is provided by Cutler (2002), who showed that the proximity in nominal sociodemographic identities (gender, language and regional origin) between voters and party leaders made those parties more attractive to those voters in the 1993 and 1997 Canadian Federal elections. Cutler observed this effect even after controlling voters’ partisanship, economic evaluations, and policy preferences. Furthermore, two experimental studies that manipulated and mixed two pictures of a political candidate and research subjects demonstrated that voters prefer a phenotypically similar candidate at a subconscious level (Bailenson, Garland, Iyengar and Yee 2006; Bailenson, Iyengar, Yee and Collins 2008). Despite a rather weaker effect, these studies still find a significant positive effect of facial similarity on overall impression and evaluation, especially when candidates are unfamiliar to the participants.

Table 2.1 summarizes the recent major experimental studies to examine the effect of candidates’ ethnicity on vote choice. In all these experiments, the authors randomly assigned participants into two or more groups, provided some information about hypothetical candidate(s), and asked subjects how they would vote. Typically in these experiments all the information about the candidates are identical except for their ethnic background. Accordingly, the average effect of changing candidates' ethnic background (hereafter noted as the “treatment effect”) on vote choice can be estimated by subtracting the level of support for the otherwise identical candidate in the two groups. The significance of co-ethnic voting is apparent. On the right side of Table 2.1, “Observed/assumed effect type” represents types of dyad that these studies examined. Out of three studies that involve co-ethnic voting (Dunning and Harrison 2010;
Aguilar-Pariente 2010; Brouard and Tiberj 2011), at least two reported a positive effect (ethnic minority voters support a candidate of the same minority backgrounds). Considering that at least five out of seven studies that examined the cross-ethnic dyad clearly failed to report a statistically significant treatment effect, and that many other observational studies support a similar positive effect, the evidence seems rather strong for a positive effect of co-ethnic voting.

**Mixed result at best for negative cross-ethnic voting**

A robust support for a co-ethnic voting seems to underscore the inconclusive findings on the flipside of the coin: cross-ethnic voting. Evidence for negative effects in the context of cross-ethnic voting is quite weak from Table 2.1. This is surprising, since we would expected a “penalty” by the ethnic majority voters against ethnic minority candidates. Brouard and Tiberj (2011) in fact report a positive effect of cross-ethnic voting. In their study, mostly Caucasian White French-origin voters were more likely to vote for a candidate on average, when he is described as a Sub-Saharan African-origin immigrant than when he is described as typical French-origin candidate. In contrast, Street (2014) discovered that the German voters preferred a typical German-origin candidate than a Turkish-origin candidate in 2009 in his experiment. Yet he further investigated the actual 2005 and 2009 Bundestag elections, and could not find the same result. In the latter analysis, he compared the change in the electoral performance of the candidates in between two types of districts: districts where at least one ethnic minority candidate newly entered and replaced an ethnic German predecessor, and the districts where a new ethnic German replaced the old ethnic German predecessor between the 2005 and 2009 elections. This method has an advantage of controlling for the district-specific and temporal-specific factors at the same time. The result was absolutely no evidence of substantive difference in vote share between two elections.

Other observational studies in the US pile on to these null findings. They generally suggest that
candidates' race does not have much impact on vote choice after other politically important variables such as voters' partisanship and ideology are controlled for (Citrin, Green and Sears 1990; Highton 2004; Abrajano, Nagler and Alvarez 2005 and for a more specifically on the extinct “Bradley effect”, see Hopkins 2009). Highton (2004) for example, used exit polls in the 1996 and 1998 House elections in the US and concluded that White voters do not discriminate against African-American candidates. Instead, Highton explains that candidates’ incumbency status and voters’ partisanship and ideology explain their choice. Similarly, Abrajano, Nagler, and Alvarez’s study (2005) compared two local elections, in which the combination of racial (White/Latino) and ideological (liberal/conservative) backgrounds of candidates is oppositely distributed in contrast. They show that White voters decide their vote significantly based on their ideological position and that of the candidates. These findings are in fact consistent with the other studies using aggregate data: they often concluded that ethnic minority candidates suffer from little penalty if any, in real electoral settings (Bullock III 1984; Black and Erickson 2006, but see Matsubayashi and Ueda 2011; Stegmaier, Lewis-Beck and Smets 2013 for a more nuanced effect).

So are we to conclude that in cross-ethnic voting situations, candidates' ethnic backgrounds do not matter at all? If so, then why do minorities continue underrepresented relative to their proportions in the population? While the aforementioned studies suggest that candidates' ethnicity does not change voters' choice on average (i.e. the average treatment effect is zero), this may not hold for all the voters. In other words, specific types of voters may take candidates' ethnicity into consideration in different directions, and the effects may even cancel out. In such a case, lumping together the in-fact heterogeneous voters yields an aggregation effect. As the review in the following section suggests, candidates’ ethnic backgrounds can have important moderated effect, an effect moderated by voters affect and attitudes towards ethnic minorities.
Another important possibility is that the effect of candidates' ethnicity depends on an electoral condition. Do certain contexts amplify voters’ response to ethnic minority candidates? Or do specific properties of elections mitigate or boost the treatment effect? Identifying conditions in which voters take candidates' ethnicity into consideration should contribute to better understanding of and theorizing the effect of candidates' ethnicity in voting.

2.2.2 An aggregation effect? Moderated effect of ethnic attitudes

If no average treatment effect is observed by aggregating heterogeneous voters, the primary suspect is attitudes to ethnic minority groups. Recent studies on the 2008 Presidential election point to this issue when they highlight the role of race in support for Barack Obama, particularly among White Americans. Quite a number of studies suggest that Barack Obama suffered from some electoral penalty by White voters with negative racial affects and attitudes—stereotypes, prejudice, and anxiety about African Americans (Lewis-Beck and Tien 2009; Parker, Sawyer and Towler 2009; Lewis-Beck, Tien and Nadeau 2010; Piston 2010; Segura and Valenzuela 2010; Jackman and Vavreck 2010; Tesler and Sears 2010; Schaffner 2011; Block Jr. 2011; Highton 2011; Kam and Kinder 2012). Piston (2010) for example, suggests that an expressive negative stereotype reduced the chance of voting for the Democrat only in the 2008 Presidential election, but not in any years between 1992 and 2004. The effect size is substantively large in 2008, when the coefficient is comparable to that of party identification. When the level of negative stereotype against Black increases from the “neutral” point (no difference between Blacks and Whites in the rating) to the middle point of the prejudice scale, between which about a half of White subjects are located, the probability of voting for Obama drops by 21 points (440). Even

1 This variable is measured by the relative difference in the subjects' rating of Black and Whites being hardworking and intelligent.

2 In other words, the racial stereotype index mattered in predicting vote only for Obama in the 2008 election, not for Clinton (in the 1992 and 1996 elections), Al Gore (2000) or Kerry (2004). This is so after controlling for other relevant variables to predict vote choice.
though the effect is limited to a portion of White voters, this is a significantly large effect. Others report that such an effect was apparent in the Democratic primary election, too. Tesler and Sears (2010) assessed that the 2008 Democratic primaries had candidates without much difference in policy positions, so that it was easier for liberals to express their racial resentment. They concluded that “positive and negative effects of race-based voting [...] cancel[led] each other out” (51). Jackman and Vavreck (2010) showed that voters with a higher racial resentment score (those with more negative, or less lenient views about the social situations of African Americans) were much less likely to support Obama over Hilary Clinton. They also suggested that these voters were less likely to switch to support Obama, after his victory in the Democratic primary election became apparent. Aside from the US Presidential election, studies of local elections in which an African American candidate competes with a White counterpart, suggest that White voters’ racial attitude was an as strong predictor of their vote choice as partisanship and ideological position (Citrin, Green and Sears 1990; Knuckey and Orey 2000; Kaufmann 2004).

Accordingly, reporting a negligible average treatment effect without accounting for an effect moderated by racial attitudes is to miss much of what is going on.

A moderated effect like this is also reported in two studies in Table 2.1. In Street's experiment (2014: 5), no difference was observed in the level of support for a German-origin versus a Turkish-origin candidate among those people who did not feel threatened by Muslims in the country. Yet those who do feel threatened are less likely to vote for a Turkish candidate by about 20 points. Likewise, in spite of a positive bonus for a Sub-Saharan African candidate in Brouard and Tiberj's study (2011), they showed that the level of support for the ethnic minority candidate significantly eroded by 10 to 20 points moving from the least prejudiced to the most prejudiced subjects, while such an effect was not observed for the French-origin candidate. These two experimental studies in German and France strongly support the idea that this general pattern travels across countries.
Together with Moser (2008) and Ruedin (2009), who suggest that the degree of social acceptance of the minorities in a given society, rather than the electoral system, determines the level of ethnic minority representation, the prevalence of this interaction effect provides sufficient motivation to test the following generalizable hypothesis: the effect of candidates’ ethnic background on vote choice depends on voters' level of negative affect or attitude towards the minority. If this is true, the null finding of the average treatment effect in many studies can be attributed to an aggregation effect, in which the moderated effect has been cancelled out by the opposing sides of the racial attitudes or affect variables.

### 2.2.3 Inhibitory effect of partisan context?

When the effect is strongly predicted yet not observed, another possibility is that such an effect is inhibited by a certain condition. Partisanship is one of the most studied variables in the voting behavior literature, and abundant works suggest that it independently influences vote choice (Campbell, et al. 1960; Miller and Shanks 1996; Weisberg 2008; for a general review, see Johnston 2006), voters' perceptions of candidates' issue positions (Conover and Feldman 1989; Rahn 1993) and even their own policy orientations (Cohen 2003; Kam 2005; Goren, Federico and Kittilson 2009). If partisan label is one of the most powerful, important pieces of information for voters in deciding their vote, voters may not care about candidates’ ethnicity.

Kam's experiment (2007) highlights the power of partisan information to cancel the ethnic cue most explicitly, when she randomly assigned participants either to a partisan or non-partisan context. In one group, participants saw a candidates with a Latino family name “Moreno” with a party name, while

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3 This study aims to examine non-Hispanic White voters’ explicit and implicit stereotypes against Hispanics, the latter being measured by sub-conscious priming. Participants were asked to assume a hypothetical election for the State Supreme Court Judge, and asked to vote for one from three candidates. Unfortunately, this study does not have a variation in candidates’ ethnicities, when all participants in all the experimental groups saw three candidates with a fixed set of ethnic backgrounds (Kam 2007).
others saw Moreno without partisan affiliation. She finds that stereotypes against Hispanics had a substantive negative impact on voting for Moreno, but only when the party cue is absent.\(^4\) Together with some evidence of other experimental studies in a non-partisan context In Table 2.1 such as Terkildsen (1993) and Street (2014), as well as no *average* treatment effect in observational studies, Kam's study leads me to the following hypothesis: if any such effect exists, the effect of candidates' ethnicity on vote choice is significantly mitigated by the presence of partisan information.

Other conditions that limit or facilitate the effect of candidates' ethnicity are not clear from the existing literature, but the same logic can be extended to candidates' policy orientations or simply ideology. In Table 2.1, Weaver (2012) presented and randomly assigned different ideological standpoints for candidates (liberal or conservative policy positions on various issues in their “platform”).\(^5\) She reported that there was no significant interaction effect between the platform type and candidates' race on vote choice. This may be because the information in the platforms acted as partisan information, whereby the candidates' policy statement, either liberal or conservative, may have signaled that they were either a Democrat or Republican candidate. In contrast, Dunning and Harrison (2010) provided participants with ample policy information using a videotaped image played by an actor, and found a modestly positive co-ethnic, or negative cross-ethnic vote intention. Most of the policy statements they used however, sounded like valence rather than position issues, and there was no real variation in candidates' policy positions.\(^6\) Unlike Weaver's study (2012), candidates' policy statements in Dunning and Harrison (2010)...

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\(^4\) Strictly speaking again, because an experiment group without a Latino candidate is absent, this study does not allow to observe a possible interaction effect of candidates' ethnic background and partisan information. A reasonable inference can be made however, that partisan context offsets the possible effect candidate's ethnicity on vote choice.

\(^5\) All the policy information was adopted from the website of real candidates during the campaign, very likely those of real Democrats and Republicans.

\(^6\) Due to the setup of the experiment and the nature of their sample, their result can be interpreted as the evidence for both co-ethnic and cross-ethnic voting, because many different combinations of ethnic origins were tested. The candidate's speech promises providing greater employment opportunities, better
may not have had a strong signal enough to make voters infer candidates' partisanship, or their positions were not clear enough to inhibit the effect of candidate's ethnicity.

2.2.4 Projections of images of ethnic minority?

Other politically relevant information may facilitate or inhibit the effect of candidates' ethnicity on voting indirectly. More specifically, several studies suggest that voters tend to project their stereotypical image of an ethnic minority group to candidates, when the candidates have the same background. In other words, they unconsciously infer candidates' characters from their stereotype about people from that ethnic background. Although the projected image may not directly influence vote choice, it can do so indirectly. Berinsky and Mendelberg (2005) and Berinsky et al. (2011) manipulated negative information about both candidates themselves and candidates' ethnicity, and found that information on a valence issue about ethnic minority candidates shifted the perceived ideological position of the candidates to the liberal direction. This could, they contend, electorally penalize ethnic minority candidates in some situations.

First, in Berinsky and Mendelberg’s study (2005), a hypothetical candidate in a US election was described either as liberal or conservative on the healthcare issue (randomly assigned), and his ethnic (or religious) background was randomly assigned to be non-ethnic (non-religious) or Jewish as well. On top of these manipulations, they further added another experimental group that encountered a description of the Jewish candidate as “shady”, engaging in some questionable business practices. Their findings are twofold: first, subjects in the “shady” Jewish candidate condition rated him more liberal than in a control condition—a not-shady, non-Jewish candidate. Then by rating the candidate more liberal the subjects in access to education, greater infrastructure and resources, more economic development, etc. (Dunning and Harrison 2010: supplementary document). This was deliberately designed to distract, because the main purpose of their research was to investigate the effect of cross-pressure of candidates' ethnicity and cousinage (“joking kinship” based on a certain types of surnames, Dunning and Harrison 2010: 2).
the “shady” Jewish candidate condition indirectly reduced (or in another case increased) positive feelings towards the candidate. In their words, a “shady” Jewish candidate received an “extra penalty” from some participants, because the manipulation activated and translated voters’ negative stereotypes about Jews as “shady” to their political stereotypes about Jews as liberal. Similarly, Berinsky et al. (2011) manipulated the contents of the news that participants read (neutral toned story or a hypothetical sex scandal) about a Democratic candidate (Obama or John Edwards) in the Presidential primary in 2007. Compared to the control condition in which participants saw the news that the Democratic primary election was heating up, those in an experimental condition saw either Obama or Edwards accused of infidelity. The results show that in the treatment group, Obama’s ideological position was rated more liberal than Edwards’ position, and that Obama was punished more than Edwards by the scandal (Obama's feeling thermometer drop significantly more than Edwards'). These studies imply that ethnic minority candidates would be penalized more for a negative event or media description, when it coincides with the widespread negative stereotypes in the society.

Last but not least, voters in the US seem to perceive ethnic minority candidates (typically African American, but others) as being more ideologically liberal (Moskowitz and Stroh 1994; Sigelman, et al. 1995; McDermott 1998; Mendelberg 2001, 2008; Weaver 2012). Depending on the distribution of the ideological positions of voters, this can influence their vote choice indirectly. Yet generally we know little about exactly what information voters infer from candidates' ethnicity, and under which conditions the possible effects on vote choice are facilitated or inhibited.

2.3 What problems do the existing studies have? What do we not know?

In this section, I point out three types of problems with the existing studies as a whole. The left column of Table 2.2 summarizes these problems.
2.3.1 Theoretical examinations are missing

The previous section (Section 2.2) suggests that an average treatment effect of candidates' ethnicity is not observed in many studies, but that this can be because the effect is moderated or inhibited by some important variables. The first major problem with the existing studies however, is that few studies identified a moderated variable or a condition or explain why and under what condition the effect is not observed. Even a small number of studies that did often rely on one theoretical explanation: it is rare to put several possible theoretical explanations in competition, and comparatively examine their results. It is rare to see a survey experiment that is specifically designed to examine a possible inhibition effect. As far as I know, Kam (2007) is the only study that theoretically examined an inhibition effect of partisan context in relation to the effect of candidates' ethnicity. Furthermore, to the best of my knowledge, no studies have examined causal mechanisms, or by what process candidates' ethnicity changes vote choice. Thus, in short, existing studies often lack theoretically-driven inquiry into why and how the effect is or is not observed, under what conditions (the first problem in Table 2.2).

2.3.2 Threats to the measurement of the key variables

A single-candidate experiment design

The second problem with many experimental studies lies in their design. Often, they present a single candidate as experimental stimuli and ask participants about candidate impression and evaluation, and if they want to vote for that candidate. Such studies end up suffering from a threat to the measurement validity of the dependent variable. When the crucial research question in this scholarship is whether candidates' ethnicity influences vote choice, a single candidate design does not validly measure this concept directly. A middle column in Table 2.1, “N in the contest”, shows that four studies (Terkildsen 1993; Dunning and Harrison 2010; Brouard and Tiberj 2011; Street 2014) presented only a single
candidate to participants but randomly assigned them to a different ethnicity condition. In these studies, after introducing the candidate, researchers typically ask a likelihood of voting for the candidate they saw, which is their key dependent variable. In one sense, the analysis of such a propensity to vote for the candidate should be certainly helpful in understanding the effect on vote choice. Nonetheless, the likelihood of voting for a candidate without comparison is an elusive concept, when the central concern is their vote choice. In other words, likelihood of voting is conceptually invalid to measure an act of voting for one candidate over the others. Without any competitor(s), mere likelihood may just measure a vote of confidence for that candidate. For example, Street (2014: 3) asks participants, “[c]ould you imagine voting for [candidate name], if [she/he] were to run in your district?” In response to this question, some participants may just pay lip service by just answering that they can “imagine” voting for an ethnic minority candidate. Yet in a more realistic electoral context with the presence of other comparable candidates, the participants may not vote for the former (an ethnic minority candidate) despite their answer in a likely-to-vote question.

Relevant policy implications of candidate's ethnicity are not identified or properly measured

Third, many existing studies fail to identify clearly, measure validly, and use consciously what they assume candidates’ ethnicity signals to voters, particularly perceived policy preferences of the candidates. In other words, they often suffer threats to the measurement of key independent variables. For example, McDermott (1998: 901) explicitly hypothesized that an African American candidate is “more concerned with racial issues than white candidates”, because “a black candidate would be more committed to issues of racial equality than would a white candidate.” While this theoretical reasoning sounds correct, she tested this hypothesis by a more global variable of perceived ideological position of the candidates, comparing the two races. The problem with this measurement is that the perceived ideological position contains not-necessarily-racial policy issues, such as welfare distribution, which should not be allowed
to contaminate a treatment effect or mechanism. Similarly, Sigelman et al. (1995: 255, 257) measured the perceived likelihood of “help[ing] end discrimination against minority groups”, but this was lumped together with other variables such as “be fair to all Americans” to compose an index of “perceived compassion.”

It is unfortunate that they did not report or examine whether the perceived position of the candidates on a specific policy position varies across racial/ethnic groups, because this may reveal more about the nuanced meanings of racial/ethnic cues. Other experimental studies weakly identify what the candidates' ethnicity may imply, or on what policy dimension voters' perceptions of race or ethnicity may matter.

This problem can be summarized as a failure to measure properly and validly the important mediator variable of perceived policy preferences on an ethnicity-related issue, as described in the middle of the bottom row in Table 2.2.

### 2.3.3 Selection bias in observational studies

Finally, observational studies using actual election results or election surveys inevitably suffer from the natural or strategic selection bias caused by the political process and opportunity structure (King, Keohane and Verba 1994: 135). The problem here is that few studies address or take this issue seriously. Ethnic minority candidates may choose to run in a district where many co-ethnic or other minority voters reside in order to increase their chance of winning. Typically, co-ethnic minorities and voters living in the same district may be generally more likely to support ethnic minority candidates than voters in an ethnically homogeneous district. Alternatively, parties and party leaders may have some ethnic bias, and they place new ethnic minority candidates in a district in which the prospect of winning the election could be captured to influence vote choice the most. Sigelman et al. (1995) actually found a statistically significant differences in the level of a “compassion” index across three racial backgrounds (“Anglo”, “Hispanic” and “Black”), which they report had a positive impact on vote choice.
is slim anyway (Kulich, Ryan and Haslam 2014). In this case, the chance of winning is biased towards a negative.

For instance, Highton (2004: 6) examined individual White voters' choice with an election survey in the US, using White Americans' voting in districts without any African American candidate as a baseline comparison. This is inevitable, because it is “impossible to observe counterfactual situations, and, therefore, creating other kinds of ‘controlled’ comparisons is necessary” (3). However, the result of such an analysis would be accurate only when this assumption of controlled comparison holds: the potential propensity of White voters’ support for an African American candidate in such districts is the same as the observed propensity in the districts where an African American candidate actually ran. If this assumption is violated, his estimate of the causal effect of ethnicity on vote choice is biased. In some cases where an African American candidate selectively choose a racially diverse district where they expect more votes, the result of the analysis suffers from a positive bias for African American candidates, suggesting no or little racial penalty observed, as Highton concludes. This problem is serious, especially when the estimated effect size is very small, simply because it is sensitive to any bias.

Another aspect of this selection bias problem is that potential candidates of certain quality may select their party strategically. If ethnic minority candidates tend to affiliate with a specific party with more liberal policies, again it is impossible to isolate the effect of candidates' ethnicity from partisanship, ideology, and other important features of candidates in observational studies. For instance in the recent US Congressional and Senate elections, about 80% of African American candidates were a Democrat, as were two thirds of Latino candidates (Fraga 2013; Washington 2006). Under such political contexts as in the US, voters may instantly imagine that ethnic minority candidates are liberal or Democrat. Voters can simply infer this from the general context.
2.4 Which theories are tested to explain the effect? What mechanism is at work?

While it is intuitive to expect a negative effect in cross-ethnic voting, several theoretical explanations are possible. To address the lack of consensus on psychological-theoretical implications of work in this field, I review, summarize and categorize three theoretical accounts and two causal mechanism for why and how candidates' ethnic backgrounds change voters' choice in this section. First, I introduce social identity theory. This theory is suitable to explain co-ethnic voting, but I argue that it can in fact be used to explain cross-ethnic voting. Then I derive two possible causal mechanisms at work from two closely related theories, to explain when candidates' ethnicity influences vote choice. The second theory is a summarized theory of negative affect and attitudes, and from this I derive an affect-driven or trait-driven mechanism. Finally, I borrow the realistic group conflict theory to theorize an alternative mechanism of candidate's ethnic background as a relevant policy preference cue.

2.4.1 Social identity theory to explain reluctant cross-ethnic voting

Co-ethnic voting can be viewed as a phenomena of choice homophily. “Homophily” is the idea that people with similar sociodemographic characteristics have natural tendency to group together, and “choice homophily” is its subcategory, the result of voluntary or preferred choice of individuals (McPherson and Smith-Lovin 1987; McPherson, Smith-Loving and Cook 2001). Humans are predisposed to favor someone alike, because they tend to assume that the others of the same group have similar attitudes to themselves, and others with similar attitudes are perceived more attractive (Byrne and Wong 1962; Byrne 1969: 48-50). Such a process can occur even at a subconscious level on trivial subjects.⁸

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⁸ For example, people express positive affective reactions to the same numbers as their date of birth, or even the first letter of their own name (Zajonic 1968; Nuttin 1987; Kitayama and Karasawa 1997).
A more group-centric, theoretical explanation is provided by social identity theory. This theory proposes that human brains are hard-wired to favor ingroup members over outgroup members, even when a group distinction is trivial (Tajfel and Turner 1979; Tajfel 1982; Hogg and Abrams 1988). This is considered to be the result of human evolution, when humans probably had a better pay-off by helping ingroup members against other groups in a long run. Accordingly, the members of the same ethnic group believe that they share common experiences, history, interests, institutions, culture, and “fate”, even though there may be little factual basis to these beliefs (Cornell and Hartmann 2007: 89-95).

Social identity theory, in short, can explain co-ethnic voting as the result of ingroup favoritism or homophilic tendency (Sigelman and Sigelman 1982). In keeping with this logic, social identity theory can actually be applied to cross-ethnic voting: when voters of an ethnic majority group see an ethnic minority candidate and a co-ethnic candidate, they may just merely be engaged in a co-ethnic voting to support their ingroup member. That is to say, ethnic majority members may not actively downgrade the ethnic minority candidate (discussed below). If this theory holds, then ethnic majority citizens with a stronger ethnic identity should be less likely to vote for an ethnic minority candidate, and that those with a weakest ethnic identity should not be more likely to support the minority candidate. This is because the theory predicts co-ethnic voting only as a function of ingroup favoritism.

2.4.2 A negative affect-driven or trait-driven mechanism

In contrast to the explanation derived from social identity theory, most studies in the previous sections assume some penalty for ethnic minority candidates in cross-ethnic voting. Most particularly, the possibility of an effect of candidate's ethnicity moderated by voters' ethnic attitudes implies that prejudice and negative stereotypes about the ethnic minorities prevents voters from supporting the minority candidate. Although several important differences exist in conceptualizing racism, prejudice
and negative stereotypes (see Forbes 1997; Sears, Hetts, Sidanius and Bobo 2000; and Huddy and Feldman 2009 for a detailed review), here I simplify them to one cluster of explanations that negative affect or attitudes about a candidate's ethnicity are translated to a reluctance to support the candidate. So, albeit with some variation in concepts and their measurement—overt racism, racial/ethnic resentment, negative stereotypes about racial and ethnic minorities, colder feeling or anxiety—many studies suggest that voters with higher level of negative affect or impression are less likely to vote for a ethnic minority candidate.

While this theory is clear, its mechanism is a black box. To the best of my knowledge, there is so far no study that proposes and tests a causal process in which those with negative affect or attitudes about ethnic minorities vote against an ethnic minority candidate. Perhaps, this is because many voters may directly and automatically transfer their negative affects to their vote choice without much intermediate steps (Ladd and Lenz 2008). Here however, based on work in voting behavior, I specify two possible, similar mechanisms for this effect: an affect-driven mechanism and a trait-driven mechanism. I will theorize the affect-driven mechanism first.

Affective intelligence theory (Marcus, Neuman & MacKuen 2000; Mackuen, Marcus, Neuman, and Keele 2007) argues that a voters’ level of anxiety plays an important role in their processing of election information. This theory contends that a higher level of anxiety leads voters to seek more information (e.g. policy orientations) for their vote decision, which lead them to modify their habitual voting pattern. But even before seeking further information, as I discussed above, if a candidate's ethnic minority background makes voters more anxious about the candidate, they may well just directly transfer such an affect to their impression of candidates, or to their vote choice (Ladd and Lenz 2008; Ladd and Lenz 2011). In other words, given the negative affect (anxiousness) derived from the candidate's ethnic background, a negative impression of candidates can be automatically formed, which drives them to
express negative responses to the candidate (not voting for the ethnic minority candidate) as its consequence (Stephan, Stephan and Gudykunst 1999; Valentino, Hutchings and White 2002; Brader, Valentino and Suhay 2008).

I claim that there is a good reason why we can skip the information search process, but instead assume a direct transfer from affect to cognitions or even behavior (vote choice). Even when anxious voters try to carefully seek further information, their information processing can be biased towards confirming any negative factors they can find about the candidate, if they hold a negative affect against the candidate. In other words, such voters are likely to engage in motivated reasoning that they “must have a good reason” to reject the ethnic minority candidate (Kunda 1990; Taber and Lodge 2006; Erisen, Lodge, and Taber 2012). As the “hot cognition” hypothesis contends, the initial affective arousal is so powerful and automatic that voters, instantly and often unconsciously, activate their affective memories about political objects they face (Lodge and Taber 2005; Cassino and Lodge 2007). A number of social psychological studies suggest that latent group attitudes, especially stereotypes and negative prejudice against racial and ethnic groups, are often activated automatically (Devine 1989; Bargh and Chartrand 1999; Eberhardt, Goff, Purdie and Davies 2004; Devos and Banaji 2005). The consequence of such a biased information search is rather obvious. Thus, it would not be surprising if voters with negative affect toward ethnic minorities would automatically and instantly feel anxious about an ethnic minority candidate, which would motivates them to process information in such a way as to construct a negative impression and evaluation of the candidate.

Combining these theories accordingly, I can summarize one causal mechanism in the following way. A candidate’s ethnic minority background first triggers a higher level of anxiety about her/him among some voters. This anxiety leads those voters to be engaged in a biased information search, which would construct an overall negative impression of the candidate. Then the higher anxiety and/or overall
impression of the candidate about candidates should lower the propensity to support the ethnic minority candidate. How anxious voters would feel about candidate, or how negatively they judge the candidate should depend on their affect and attitudes about the relevant ethnic minority groups. If they like or feel affinity towards the ethnic minority, they should not feel anxious about the candidate of that background. As the matter of convenience, I call this mediation an affect-driven or trait-driven mechanism.

2.4.3 A relevant policy preference cue mechanism

An alternative mechanism can be derived by considering the ethnic background as a policy preference heuristic. To understand this, it is useful to draw on realistic group conflict theory. The theory predicts the same negative response to an ethnic minority candidate by a slightly different logic from the theories of prejudice. It emphasizes the role of the perceived threat to the majority groups in terms of status, position and resources (Blumer 1958; Bobo 1999; Bobo 2000). In the context of cross-ethnic voting, the realistic group conflict theory explains that the ethnic majority voters who feel some threat to their own group by ethnic minorities would be less likely to vote for an ethnic minority candidate, because they believe that electing the candidate will result in losing some group-based interests. There is one crucial assumption here: voters must presume that the ethnic minority candidate will affect policy in such a way as to conflict with the interests of the ethnic majority group. To simplify this notion: these voters would believe that an ethnic minority candidate will support policies that only benefit “their” ethnic minority group at the cost of “our” ethnic group members. Such perceived group threat can certainly be driven or fueled by negative affect and attitude towards ethnic minorities. While distinguishing two theories is difficult, it is unreasonable to entirely reject this possibility.

A large body of literature on use of heuristics backs up such an assumption. In considering which candidate brings the best policy outcomes or benefits to citizens, they use various heuristics (Lupia
1994), but among others, socio-demographic backgrounds would be the “simplest” heuristic for all voters to guess parties’ or candidates’ policy preferences (Popkin 1991; MacDermott 1998; Cutler 2002). The well-known economic theory of rational voter behavior, which emphasizes policy benefits and utility, predicts that voters support a candidate or party whose policy preferences are closest to the voter’s own (Downs 1957; Hinch and Enelow 1984; Merrill and Grofman 1999). Despite strong influences of partisan and other group-based habits in voting, many voters appear to take into account potential policy benefits and compare the utility of the possible electoral outcomes, and this affects their vote choice (Kedar 2009).

What policy preferences might voters infer from the candidate's ethnic background? Several studies in the US suggest that White voters in general perceive ethnic minority (African American or Jewish) candidates being more liberal (Moskowitz and Stroh 1994; Sigelman, et al. 1995; McDermott 1998; Mendelberg 2001, 2008; Berinsky and Mendelberg 2005; Weaver 2012). Yet, “liberal” may be too broad. Considering the realistic group conflict theory, one can reasonably expect that voters infer an ethnic minority candidate's policy preference on a specific issue from her/his ethnicity, when they imagine that the candidate prefers benefiting his or her own ethnic groups at the cost of their own ethnic groups. Kaufmann's study (2004) points to this idea, and suggests that some ethnic minority candidates often signaled group-based preferences in the US. What a specific policy issue would be depends on the social context. In the US case for example, a candidate's African American background may make voters to infer that the candidate supports an affirmative action policy. An immigration policy may be a more relevant policy issues for a Latino candidate, on the other hand.

When voters use this kind of heuristic to guess candidates' specific policy preferences, I expect that they

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9 Some studies contends though, that use of such cues may depend on the degree of cognitive sophistication (Sniderman, Brody and Tetlock 1991; Mastubayashi and Ueda 2011).
revise their mental map of the distance between their own policy preference and that of the candidate. Thus by shifting the perceived policy preferences of the candidate on an *ethnicity-related issue*, voters who oppose such a policy stance based on group interests must see a larger distance between their policy preference point and that of the ethnic minority candidate. This process is illustrated in Figure 2.1. The upper part of the figure illustrates a mental map of policy space when a candidate is from the ethnic majority, while the bottom part illustrates the case of an ethnic minority candidate. Let us assume that the relevant policy is public assistance for the preservation of ethnic minority culture (e.g. the Multiculturalism Program in Canada), and that the candidate's ethnic minority status signals that the candidate supports this public assistance, *regardless of his/her actual preference*. The distance on this policy dimension is enlarged for a hypothetical voter #1, who opposes public assistance than for another hypothetical voter #2, who supports it, when the perceived position of the candidate changes from the middle point (above) to the right (bottom) in the direction of supporting the policy. Following a simple policy proximity model, voter #1 should be predicted to be less likely to vote for an ethnic minority candidate, because of her group-based policy preferences. On the other hand, some voters like #2 should not be so much influenced by the candidate's ethnic background, because shift in the perceived policy preference of the candidate minimizes the distance of the two preference points.

Thus I summarize an alternative causal mechanism as the following: a candidate's ethnic minority background functions as a heuristic by which voters infer the candidate's policy preference on a *specific*, ethnicity-related issue. By shifting the perceived policy preference point of the ethnic minority candidates compared to the case of a candidate of the ethnic majority, those who opposes policies that benefit ethnic minorities out of their group-based interests, see a larger distance in policy preference points between a candidate and the voter. The result is that they are less likely to vote for the ethnic minority candidate. This causal mechanism, driven by the heuristics on policy preference, can be called
a relevant policy preference cue mechanism.

To sum up, I have introduced three different explanations for a possible electoral penalty in cross-ethnic voting. Social identity theory may explain the lower level of support of an ethnic minority candidate by ethnic majority citizens, by the same logic as for co-ethnic voting from ingroup favoritism. Then to advance the study further, I proposed two causal mechanisms to be examined. For the first one, I summarized the theories of prejudice and negative stereotypes to argue that voters with negative affect or attitudes about ethnic minority groups are less likely to vote for an ethnic minority candidate. Then I derived an affect-driven or trait-driven mechanism to explain how this can occur. Alternatively, I relied on the realistic group conflict theory to elucidate the importance of group-based policy benefits for individual voters of the majority background and I called this a relevant policy preference cue mechanism.

2.5 What research strategies are adopted to overcome the weaknesses of the existing studies?

This thesis reports one observational study in Canada and several survey experiments in Canada and Japan. In this section, I discuss several advantages of the experiments. In these survey experiments I present two or three hypothetical candidates with short biographical and policy information with a picture. Then participants are asked their impressions of the candidates, and their (hypothetical) vote intention. Most importantly, in one experimental group participants see one of the ethnic minority candidates is explicitly referred to, and signaled as an ethnic minority candidate, while in the other group, all the candidates are of the “typical” ethnic majority group. The groups of candidates are randomly assigned to participants. In addition to this randomization, 1) biography and policy statements as well as 2) partisan context (whether the candidates' party affiliation is available or not) are independently
randomly assigned. The details of the contents are discussed in Chapter 3 and 4 respectively, and in this section, I explain how several design strategies are deployed to overcome the weaknesses of the existing studies identified in Section 2.3. These strategies are summarized in the right column of Table 2.2.

2.5.1 **Measuring the relevant concepts implied by three theories and two mechanisms**

Because the existing studies often fail to test different theories or compare their explanatory power, as I argued in Section 2.4, this study examines three theories through the analysis of three moderated effects as well as an inhibition effect of partisanship by random assignment of partisanship. In this section, I introduce relevant variables that validly measure the concepts suggested by the theory, and provide justifications. First, to test the social identity theory that the lower support for an ethnic minority candidate among the ethnic majority voters derives from a positive co-ethnic voting, I measure the strength of ingroup ethnic identity by using the Multigroup Ethnic Identity Measure. This is one of the standard measures of the social identity which is specifically designed to capture the strength of ethnic identity (Phinney 1992; Phinney and Ong 2007).

Second, to test the effect moderated by the negative affects and attitudes to the ethnic minority groups, I use the level of general trust in the members of the relevant ethnic minority group, to which the hypothetical candidate is described to belong to in the experiment. This trust measure has at least two advantages. First, this works better than the often-used racism scales, because it can directly capture the level of negative affects towards the ethnic group without confounding with voters' ideology (Huddy and Feldman 2009). Second, unlike in the typical measurement of negative stereotypes, the trust measure is more comparable and broadly applicable to any groups, because this does not depend on the specific image or characteristics of ethnic groups. In other words, the trust measure can capture a basic, general propensity of favorability. Then in testing the affect or trait-driven mechanism, I use the level of anxiety...
and hope for the candidate, as the affective intelligence theory suggests (Marcus, Neuman & MacKuen 2000). Similarly, to measure candidate impressions, I use four variables that capture the perceptions of candidates' competence, integrity, leadership, and compassion (Kinder 1986). These are used as mediating variables.

Finally to test the realistic group conflict theory and relevant policy preference cue mechanism, I measure attitudes on an ethnicity-related policy both of voters and candidates. Because the theory suggests that what matters is the perceptions, I measure voters’ perceptions of the candidates’ likelihood of supporting a relevant policy. If the lower support for an ethnic minority candidate derives from realistic concerns over policy benefits, as the theory suggests, those who oppose such a policy are predicted to be less likely to vote for the candidate. Further, if the relevant policy preference cue mechanism is operating, then voters should first perceive that the candidate would be more likely to support the policy that benefits the ethnic minority group. What policy makes it “relevant” to the ethnic group depends on the social context. For an experiment in Japan, I use the recently debated issue of local suffrage for permanent residents (discussed more in Chapter 3). In Canada, I use the policy of public funding for preserving ethnic minority culture. Both policies explicitly indicate that they mainly benefit the ethnic minority groups, and they could be perceived as a threat to the position or resources of the ethnic majority group for some people. In addition to this, I also ask the perceived likelihood of supporting policies that are not directly related to ethnic issues, but are addressed in the candidates' policy statements. This design allows to conduct a placebo test of whether participants change their perceived policy preferences of the candidates only on the ethnicity-related issue.

2.5.2 Random assignment of partisan/non-partisan context and candidates' policy preferences

To examine the inhibition effect, my design randomizes assignment of the presence and absence of
partisan information: participants in one experimental group see candidates without partisan affiliation, while others in another experimental group see them introduced with a partisan label. By comparing the treatment effects across these two groups of different partisan contexts, I can test the hypothesis that the effect of candidate's ethnicity is washed out by some politically relevant information, most notably partisan affiliation.

Randomly assignment of party context independently from the randomization of candidates' policy statements has at least two advantages. First, this allows me to disentangle the effect of candidates' articulated policy positions from their partisan label, including the party cue effect that a party affiliation hints at the policy preferences of the candidate. In a society where ethnic minority candidates tend to affiliate with a certain party, or adopt certain policy positions, separating out those confounders is difficult without clear manipulations. The experiments in Japan gives an extra leverage in this sense, when few voters have any knowledge of a typical party affiliation of ethnic minority candidates, partly because only few ethnic minority candidates exist in the first place.

Yet a more important advantage however, is that this randomization makes it easier to examine the relevant policy cue mechanism, because it virtually manipulates the mediation variable. Although randomization of the mediator does not identify estimates of a causal mechanism (Bullock, Green and Ha 2010), it certainly helps in unpacking or illuminating it by encouraging subjects to infer a specific level of the perceived policy preferences of the candidates (Imai, Tingley and Yamamoto 2013).

2.5.3 Elections where multiple candidates compete

I pointed out earlier that a single candidate design, adopted frequently in the existing experimental studies, has a serious problem with the measurement validity of the dependent variable. To address this problem, in all the experiments, multiple hypothetical candidates are presented in order to examine the
effect on vote choice in a competitive electoral context. This design not only increases the external validity of the experiments, but also improves the quality of measurement for the purposes of gauging the behavioral outcome of vote choice. Moreover, and it turns out to be crucial, the multiple-candidate design allows for the examination of possible changes in the relative perceptions of the competing candidate(s) between two ethnicity conditions. When the target candidate's ethnicity changes, participants may not change their answers about the that candidate whose ethnic background is randomly assigned. But they may change their affects on, impressions of, or perceived policy distance to the other (majority ethnicity) candidates, and this may change their vote choice. Only a multiple-candidate design allows for the assessment of this causal mechanism.

2.5.4 Two experiments in Canada and Japan

Finally, because observational studies suffer from a selection bias problem (see Section 2.3.3 in Chapter 2 for this detail), I do two things: first in analyzing the observational data, I examine the relationship among candidates’ ethnicity, their districts and party affiliations. This is to investigate in which districts ethnic minority candidates are more or less likely to run, and with which party they are more or less likely to affiliate. Second in survey experiments, participants of diverse social backgrounds are recruited nationwide, and they view the same sets of hypothetical candidates. By doing so, the problem of selection bias, especially the strategic or natural selection of the electoral district can be assessed.

Below I discuss some further advantages of examining the treatment effect in two countries. Two countries are selected mostly for practical reasons that I am a Japanese studying in Canada. This accidentally however, provides substantial analytical leverage. First, with the single exception of Aguilar-Pariente (2010), no individual voter-level study has been conducted on this topic. Comparing the results should contribute to better understanding of the effects. More substantively, this case
selection not only assesses the effect, but also simulates the so-called “most different system design”, in which the conceptually same effect can be assessed in starkly different contexts (Przeworski and Teune 1970: 35-39). The socio-political contexts regarding ethnicity are utterly different between Canada and Japan, while the basic nature of individual-level cognitions and perceptions are often assumed to be universally similar, if not the same, in the field of social and political psychology.

Canada has integrated a steady stream of immigrants from various places in the world throughout its history, with the diversity of those populations increasing in the last half-century. Its population is now multiethnic, and its polity strongly commits to multiculturalism in order to accommodate this diverse population (Kymlicka 1995). On the other hand, Japan is a country with only a very recent history of rather limited immigration and so has comparatively little ethnic diversity; accordingly, its political institutions and norms to accommodate ethnic diversity are also relatively weaker. Figure 2.2 demonstrates this point. It plots the percentage of stock of foreign-born population in 2011 as the level of immigrant intake on the horizontal axis, and the Migration Integration Policy Index (MIPEX) on the vertical axis. As it clearly illustrates, Canada, is one of the most immigrant-accepting countries (about 20% of its population is foreign-born), and has the third strongest immigrant-integrating policies (MIPEX score of 72 out of 100) of the 26 countries. In contrast, Japan is one of the least immigrant-accepting (only about 2% of its population are foreigners), and its integration policies are considered one of the least accommodating (MIPEX score of 38). Although neither immigrant-acceptance and integration policies can be directly translated into the actual degree of accommodation of ethnic diversity, Figure 2.2 clearly captures the stark contrast of the two countries in their political openness to the ethnic minorities.

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10 MIPEX is the expert-rated, summarized index of the degree of immigrant integration policies in a country. For this detail, see the Migration Policy Group and British Council's page (2014) for MIPEX.
Unfortunately, observational study of the effect of ethnic minority candidates on voter choice and electoral outcomes is impossible in Japan, simply because the number of existing ethnic minority (former non-Japanese) candidates and MPs in Japan is microscopic. Yet similar experiments with hypothetical candidates are possible in two countries, and they should provide valuable results for comparison. As Moser (2008) and Ruedin (2009) describe, and as the strong likelihood of a moderated effect of the ethnicity cue by the voters' ethnic attitudes implies, the degree of acceptance of ethnic minorities in the society is considered to influence the direction and magnitude of the effect. Thus if such a contextual effect is important, I expect that the more multi-ethnic and stronger ethnic-integrative environment in Canada leads the ethnicity cue effects to be much less than in more “homogeneous”, less-integrative contexts in Japan. In other words, the effects must be easier to observe in Japan than in Canada. So if some identity cue effects are observed in Canada, it is expected that the same or stronger effects should be observed in Japan. If the same causal patterns or mechanisms are observed in both countries however, they should be regarded as a generalizable evidence that can travel across contexts.
3 Empirical test I: Experiments in Japan

3.1 Introduction: Selecting an ethnic group and issue to test hypotheses

Japan is the “most likely case” in which to observe negative cross-ethnic voting, as its immigration and integration policies are among the strictest in the world. While Japan's immigration policy has gradually converged to international norms and the practices of other liberal democracies (Tsuda and Cornelius 2004; Surak 2008), its political institutions are still reluctant to accommodate ethnic minorities and diversity. Although the myth of ethnic homogeneity in Japan has been repeatedly challenged (Oguma 1995; Lie 2004), ethnic minorities are still a much smaller proportion of the population than in other advanced democracies (below 2% of the population).  

Ethnic minority representation in the national legislature is surprisingly low. Although it is difficult to accurately identify ethnic minority status my estimate is that there are at most 10 ethnic minority members across both Houses, out of a total of 724: only about 1.4%.  

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11 The statistics depend on the definition of ethnic minority groups. As a proxy for ethnic minorities, the percentage of “non-Japanese nationals” is only about 1.6% of the entire population (Ministry of Internal Affairs and Communications [MIC], or Sōmushō 2013a). Note that the other 98.4% include Ryūkyuans or Uchinānchū (domestic residents of the Okinawa islands), Ainu (domestic residents of the Hokkaido islands), Wilta (former domestic residents of the Sakhalin islands) Ogasawara (domestic residents of the Bonin Islands) and many naturalized Japanese nationals who would identify themselves as an ethnic group other than Japanese. Except for the Ryūkyuans and the naturalized Korean Japanese, the absolute and relative number of the other groups is minuscule, however.

12 Identification is difficult due to both the inherent problem in defining an ethnic minority group and their invisibility in Japan. For a hypothetical example, an individual who would otherwise be recognized as an ethnic minority may have obtained a Japanese-sounding name when he or she naturalized and use that name in his or her daily life, thus his or her ethnicity is invisible. Another challenge is that individuals may have multiple ethnic identities including Japanese, but many other Japanese recognize them as Japanese only. In my estimate above, I categorized out of the 9 House members who were born and elected in the Okinawa prefecture as members of an ethnic minority (Ryūkyuan). This may be an overestimate, however there is certainty over the ethnicity of at least two of these members, Kantoku Teruya and Denny Tamaki. Teruya advocates for the independence of Okinawa/Ryūkyu based on his ethnicity, and Tamaki has expressed his multiple (American and Ryūkyuan/Japanese) origins. Below are all the names and my categorizations of their ethnicity: Renho Murata (HoC, Taiwanese background),
Ethnic and racial discrimination and the social exclusion of ethnic minorities are universal phenomena and this seems to be at least as prevalent in Japan as in other liberal democracies. A number of cases of overt racism, ethnic exclusion, hate speech, and biased media reports have been reported (Okamoto 2005). After Japan ratified the International Convention on the Elimination of All Forms of Racial Discrimination in 1995, The Committee on the Elimination of Racial Discrimination (CERD) repeatedly pointed out problems of persistent discrimination against minorities in Japan and provided advice on improving the situation. The government's response to them was generally slow and failed to implement some recommendations (Okamoto 2005; Murakami 2005). Given this environment, I assume that the potential level of support for an ethnic minority candidate would be lower in Japan. Furthermore, there would be less social pressure on voters to hide their preference for a non-minority candidate.

The next question is which ethnic minority group should be used for the ethnicity manipulation in the experiment. One of the largest and historically important yet greatly marginalized, ethnic minority group in Japan is the Koreans, especially so-called Zainichi Koreans. Zainichi Koreans are those who immigrated to Japan during the imperial era or right after the Second World War and the descendants of those immigrants. Due to the post-war Japanese citizenship policies, the descendants of the first-generation Zainichi Koreans are not legally Japanese citizens, unless they have naturalized as Japanese nationals, or have one Japanese parent with Japanese nationality. Japan now has fourth

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13 Because this is beyond the scope of this study, I introduce one illustrative example here. Japanese government clearly refused to consider a legal measure to penalize racist hate speech, which was recommended by the CERD. The government replied to its report by arguing, “racist thoughts are [not] disseminated and racial discrimination is incited, to the extent that the withdrawal of its reservations or legislation to impose punishment against dissemination of racist thoughts and other acts should be considered even at the risk of unduly stifling legitimate speech.” (Government of Japan 2013: 20).

14 The literature on this topic is abundant. Although they are certainly important topics to consider, their
generation of Zainichi Koreans, born and raised only in Japan but without Japanese citizenship (Chung 2010).

The rights and legal status of Zainichi Koreans have been at the centre of the debate on ethnic minority policies. Zainichi Koreans gradually acquired rights equivalent to Japanese citizens, starting with permanent residency status and access to the welfare system after a series of movements and negotiations in the 1960s and 70s (Tanaka 1995). Although their absolute numbers and share of the “foreign” population has declined, as Japan accepted new immigrants, their presence and the debate about their rights remain politically significant. One contentious issue that has not been resolved includes their political rights. Suffrage for permanent residents in Japan, which is relevant mostly to Zainichi Koreans, has been repeatedly proposed and challenged for three decades. At the legislative stage however, the reform has been rejected, mainly by some members of the Liberal Democratic Party, the long-term government party (Eba 2006; Day 2009; for the legal battle, see Kondo 2001). The issue reappeared on the public agenda in 2009-10 (Hara, et al. 2012). When the Democratic Party of Japan came to power, it considered introducing a bill to grant local suffrage to permanent residents, but eventually backtracked in the face of strong opposition within party and beyond.

Thus the Zainichi Koreans are one of the largest, most-recognized and most politically significant ethnic minority groups in Japan, making them an ideal case for the current experiment. First, Japanese voters must have some feelings about and perhaps some political opinions on the rights of Zainichi Koreans. Second, I also expect, in the current Japanese context, that the ethnically-relevant political issue that
details are outside the scope of this thesis, or unnecessary in deciding on an ethnic group for the manipulation in the survey experiment, thus omitted. To examine the historical contexts, I relied mainly on the following words: on the causes and consequences of their changing legal status after the Second World War, Tanaka (1995); Kim (1997); Onuma (2004); and Morris-Suzuki (2006). On changing perceptions about their legal status and their attitudes in relation to the Japanese nationality, see Asakawa (2003) and Sasaki (2006). On their naturalization, see Kim (1990).
Japanese voters would most associate with *Zainichi* Koreans is their suffrage. Furthermore, many voters must expect that an ethnically Korean candidate would support this policy, as the policy is perceived to mainly benefit mainly the *Zainichi* Koreans. This reasoning is backed up by the fact that a large proportion of *Zainichi* Koreans do seem to actually prefer this policy. Although the study is not entirely systematic, Asakawa (2003: 166-167) surveyed a random sample of 359 ethnically Korean Japanese who naturalized between 1998 and 1999. He reported that 89.5% of them (most of whom were previously *Zainichi* Korean) either agreed or strongly agreed with the policy of granting local suffrage to permanent foreign residents. Of course, this is not publicly shared knowledge, but it is reasonable to expect that Japanese voters would assume the same conclusion as these statistics suggest.

Accordingly, the survey experiment in Japan focuses on candidates who formerly had *Zainichi* Korean status and utilizes the issue of suffrage for permanent residents in. In the following section, I summarize the key aspects of the survey design, focusing on its experimental stimulus.

### 3.2 Survey design

#### 3.2.1 Three studies

To examine the effect of the candidate's Korean ethnicity on voting behavior in Japan, three on-line survey experiments were conducted. The first survey was a pilot study with the students of the Faculty of Policy Studies (FPS) at Chuo University, conducted in November 2010. A total of 163 students participated in this study. The other two on-line surveys recruited eligible Japanese voters with an age range of 20 to 70. They were conducted in January and November 2011, with approximately 3,000 participants.‡ Except for some important differences in design, which are described in detail in the

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‡ I greatly appreciate the support of Professor Kiichiro Arai and Masaru Kohno for their generous offer to introduce and conduct the online survey as part of their program of studies.
following section, the contents of each study is almost entirely identical, so the three sets of data were aggregated into a single dataset for analysis. Their basic features and differences of the three studies are summarized in Table 3.1.

In the first study, the FSP students were invited to participate in the study after two political science classes. They were informed that they would be asked to vote in a mock election and to answer several questions on politics and social issues, and that the general purpose of the study was to “understand voting behavior in different contexts and its relation to opinions on political and social issues”. After they completed they were rewarded with 500 yen (about C$5) for their participation.

In the two main studies, Japanese voters were recruited by the survey company, Nikkei Research, with an e-mail invitation sent to randomly sampled, eligible individuals who were registered with the *Nikkei Access Panel Monitor*. In both cases, the survey program appeared after another survey on politics, which was not directly related to this study. They were rewarded for their participation according to Nikkei Research's established procedures.

3.2.2 Survey program and features

Soon after the survey started, respondents were asked to assume that two hypothetical candidates were considering running in the next House of Representatives election (the Lower House in Japan, or HoR)

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16 Nikkei Research, one of the major on-line survey companies in Japan, recruited participants from their panel which at the time held no fewer than 150,000 registered adults. The samples were randomly chosen, after the panel was stratified by gender and geographic distribution across six regional blocks ([1] Hokkai and Tohoku, [2] Kanto, [3] Hokuriku, Shin'etsu and Tōkai, [4] Kinki, [5] Chūgoku, and [6] Kyūshū and Okinawa), in proportion to the actual demographic data reported in the MIC’s *Jūminkihondaichō* [Basic Residence Register] (MIC 2009), except that the samples’ age range was 20-70. After the selected members were given a unique ID and pass word to access the survey, meaning they could only complete it once.

17 The amount, format and timing of the reward varied according to the participant's preferences and participation record, and this information is private.
election, and instructed to review the candidates' short profiles. The respondents were also told that the subsequent questions would ask about their impressions or evaluations of the candidates, and the respondents' vote intentions. When respondents saw the candidates’ profiles and platforms in a single-page web page, they were randomly assigned to one of 8 (the first and second surveys) or 24 (the third survey) conditions. The difference between the first two studies and the third study is that the third condition adds 16 partisan conditions. In other words, all the conditions in the first two studies and eight of the conditions in the third study were in a non-partisan context. Below I explain the eight common conditions before moving on to the additional partisan conditions.

Eight experimental conditions: common to all three surveys

The eight conditions are composed of the three sets of dichotomous conditions varying on the following dimensions: (1) candidates’ pictures (2) profiles and platforms and (3) one of the two candidates' ethnic backgrounds. One of two pictures was assigned to each candidate, while one of two profile-platform sets was also randomly assigned to each candidate, independently of the picture assignment. Independently of these assignment rules, four out of eight conditions indicate that one candidate has an ethnic Korean background. In short, the first two studies adopt a 2 x 2 x 2 design. The details of these conditions are available in Appendix A1.

Both candidates are men about 50 years old, and have equally prestigious career backgrounds and credentials. In order to control for the possible effect of physical attractiveness of the candidates, one of two candidate pictures was randomly assigned. However, when aggregating the data, I found no statistically significant or systematic difference between the level of support for the candidate under the two picture conditions ($p=.41$). Because the manipulation of this variable is trivial, the impact of pictures
will not be discussed hereafter.\textsuperscript{18}

One of two sets of profile-platforms was randomly assigned to each candidate with one exception concerning ethnicity, which is described below. These two profile-platforms are hereafter denoted as “X” and “Y”. The profile includes information about the candidate’s year of birth, education, occupation and family background such as his marital status and children. The platform contains the candidate’s policy statements on welfare, tax, the economy, and most importantly, the rights of foreigners. These descriptions appear as if a real candidate had expressed his policy views on his website or in the official political advertisements distributed before the election by \textit{Senkyo Kanri Iinkai} (the Electoral Management Committee). Briefly put, each policy platform states the following: platform X proposes a possible increase of the consumption tax in order to restructure the pension plan, and a reduction in corporate tax. It also opposes granting suffrage to permanent foreign residents. In contrast, platform Y does not mention increasing the consumption tax but proposes relocating the current consumption tax to the pension plan, and supports more redistribution by abolishing deductions from taxable income for higher income individuals. It also suggests “improving the legal framework for permanent residents”. To increase external validity, these profiles were produced by mirroring the actual profiles of some existing Diet members which were available on their webpage. The policy content of platform X was taken from the official policy pledge flier (manifesto) of the Liberal Democratic Party (LDP), while the contents of platform Y was taken from the Democratic Party of Japan (DPJ)’s flier. Although the individual respondents who prefer either package of policies tend to support the relevant candidate, there was no overall difference in the level of support between the two profile-policy platforms (the profile-platform of Y was slightly preferred by 1.3 percentage points, but this was statistically insignificant, $p=.342$).

\textsuperscript{18} In fact, the picture “A” is slightly preferred in the second survey by 3.4 percentage points ($p=.08$), while the picture “B” is preferred by 7.5 percentage points in the third survey ($p<.01$). Because there is no theoretical reason to expect that one of the two pictures induces more popularity, and no overall difference in aggregate, the picture difference is not considered in the analysis.
Finally, the ethnic background of one of the candidates was randomly assigned, denoted as “H” (the control group) and “L” (the treatment group). In all the experimental groups, respondents saw a fixed Japanese-named candidate, “Kōichi Suzuki”. The ethnicity of the other candidate was manipulated. For the control group, H, respondents see a second candidate with a Japanese surname, “Sēichi Hayashi”, without any reference to the candidates’ ethnic backgrounds. Under this condition, we expect that respondents would simply assume that the two candidates are ethnically Japanese, or that they would not even think about their ethnicity. This is a very typical Japanese electoral context. On the other hand, under the treatment condition of L, respondents see Kōichi Suzuki (the same candidate as group H) and a second candidate with a Korean name, Sung-Il Lim, who is also described as having an ethnic Korean background. Here two methods were used to manipulate the candidate’s ethnicity. First, Lim is described as “[born in the year of 1960 or 1961] as a Zainichi Korean, and naturalized to obtain Japanese citizenship in 1982” in his profile. Second, only the pronounceable part of the candidate’s name was manipulated as shown in Figure 3.1.

The second method has the advantage of presenting the written name in the same way as the Japanese counterpart (Hayashi) yet signaling the candidate’s Korean ethnicity. I could have done this by taking advantage of the unique feature of the organic connection of the Japanese language system (kanji, katakana and hiragana), naming practices and norms adopted by different ethnic groups. As Figure 3.1 shows, while holding the appearance of the candidates’ name in Chinese character (kanji) constant, its pronunciation and written forms in a parenthesis was manipulated, to either read as “Kōichi Suzuki” in hiragana or Sung-Il Lim in katakana. In Japanese, the katakana form is often used for some “foreign” objects such as imported products, ideas and names. Accordingly, by manipulating the pronunciation of the candidate’s name of Hayashi/Lim and introducing a brief description of Lim’s background as a

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19 Although this is an obvious, expressive sign of Korean ethnic background, I implemented the second method to maximize the enforcement of the manipulation.
former Zainichi Korean in his profile, I intend to manipulate participants’ recognition of the candidate’s ethnicity as either Korean (group L) or Japanese (group H).

The third condition: partisan context

In addition to the 8 non-partisan conditions described above, the third study had two blocks of 8 partisan conditions with other manipulations remaining the same. In the first block of partisan conditions, one of the two party affiliations, LDP or DPJ, is assigned to the candidates in accordance with their policy type. So a candidate with policy X, taken from the LDP’s platform, is presented as a LDP candidate, whereas a candidate with policy Y, taken from the DPJ’s platform, is presented as a DPJ candidate. These conditions are constructed to make an intuitive match between the candidates' expressed policy and party affiliations. Conversely, the second block of 8 partisan conditions has a counterintuitive match-up: a DPJ candidate supports typical LDP policy X, and a LDP candidate supports typical DPJ policy Y. Because both partisan blocks have the same 2 x 2 x 2 design described above, there are 2 x 8 = 16 different partisan conditions. Combined with the 8 non-partisan conditions, the total number of experimental conditions is thus 24.

Questions and question order

After participants review the profiles and policy statements of the two candidates, they are asked about their impression of the candidates’ traits (leadership, competence, compassion and integrity) and their feelings about the candidates (anxiety and hope) on a seven point scale. After these questions, respondents are asked to vote for one candidate, or abstain, if they wish. Then they are further asked to rate on a seven point scale, how likely it is that each candidate supports or promotes the three policies on the platform agenda: (1) increasing the consumption tax; (2) increasing social spending to expand the

20 Due to the limitation on the number of questions, questions on affect are asked only in the third study.
welfare program and (3) granting local election suffrage to foreign permanent residents in Japan.\textsuperscript{21} The manipulation check questions follow, which ask the respondents to identify the candidates’ ethnicity from a list of Japanese, Korean, Chinese or Brazilian. These questions and their order are common in all the studies. All the questions and answer options used in the analyses are available in Appendix B1.

In the first two surveys, after the manipulation check questions, respondents were asked to locate their own policy stance on the same three issues: the consumption tax, the size and role of the government and the grant of suffrage to foreign permanent residents. They were asked to do this on a five point scale from “strongly agree” to “strongly disagree”.\textsuperscript{22} Then in the subsequent section, I asked the respondents to rate the level of trustworthiness and the degree of integration of various ethnic minorities living in Japan, most importantly, \textit{Zainichi} Koreans. In the final section, respondents were asked about the strength of their ethnic social identity as Japanese, as well as several basic socio-demographic questions such as sex, age and highest education achieved. The survey design of asking questions on the moderating variables after the experimental stimulus creates a potential problem of post-treatment bias. In short, because the answer to these questions can be influenced by the experimental stimulus and the choice of dependent variable, when the questions appear after them, the estimated moderated effects can be biased. The bias would occur if respondents expressed more (or less) support for a policy to grant suffrage to foreigners and had higher (or lower) levels of trust in \textit{Zainichi} Koreans, after they viewed

\textsuperscript{21} In addition, in the first and second surveys, I asked about (4) helping foreigners and ethnic minorities to integrate into Japanese society. This item was eliminated in the third survey due to the limit on question space.

\textsuperscript{22} Unfortunately, I found an unexpected error in the programming of these questions in the second study. It mistakenly coded “agree” and “neither agree or disagree” into the same category, and I found that there was no way to replicate their true answers after the survey. Because merging these two answers creates a substantive information loss, I performed multiple-imputation analyses to complement their value difference using relevant variables to predict actual choices. The predicted values by multiple-imputation models are all averaged, and rounded to the closest value of the choices. To check the robustness, I created and examined three different versions of these. Overall, I found that the results of the subsequent analyses were very similar.
ethnic Korean candidates. In order to prevent this problem, these questions need to be asked before the experimental stimulus and the vote choice question, which was the case in the third survey.\textsuperscript{23}

However, asking the questions on moderating variables before the experimental stimulus causes another problem. Asking questions on trust in Zainichi Koreans prior to the manipulation can prime ethnicity, implying that the purpose of the study is to examine attitudes towards ethnic groups in elections, and ultimately alter the effects of candidate ethnicity on respondents’ vote choice (Valentino, Hutchings, and White 2002; Mendelberg 2001, 2008).\textsuperscript{24} This is a clear tradeoff. Thus I alternated the order of these questions in the second and the third surveys. Yet I found no significant difference in the level of trust in Zainichi Koreans or support for particular policies between the second and the third studies overall.

3.3 Hypotheses

In Chapter 2, I set out three hypotheses of moderated effects, but I first examine the average treatment effect (ATE) of the ethnicity manipulation for Japanese sample. Whatever the theoretical explanation, if voters do engage in negative cross-ethnic voting, then we expect to observe a lower percentage of support for Lim than for Hayashi. In other words, respondents in treatment group L are expected to vote less often for the Korean candidate Lim than those in control group H vote for the Japanese candidate Hayashi. Vote choice, the final outcome or the dependent variable of interests in this thesis, is coded as 1 for voting for Hayashi or Lim, 0 for Suzuki, with all other answers (abstention and refusal to answer) coded as missing data. Due to the binary nature of this dependent variable, the ATEs are estimated based on the coefficients of the binary independent variable of the candidate's ethnicity manipulation (0 if

\textsuperscript{23} Because the number of questions that can be included in an online survey was limited, I eliminated the questions on ethnic social identity in the third study.

\textsuperscript{24} Huber and Lapinski (2008: 129) argue that this type of question order effect is irrelevant particularly in measuring the effect of implicit racial appeal. Because the aim of my study is different from Mendelberg's (2001), while their concerns are legitimately applicable to my study, I evaded the possible effect by priming.
Japanese and 1 if Korean) and the moderated effects are captured by the interaction terms in logit or probit regression models.

### 3.3.1 Moderated effects

Next, we examine the effect of a candidate's ethnicity in different experimental contexts such as policy platform and partisanship. Most importantly, I focus on the inhibition effect of partisan context. If the partisan information inhibits the effect of the candidate's ethnicity, then we expect that the average effect size is smaller in the partisan context than it is in the non-partisan context. Regarding the effect of other electoral contexts such as the differences in Hayashi's or Lim's policy platform or party affiliation (either LDP or DPJ), I do not have strong theoretical predictions. The effects are reviewed in different electoral contexts are, and some speculation is provided.

I then examine three moderated effects based on three theories from Chapter 2. First, if the treatment effect is moderated by a positive ethnic social identity, we should see that voters with stronger Japanese ethnic identity are much less likely to vote for the target candidate (Hayashi/Lim), when he is described as Korean (Lim). Second, if negative affects and attitudes moderate the treatment effect, then the direction and size of the effect should depend on the respondent’s level of trust in Zainichi Koreans. As those who perceive Zainichi Koreans as less trustworthy are considered to have negative affects towards the candidate Lim's Korean background, the negative treatment effects is expected to be strongest in respondents among who say that no Zainichi Koreans can be trusted. On the other hand, we should expect that those who answer that all Zainichi Koreans can be trusted are more likely to support Lim. Third, if the presence of a realistic group threat moderates the effect, we should see that the respondents who strongly oppose the suffrage of foreign residents are least likely to support Lim, as the negative

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25 These effects are no longer ATEs; rather they are and moderated effects or interaction effects with the candidate's ethnicity manipulation.
effect derives from the policy concerns that pose a realistic threat to the respondents’ own group.

3.3.2 Mediating effects and causal mechanisms

Chapter 2 proposes two causal mechanisms: a negative affect towards or a negative impression of the candidate, and a relevant policy preference cue. To test these hypothesized mechanisms, I perform mediation analyses, with the following mediating variables: 1) the level of anxiety and hope that candidates provoke in a respondent; 2) four candidate trait items (perceived degree of potential leadership, competence, care for the issues that concern the respondent, and trustworthiness); and 3) the potential policy preference distance between a candidates and a respondent. This involves three major steps, which can be further broken down to several micro steps. These steps are illustrated in Figure 3.2.

The first step

In the first step, I examine if the candidate’s ethnicity manipulation changed the level of the mediation variables. If the negative affect or trait-driven mechanism holds, then we should expect negative ATEs on mediation variables 1) and 2) respectively. For example, respondents in the treatment group L are expected to report higher level of anxiety for Lim than those in the control group H report for Hayashi. Similarly, if the trait-driven mechanism holds, then the respondents’ rating of Lim’s leadership should be lower than their rating of Hayashi’s leadership.

Another observable implication of this mechanism is that respondents in the treatment group L differ from the control group H in their reported trait or affect of the first candidate, on Suzuki. Instead of reporting a higher level of anxiety about Lim, (perhaps due to the social undesirability of expressing

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26 Due to the limitation on the number of questions, the leadership question was omitted in the third study.
prejudice, or a desire to anchor their answers to the earlier question batteries), the respondents in the treatment group may differentiate Lim and Suzuki by answering that they were less anxious about the Japanese candidate Suzuki. Thus the mediation variables are examined not only for Hayashi/Lim, but also for Suzuki.

Examination of the relevant policy cue mechanism involves more micro-steps. If this mechanism holds, then the respondents in the treatment group L should perceive that Lim supports the suffrage of foreign permanent residents more than the respondents in control group H perceive that Hayashi supports the same policy. This should be observed, even though the profile and policy statement between Hayashi and Lim were exactly the same (regardless of the platform type, X or Y). A litmus test of this source cue effect is when Lim expresses his opposition to the suffrage of foreign residents (policy X). Despite Lim’s explicit opposition to the policy, respondents may still discount his statement, because the information that participants can draw from his ethnic background is substantively strong.

Moreover, if candidates’ ethnic background functions as a specific policy preference cue, that is, cueing respondents to policies related to an ethnic minority, then we should observe the ATE only on the suffrage policy dimension, not on other, non-ethnic policy dimensions. In order to double-check this, I also examine the ATE on the candidate’s perceived position on the policy to aid ethnic minorities, which is available only in Surveys 1 and 2.27 I expect that respondents would rate Lim as more likely to support this policy than Hayashi. On the other hand, because Korean ethnicity should not be “tells” for tax or welfare policies, I expect no differences in the perceived policy preference of Hayashi and Lim on tax and welfare policies.

In contrast to the affect- or trait-driven mechanism, I do not have a strong reason to predict that the

27 Again, due to the limitation on space, this policy question had to be omitted in the third survey.
ethnic background manipulation would have an effect on Suzuki's perceived policy preferences rather than Lim's. It is rather unnatural to expect that the respondents, who interpret Lim's Korean ethnicity as an indication of his support for the suffrage of foreign residents, would express this only through their reported perception of Suzuki’s policy preference. Yet respondents could still change the perceived policy positions of both candidates to differentiate them. I therefore hypothesize that the policy preference cue on Hayashi/Lim diffuses to influence the relevant perceived policy position of Suzuki. More specifically, Suzuki's position on the suffrage of permanent foreign residents is perceived as a higher level of opposition in condition L than in condition H.

The final micro-step is to examine whether these shifts further increase the potential policy preference distance between Lim and respondents compared to the distance between Hayashi and respondents. The perceived policy preference distance is calculated by taking the absolute value of the difference between a measures of the respondents' position on suffrage for foreign residents (agree-disagree) and the perceived candidates' position on the same policy (likelihood of support), with the two measures standardized to range from 0 to 1. The hypothesis here is that the perceived policy preference distance is larger among the respondents in the treatment group L than in the control group H.

*The second and third steps*

After the ATEs on the mediating variables are observed in the first step, the effects of the mediating variables on vote choice are examined in the second step. If the affect- and trait-driven mechanism holds, then the respondents who feel more anxious about, feel less hopeful about, or have worse impressions of Hayashi/Lim should be less likely to vote for him. Further, the respondents who feel less anxious about, feel more hopeful about, or have better impression of Suzuki should also be less likely to vote for Hayashi/Lim.
To test the relevant policy preference cue mechanisms, following a simple proximity model, I expect that respondents prefer a candidate whose policy preference is closer to their own policy preference. Accordingly, the smaller the absolute distance between respondents' policy preference and the perceived policy positions of Hayashi/Lim on the suffrage issue (hereafter shortened to the “perceived policy distance”), the higher the probability of voting for him. For both mechanisms, the variable of the candidate's ethnicity manipulation is included as a control variable in the model to predict vote choice, and the estimated effect is regarded as the average direct effect (ADE). This is considered as the partial treatment effect not mediated by the proposed mechanisms.

Then finally in the third step, the average causal mediation effect (ACME) is estimated (Hicks and Tingley 2011; Imai, Keele, Tingley and Yamamoto 2011). By comparing the effect size of the ACMEs and ATEs, the percentage of mediation can be calculated – this shows, how much of the ATE is explained by the proposed mechanism, allowing us to examine the validity and robustness of the mediation effect.

All these hypotheses are summarized in Table 3.2. As examining the proposed causal mediations involves three steps and thus requires a long process, they are examined separately in the following results section.

3.4 Results

In this section, I report the results of the analysis in order of hypotheses introduced above. All the estimates are the results of analyses after excluding non-Japanese respondents.28

28 Only 0.86% of all the respondents (or 0.71% of the valid respondents who chose to vote for either one of the candidates) were non-Japanese respondents. Including them do not substantively or significantly change the results. Because the predicted direction of the treatment effect is opposite for the ethnically Korean respondents, they are excluded from the sample anyway.
3.4.1 Average treatment effects (ATEs)

On average, did the Korean candidate Lim suffer a penalty or gain a bonus compared to the Japanese candidate Hayashi in this experiment? The answer to the question is captured by the ATE, or the average difference in the percentage of support for the target candidate (Hayashi/Lim) between the control group (H) and the treatment group (L). Figure 3.3 shows this estimate when all the valid observations from the three surveys are included ($N=4,753$). The four bars in Figure 3.3 represent the raw percentage of vote choice, for either Hayashi/Lim or Suzuki, in each experimental group. The left side of the figure suggests that about 49.1% of respondents in the control group (H) answered that they would vote for the candidate Hayashi, while about 50.9% would vote for Suzuki. In the treatment group (L), on the other hand, 42.9% voted for Lim and 57.1% voted for Suzuki. The difference of $(L: 42.9) - (H: 49.1) = -6.2$ percentage points is considered as the average causal effect of the candidate's ethnicity manipulation, which means that Lim lost 6.2 points due to his Korean ethnicity. This difference is statistically significant at the 0.1% level ($p<.001$, $t=4.31$).

Although the effect size looks small, this difference is significant and noteworthy in three respects. First, the 6.2 percentage points difference would change the result in many real of two-candidate races. In the 2012 HoR election for example, in the 300 single member districts, 46 of the winning candidates had a victory margin of less than 6.2 percentage points, which is about 15% of all the cases. Second, this difference was produced by a subtle reference to ethnicity, after providing typical policy information about both candidates, and in some cases (the third study), even their party affiliation. Third, this is the

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29 There are a substantively large number of abstentions and refusals, but they are excluded from the following analyses for the sake of simplicity. Including all the valid observations of ethnically and nationally Japanese respondents ($N=6,664$), about 17.1% ($N=1,142$) answered that they would abstain, and about 11.5% ($N=769$) refused to answer the vote intention question. Between control (H) and treatment (L) groups however, the difference is negligible, as 17.0% in H and 17.3% in L abstained, and 11.8% in H and 11.2% in L refused to answer.

30 The figure was calculated from the official statistics of the (MIC 2013b).
average treatment effect, and a substantively larger percentage of some voters were influenced by this treatment, as we see in the following analyses.

Figure 3.4 plots a series of ATEs by different datasets and experimental manipulations as circles, and a 95% confidence interval as whisker, both estimated from the logistic analyses. The ATEs are statistically significant when the whiskers do not touch the vertical line at zero, which suggests no difference in the vote share between Hayashi and Lim. The negative effect (if circles are located on the left side of the vertical line) means that Lim suffers electoral costs for his ethnic background, relative to Hayashi.

First, the top estimate of -.062 corresponds to the ATE of 6.2 points difference discussed above, and the following three estimates are the ATEs for each of the three surveys. First, there is a substantive difference in the estimate between the first survey of the Chuo University students (ATE=-.02, statistically insignificant, p=.81, yet the statistical power is very small) and that of the second study on the nationwide sample (ATE=-.073, p<.001), even though the designs of two experiments are almost exactly the same. As we see in the following analysis, I argue that this is due to the difference in the respondents’ dispositions on moderating variables: the Chuo University students had on average a weaker Japanese ethnic identity, more trust in Zainichi Koreans and more liberal views on the suffrage for foreigners policy.\(^{31}\) In the third study with another nationwide sample, the ATE is slightly smaller

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\(^{31}\) This result also leads to the argument that nationwide sampling which is representative of the population is needed even in an ethnically rather homogeneous country like Japan, at least on this topic of ethnicity and voting. Studies on this topic that rely only on University students in urban areas, who tend to be liberal on that dimension would have serious problems in generalizing the results, especially the ATEs. This is not because the University students sample is simply intrinsically weak in external validity, but because the distribution of important properties that moderate the treatment effect is considerably different from the rest of the population. For example, the level of trust in Zainichi Koreans is 0.72 points higher on a 7 point scale among Chuo University students than the nationwide sample in the second study, and Chuo students are about 1 point more liberal on a 5 point scale in supporting the policy granting suffrage to foreigners. This clearly violates Druckman and Kam (2011)’s assumed validity criteria for using a convenient sample in experiments. This point is revisited when in examining the Canadian data in Chapter 4.
(-.052, \( p = .02 \)) than the second study. This is because two thirds of the experimental groups in the third study were in a partisan context, which as we will see below, inhibited the effect. When the analysis is limited to only the non-partisan groups in the third study, the ATE was -.085 (\( p = .023 \)), which is comparable to the ATE of -.073 in the second study. Overall, except for the results of the first survey, the treatment effect was negative: the candidate suffered an electoral cost of about 6 percentage points when his ethnic background was Korean, compared to when he was assumed to be ethnically Japanese.

The size of the treatment effect depends on the Hayashi/Lim’s policy platform. When he was associated with the LDP’s policy, which clearly opposes the suffrage of foreign residents, the treatment effect was weaker (-.045, \( p = .028 \)) than when he had the DPJ’s policy, which implies some support for the policy (ATE=.80, \( p < .001 \)). Because the platform contains reference to other policy issues such as tax, economy and welfare, and the platform is introduced with a profile, it is difficult to assert that the difference in the policy position on the suffrage issue caused this. This result however, at least implies that ethnic minority candidates pay higher electoral costs when they support a policy that benefits an ethnic minority group. While the effect size of the ethnicity manipulation differs, there was no statistically significant or substantively large interaction effect with policy platform difference on the vote choice for Hayashi/Lim.

3.4.2 An inhibition effect of partisan information

The bottom four estimates in Figure 3.4 imply that the party affiliation of the candidates has an inhibition effect. First, while the effect under the non-partisan context was -.073 (\( p < .001 \)), this effect looks attenuated, and became statistically indistinguishable from zero, when both candidates are introduced with partisan information (ATE=-.035, \( p = .203 \)). Because no other information was added for these treatment groups, the party information appears to have inhibited the effect of ethnic background.
manipulation.

So did the partisan information simply override the treatment effect of ethnicity? A closer look at this effect reveals that the inhibition effect is more complicated than that. First, despite their statistical insignificance, the bottom two estimates in Figure 3.4 show that the inhibition effect looks stronger for a DPJ candidate (ATE=-.018, \( p=.636 \)) than a LDP candidate (ATE=-.050, \( p=.188 \)). In other words, the negative treatment effect of a Korean background was relatively larger when Lim was a LDP candidate than when he was a DPJ candidate. Interestingly, this contrasts to the interaction effect of the candidate's ethnicity and the policy platform: the electoral cost that Lim pays is higher, on the one hand, when he expresses DPJ's liberal policy on foreign residents, but on the other hand, Lim is punished more, when he is described as an LDP candidate i.e. belonging to a party which in reality is more conservative on that dimension.

Figure 3.5 further disaggregates this effect, by interacting both party and policy platform with candidate ethnicity interacting with party. The figure suggests that the inhibition effect in partisan contexts mainly derives from the “counterintuitive” sets of conditions when 1) Hayashi/Lim is an LDP party candidate expressing a DPJ platform, and when 2) he is a DPJ candidate expressing a LDP platform (the estimate second from the top and the bottom estimate). Conversely, the ATEs under the “intuitively” matched party-policy conditions (the top estimate and the third estimate from the top) are strongly negative (ATE=-.086, \( p=.103 \) under the LDP party and policy condition; and ATE=-.092, \( p=.077 \) under the DPJ party and policy condition). Both ATEs are statistically insignificant at the 95% level, but this is because the number of observations is low (\( N=352 \) and 361 respectively), thus their statistical power is too small to capture the estimated effect sizes.

Although these surprising results were not theoretically driven, some speculations are possible. Among
them, one possibility is that respondents in the counter-intuitive party-policy treatment groups may have been confused, distracted by the candidate information, and therefore focused more on the policy contents or other political information than the respondents under the intuitive party-policy conditions. If these speculations hold, the respondents disregarded the candidates' ethnicity, and thus its effect was inhibited.\textsuperscript{32}

Thus, although the interaction of party and policy information with the effect of the candidate's ethnicity is difficult to identify, an inhibition effect of the partisan context was observed in aggregate. One presumed causal process is that the more politically relevant information (such as party affiliation, policy platform or the combination of both) has a greater impact on vote choice.

\subsection*{3.4.3 Moderated effects}

This section tests the three hypotheses from Chapter 2 by examining the three moderated effects introduced in Section 3.3.2. The top of Figure 3.6 summarizes the marginal effects (and confidence intervals) of the ethnicity manipulation at different levels of the respective moderating variables. The distributions (bars) and the means (a gray vertical line) of each moderating variable are used in the analysis at the bottom of Figure 3.6.\textsuperscript{33} As is the case in the figures above, dots represent marginal

\textsuperscript{32} Another possibility is that partisan respondents respond differently to the information regarding the policy on foreign residents. As is obvious, the ancillary analysis (not shown here) suggests that the respondents who usually support the LDP (or the DPJ) are more likely to support a candidate of the relevant party under the partisan treatment conditions. The analyses also suggest that the LDP partisans are much less likely to support the policy of granting suffrage to foreign residents and that they are much less likely to vote for an LDP candidate when they see that candidate supporting the suffrage of foreign residents or when that candidate is Korean and therefore perceived as more likely to support the suffrage policy. So while many LDP partisans under the counter-intuitive condition would vote for Suzuki regardless of the candidate's ethnicity, under the intuitive condition, Hayashi/Lim's ethnicity is key information that signals the likelihood of support for the suffrage policy.

\textsuperscript{33} Again, the estimates are based on a logistic regression that included only three variables: the ethnicity manipulation a moderating variable and their interaction term. Introducing other variables of experimental manipulation (i.e. dummies for a policy or party context) does not substantively change the
effects and whiskers show 95% confidence intervals. The effects are statistically indistinguishable from zero when the whiskers touch the horizontal line at zero. In short, Figure 3.6 confirms that negative affect towards the ethnic minority and realistic policy concerns have strong moderating effects, while the strength of the respondent’s own ethnic identity does not moderate the effect of the candidate’s ethnicity.

*Ethnic identity and co-ethnic voting*

First, the left side of the figure rejects the moderating effect of strength of Japanese ethnic identity. The estimated marginal effect among the respondents with the weakest Japanese ethnic identification (shown by the far-left dot), is -.058 ($p=.30$). This means that those respondents who disagreed both that they have a strong sense of belonging to the Japanese ethnic group and that they have a strong attachment to the Japanese ethnic group are 5.8 points less likely to vote for the Korean candidate Lim, than for the Japanese candidate Hayashi. Importantly, this effect size does not change a lot, regardless of the level of ethnic identification. On the other end of the spectrum, the estimated effect for respondents with the strongest Japanese ethnic identity (the respondents who answered that they have both a strong sense of belonging and a strong attachment to the Japanese ethnic group) is -.086 ($p=.007$). So, the hypothesized moderating effect of the strength of respondents’ ethnic identity is rejected: the effect of candidate’s ethnicity is rather homogeneous alongside the dimension of the respondent’s own ethnic identity. A theoretical implication of this result is that the electoral costs that ethnic minority candidates would potentially pay are not generated by the co-ethnic voting process. In other words, voters have other reasons to vote against ethnic minority candidates besides supporting their own ethnic majority group candidate.

*Negative affects and attitudes towards ethnic minority groups*
In contrast to the small moderating effect of social identity, respondents' affects/attitudes towards Zainichi Koreans strongly moderate the treatment effects. The middle portion of Figure 3.6 shows a steeper line for the marginal effect as the level of trust changes from “none trusted” to “all trusted.” First, the strongest negative effect of the ethnic manipulation is observed among those who answered that they trust no Zainichi Koreans: on average across all the other experimental conditions, they are 25.7 points less likely to vote for Lim, than for Hayashi. To describe the effect for this group in a more detailed way, while 49.5% of the respondents with the least trust in Zainichi Koreans in the control group H voted for Hayashi, only 23.9% of the comparable respondents in the treatment group L voted for Lim. This is a substantively large negative effect in a two candidate race. Furthermore, as the bottom histogram suggests, this group is not a tiny minority in the sample. About 11.4% of the respondents in the analysis expressed the lowest level of trust in Zainichi Koreans.

The negative marginal effect size gradually diminishes, as the level of trust in Zainichi Koreans improves, but it is still negative and significant (-.088, \( p < .001 \)) at the neutral point of “4” on this scale of 1 (the least trust) to 7 (the most trust). The negative marginal effect is offset to zero at the trust level of 5.37, and it turns into a positive effect after this point. More specifically, for those who rated “6” on this scale, the treatment effect is estimated +0.41 (\( p = .048 \)), and the respondents who answered that almost all the Zainichi Koreans are trusted (“7”) are about 10.5 points more likely to vote for Lim, compared to when the candidate was Hayashi. At this end of the scale, there are also a non-negligible percentage of respondents (14.1%).

Thus the strong moderating effect of affects/attitudes towards ethnic minority groups is confirmed. The level of trust in Zainichi Koreans can change not only the effect size but also even the direction of the effect. I believe that omitting this heterogeneous effect of the candidates' ethnic background misses an important aspect of this issue, because even when the observed ATEs are small or statistically
insignificant, the influence of the candidate's ethnicity can actually be buried in the aggregation. This feature is observed again in the following analysis of the moderating effect of relevant policy attitudes.

**Attitudes towards a realistic group-threatening policy**

Similarly to the case of negative attitudes to Zainichi Koreans, attitudes to the foreign residents’ suffrage policy strongly moderates the treatment effect. The far right portion of Figure 3.6 shows that again, the size and even the direction of the effect largely depend on this attitude. While the effect of the candidate's ethnicity manipulation is +.093 (p=.003) for the respondents who strongly support the policy, it ends up at -.156 (p<.001) for the respondents who strongly oppose it. The estimated treatment effect is still negative (-.035, p=.036) among the “neutral” respondents on this policy, who neither agree nor disagree with the suffrage for foreign residents. To be more concrete, for the strongest negative effect of -15.6 points, while 47.9% of the respondents who oppose the suffrage of foreign residents in a control group H are estimated to vote for Hayashi, only 32.4% of the comparable respondents in a treatment group L voted for Lim. This moderation is also substantively large. Although its absolute magnitude is smaller than the effect of trust in Zainichi Koreans, this is likely to due to the scales used for the two survey questions. While the trust in Zainichi Koreans is measured on a seven point scale, policy attitude uses a five point scale, and as much as 33.4% of the respondents in the analysis disagreed strongly with the policy. I believe this is another important heterogeneity among voters that should not be disregarded.

In a nutshell, the effect of a candidate's ethnic minority status on vote choice largely depends on voters’ affects and attitudes to that ethnic minority group, and voters’ policy attitudes on some ethnically relevant issue that can be perceived as threatening to the majority group or as benefitting the minority group. Of course, these two ideas are endogenous to one another: the level of trust in Zainichi Koreans and the level of support for the suffrage policy are moderately correlated: Kendall's tau-b is -.037. As
discussed in the theory section, we cannot eliminate a possibility that this moderation may ultimately be driven by negative affects and attitudes towards Zainichi Koreans. Lower levels of trust in Zainichi Koreans may lead to opposition to foreign residents’ suffrage and vice versa, and either way this leads to lower support for Lim. However, these are two theoretically different explanations, and some ancillary analyses suggest that part of these effects is independent of one other.\textsuperscript{34} Thus in the following section, I examine further the validity of the two theories by examining their proposed mechanisms. The causal process of how certain respondents ended up not voting for Lim compared to Hayashi is closely examined.

\subsection*{3.4.4 Trait-driven and affect-driven mechanisms}

Below, I examine two closely related causal mechanisms, trait-driven voting and affect-driven voting, as well as a relevant policy preference cue mechanism. Following the three steps illustrated in Figure 3.2, the ATEs on several mediating variables and other related variables are estimated by a series of regressions with an ordinary least squares (OLS) method. Then I focus on a few mediating variables to ascertain how much of the effect is mediated by the proposed mechanism.

\textit{The first step}

A trait-driven or affect-driven mechanism hypothesizes that the candidate’s ethnic minority background makes respondents anxious about the candidate, or worsens their image of the candidate, which leads to a vote against the candidate. Thus, the ATEs on these mediators, anxiety and the four variables that tap

\textsuperscript{34} A model with both variables and their interaction term was examined. Although the magnitudes of the moderating effects were both attenuated a little, the same trend of moderating effects was observed at a comparable level for both variables. On the strongest negative effect side for example, the estimated marginal was -.211 ($p<.001$) among the respondents with the lowest level of trust in Zainichi Koreans, while it was -.129 ($p<.001$) among the respondents who strongly oppose the suffrage of foreign residents.
the candidate image, are examined in Figure 3.7. Because they are separately measured, the ATEs on two competing candidates, Hayashi/Lim and Suzuki are shown. For both figures, dots on the left-side of the vertical line at zero means that the respondents expressed more negative affect towards or negative impressions of the candidate under condition L compared to condition H. Conversely, dots on the right-side of the vertical line mean that the candidate was positively perceived under condition L.35

The left side of Figure 3.7 reports surprising results for how respondents reported their affect for and perceived traits of Hayashi/Lim. In spite of the lower level of support for Lim compared to Hayashi, Lim was more positively perceived on the leadership (+.175, \( p = .002 \)) and competence (+.222, \( p < .001 \)) dimensions, and respondents expressed higher hope (+.226, \( p = .002 \)) for him than for Hayashi. These effect sizes are rather smaller (compared to the scale of 1 to 7 for all the variables), but they are statistically significant. Even the ATE on anxiety about the candidate was positive, despite its statistical insignificance (\( p = .396 \)). So the respondents on average evaluated Lim as a better leader, a more competent candidate, and they had higher hope for and perhaps less anxiety about Lim, compared to Hayashi. Again, this fact is inconsistent with the fact that Lim was less popular as a vote choice than Hayashi, but it makes some sense, considering that there are very few Korean or any ethnic minority politicians in Japan. When he appeared as a viable candidate with good qualifications, especially when he was endorsed by one of the major parties in Japan, respondents may have had a special regard for his potential ability, skills and quality. They may even have reasoned that Lim went through all the difficulties and overcame the possible hardship that he faced as a Korean Japanese, and that he therefore was a good candidate. Rather than imposing a penalty on Lim for being an ethnic minority candidate, this fact suggests that voters can give an extra credit to him. This is however, only one half of their voting considerations.

35 The anxiety scale is reversed to adjust its direction in the same was as all the other variables in the figure.
The right side of Figure 3.7 tells the other half of this story. When the target candidate is described as Korean, the figure suggests that the opponent candidate, Suzuki is perceived as more competent (+.134, \( p = .001 \)), caring more about the issues that the respondents care about (+.142, \( p = .001 \)), and more trustworthy (+.200, \( p < .001 \)). Further, the respondents felt much less anxious about Suzuki (+.402, \( p < .001 \)) as well as more hopeful about him (+.171, \( p = .012 \)), when the opposing candidate was Lim than when he was Hayashi. Instead of expressing the negative affects towards Lim, respondents in the treatment group L reported better affective reactions to the opposition candidate Suzuki. In short, Lim's Korean background does not worsen respondents' feelings towards him, but it does improve their feelings towards Suzuki.36

Because reporting all six variables for both candidates is inefficient, below I limit the analysis only to two variables: (1) an additive measure of the overall traits of the candidate, comprising questions on competence, care and trust, and (2) the level of anxiety about Suzuki.37 The scaling of the additive

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36 There are several possible explanations for this. The first possible scenario is that respondents suppress their true negative affects to and evaluations of Lim due to social desirability concerns, considering that it is not acceptable to devalue Lim for being Korean. Yet because they may have still wanted to differentiate Lim from Suzuki in a “less-harmful” manner, they improved their rating of Suzuki. The second possible process is that respondents simply anchored their answer value on a seven-point scale, when they answered the very first question (competence for Hayashi/Lim). When the question batteries continued in a similar format, asking on the same dimension about Lim and Suzuki alternatively, respondents may simply want to keep the same tone for their answer, unless they have some good reasons to change. Then from the anchored point, respondents may express the difference in their feeling between Lim and Suzuki, so they shifted their rating of Suzuki upward rather than diminishing that for Lim on the relevant dimension.

37 As I noted earlier, the leadership question was not asked in the third study due to the limited number of questions. Although theoretically the four impression variables are expected to capture different traits of the candidate (Kinder 1986), they are summarized here to compose an additive measure for convenience’s sake. Two separate confirmatory factor analyses were performed with the four variables with the survey 1 and 2 data, assuming only one latent factor variable. The result predicted statistically significant coefficients (loading) on each variable, and the standard goodness of fit measures (root mean square error of approximation, hereafter RMSEA) suggest decent model fits, .094 for Hayashi/Lim and .034 for Suzuki. The old measure of reliability, Cronbach's alphas, were approximately .90 for all cases, with three or four items for Hayashi/Lim or Suzuki.
index is adjusted to range from 0 (the worst impression) to 1 (best), and the ancillary analysis suggested that the ATE on this measure was estimated as +.033 ($p<.001$). This means, as with the analyses above, that the perceived trait of Suzuki candidate improves by about 3.3 points (.033 out of 1), when the opponent candidate is Lim compared to when he is Hayashi. Examinations of the mediating variables for Hayashi/Lim are not reported here, though available, because they failed to pass the first step of the mediation analysis.

*The second and third steps*

Because several significant effects for the affective mediating variables for Suzuki are confirmed in the first step, the effect of the mediators and the ADE on vote choice are examined in the second step, and the ACMEs are estimated in the final step.

Figure 3.8 summarizes the results of the second step for a trait-driven mechanism and an affect-driven mechanism. Note that the mediating variables measure each concept for Suzuki, not Hayashi/Lim. First, the top part of the figure shows that the respondents’ impression of Suzuki can moderately mediate the effect of the ethnicity manipulation of Hayashi/Lim on vote choice. As respondents had a better impression of Suzuki, they are significantly less likely to vote for Hayashi/Lim. The figure on the right, -.653 suggests that when respondents improve their impression of Suzuki by 10%, they are 6.5 points less likely to vote for Hayashi/Lim (or in other words, 6.5 points more likely to vote for Suzuki). The ADE of -.035 suggests a remaining treatment effect which is not explained by this mediation. It still decreases the likelihood of voting for Lim by 3.5 points ($p=.032$).

On the other hand, the bottom part of Figure 3.8 shows that anxiety about Suzuki can strongly mediate the treatment effect. A one unit increase of the reversed anxiety measure (so the respondent is less anxious about Suzuki) decreases the likelihood of voting for Hayashi/Lim by 7.7 points. Taking this
mediation effect into consideration, the ADE is only -.018 and statistically insignificant. In other words, the remaining treatment effect not explained by this affect-driven mechanism decreases the chance of voting for Lim by only 1.8 points ($p=.414$).

Finally, Figure 3.9 provides the ACMEs and their percentage the total effect mediated by the two mechanisms. On the left side, the mediation analysis of the trait-driven mechanism yielded the estimates of ACME of -.021 out of a total effect of -.057. This means that about 37.7% of the total effect is mediated by their perceived traits of Suzuki. On the right hand, the comparable ACME in the affect-driven mechanism is -.038 out of a total effect of -.056, which is about 66.6% of the total effect mediated. More concretely, about two thirds of the effect of ethnicity manipulation of Hayashi/Lim on vote choice was because respondents felt less anxious about the opposing candidate, Suzuki. Although it is methodologically impossible to give unbiased estimates of AMCE, if the true mediation is close to the estimates in this analysis, it is a substantively large mediation.

There are many possible biases in the estimates of ACME, especially when the mediator variable is not manipulated randomly. Despite the advice of Bullock, Green and Ha (2010), it is almost impossible to convincingly argue that none of the unobserved factors that influence the mediator are also correlated with the unexplained variance in the vote choice. For example, the level of attention to the profile and platform information may increase or decreases the level of anxiety about the candidate, and at the same time explains some portion of vote choice. There are many such speculative doubts, and replications of the study with slight changes to some aspects of the experiment program is perhaps the only appropriate way to check the robustness of these findings. Performing a sensitivity analysis however, is an ancillary way to assess the degree to which this assumption about mediation is violated. Ancillary sensitivity analyses (not shown here but available) suggest that the estimated ACME would disappear completely if the correlation between the two error terms for the mediator and for vote choice exceeded -.3, both for
the trait-driven and the affect-driven mechanisms. These results indeed suggest that the observed mediation is relatively vulnerable to the violation (see Imai, Keele, Tingley and Yamamoto 2011).

In sum, a series of analyses strongly suggests that traits of the candidate, or more likely the level of anxiety towards the candidate mediates the effect of the candidate's ethnic background. However this is by changing the impression of or anxiety about the opponent candidate Suzuki rather than the target candidate Hayashi/Lim. Although the total effect size was rather modest (a change of 5.6 points), the mediation analyses suggested that the affect-driven mechanism could potentially explain two-thirds of its effect. This implies that the impact of a candidate's ethnicity on vote choice can be mainly an affective process, not simply by imposing negative feeling towards the ethnic minority group onto the candidate, but by translating such feeling into positive affect for the co-ethnic candidate. In the following section, I examine an alternative mechanism for the impact of a candidate's ethnicity: the relevant policy preference cue.

3.4.5 Relevant policy preference cue mechanism

The first step

The relevant policy preference cue mechanism posits that the candidate's ethnic minority background signals the candidate's support for an ethnically relevant policy benefitting their group. This perception increases the perceived policy preference distance between the candidate and the average voter and lowers the probability of voting for the ethnic minority candidate. Thus the first step to examine this process requires checking whether the ethnicity manipulation of Hayashi/Lim actually shifted the perceived policy position of Lim on the suffrage of foreign residents compared to Hayashi. I further examine whether such a change induces a shift in the perceived policy position of the competing candidate Suzuki under the condition L. Figure 3.10 and 3.11 confirm both hypotheses.
As in the other figures shown above, the left side of Figure 3.11 presents the ATEs and the 95% confidence intervals of the perceived position on each policy for Hayashi/Lim, and the left side shows those for Suzuki. Figure 3.10 disaggregates the ATEs in Figure 3.11 into the average perceived policy positions of each candidate under each experimental condition. Solid (colored) marks represent the average perceived policy positions of Hayashi/Lim, while hollowed marks are those of Suzuki. The further the marks are to the right, the higher the perception that the candidate supports that policy. Overall, both figures provide striking evidence for the hypothesis: the shift in the perceived position occurs only on the relevant policies. First, take a look at the estimates for a tax increase and a welfare spending increase. In Figure 3.10, the colored (Hayashi/Lim) and hollowed (Suzuki) circles and squares show that under both policy conditions of X and Y, the perceived policy positions on these issues do not change a lot by ethnicity condition. Note that the changes in their positions are a mirror image between the two policy conditions. This means that respondents differentiated the two candidates, and rated their perceived policy positions according to their policy platform, almost regardless of their ethnicity. In Figure 3.11, the top two estimates illustrate the ATEs by ethnicity. Lim was perceived as less likely to support increasing tax (ATE=-.101, \(p=.029\)) and more likely to support increasing welfare spending (ATE=+.107, \(p=.006\)). Although they are statistically significant, their effect sizes, one-tenth point out of six possible points shift are minuscule.

In contrast, the perceived policy positions of the ethnically relevant issues are substantively influenced both by policy and ethnicity conditions. In Figure 3.10, diamonds (suffrage for foreigners) and triangles (aid for foreigners) change their location across the four experimental conditions. For example, the four solid diamonds for Hayashi/Lim move from the top left to the bottom right of the figure. When the target candidate is Hayashi and he clearly opposes suffrage, he is perceived as least likely to support (3.24) the

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38 Again, the ATEs are the coefficients of a dummy variable of the ethnicity manipulation in a series of separate OLS regressions.
suffrage of foreigners. When his ethnicity is manipulated to Korean, even if he still opposes the policy exactly the same way as Hayashi does, Lim is perceived as being a lot more supportive (4.08) of that policy. It is particularly noteworthy that Lim's position is perceived as being quite proximate to that of Suzuki in the same condition (4.34, depicted by hollowed diamonds in the same condition). Lim is still recognized as less supportive of the suffrage of foreigners than Hayashi who expresses more liberal policy views on foreign residents in Japan (4.60, the third from the top), but again, the respondents further shifted their perceived position to the right, when the candidate's ethnicity is manipulated to Korean Lim (5.50).

These changes are summarized more efficiently in Figure 3.11. Note that these are the changes that occur when only candidate ethnicity is manipulated from Japanese Hayashi to Korean Lim, across all conditions. The two ATEs at the bottom left suggest, *regardless of what he said in his platform*, respondents perceived that Lim would be more likely to support suffrage than Hayashi.39 The overall magnitude is +.867 ($p<.001$) on a scale of 1 to 7, which can be disaggregated to +.836 ($p<.001$), when Hayashi/Lim opposes the policy, and +.899 ($p<.001$), when he appears generally accommodating to foreign residents. To be sure, the respondents in all conditions take what the candidates say into consideration: as we saw in the gradual shifts in positions of the solid diamonds in Figure 3.10, Lim is perceived as less supportive of the suffrage policy, when he expresses opposition to it (4.08, the second solid diamond from the top) than Hayashi is when he expresses liberal view on the treatment of foreigners (4.60, the third from the top). However, the shifts of the perceived policy positions by ethnicity condition, occurs almost independently of the policy conditions, which is prime evidence that the candidate's ethnicity functions as a policy preference heuristic. But this occurs only on an ethnically relevant policy dimension: a similarly large size of ATE in the same direction (+.820, $p<.001$) is

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39 These are estimated in an OLS regression with three dummy variables: the ethnicity manipulation, the policy manipulation and their interaction term.
observed on the perceived policy position of providing aid to foreigners. Voters “take a signal” from the candidate's ethnicity that he would support his ethnic group, despite his expressed policy views.

The right side of Figure 3.11 tells a side story to this main effect on the left. It looks as if a mirror image of the shifts in perceived policy preferences occurred for Suzuki, but on a much smaller scale. When the competing candidate is Lim, Suzuki's position on the government aiding foreign residents is perceived as little less supportive than when the competitor Hayashi (ATE=-.336, p<.001), and same effect is seen for the suffrage of foreigners (ATE=-.296, p<.001). The shifts on tax and welfare spending are again smaller in scale. As we observed that respondents felt differently about Suzuki when his competitor’s ethnicity changed from the Korean Lim to the Japanese Hayashi, the policy effect also seems to diffuse to Suzuki, perhaps because respondents want to make a clearer distinction between two candidates. The magnitude of this side effect is however, much smaller.

Even if an ethnic minority candidate is perceived to be supporting a certain policy, it does not directly validate the mechanism of voting against him, because some voters may actually prefer such a shift, depending on their own policy view. Thus according to the proximity model, the vote decision is based on both a candidate's and a voter’s policy preference points. Therefore for the policy preference cue mechanism to work, it is crucial to find significant ATEs on the policy preference distance. Figure 3.12 provides the evidence. Again, the ATEs on the policy preference distance for increasing tax and welfare spending are very small or statistically indistinguishable from zero. Unlike the finding in Figure 3.10, the respondents under condition L did not see more distance between themselves and Lim than the respondents under condition H saw between themselves and Hayashi(ATE=+.01, p=.253). The same is true for Suzuki (ATE=+.002, p=.838). Yet this result is very likely biased by the coding error in

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40 Because of the possible projection effect, I examined models that controlled for the respondents' policy preferences as well. The details of the results are not reported here, but they are strikingly similar, and the interpretations of the results hold well, too.
measuring respondents' policy preferences described above.\footnote{As reported earlier, two answer options of “agree” and “neither agree nor disagree” were mistakenly merged in the survey program when calculating the policy preference distance. Imputation could not be performed only for this variable, since this question was not asked in the third study. Thus this variable is not used in the mediation analysis.}

In contrast, when respondents under condition L considered the suffrage of foreigners, they perceived a larger distance between their policy preference and those of Lim compared to those under condition H. This shift is in a hypothesized direction (farther away from the respondents), although the effect size of .056 ($p<.001$) on the standardized scale from 0 to 1 is not so large. Given the findings on the perceived policy preference of Hayashi/Lim in Figure 3.10, it is not surprising that the direction and size of the ATEs on the policy preference distance for suffrage are approximately the same, regardless of the assigned policy conditions (X or Y). The difference is that the diffused effects for Suzuki are not confirmed in this analysis (ATE=-.012, $p=.159$), although the direction is as hypothesized. This is because the effect size on Suzuki's side is small, so when it is translated to the effect on the policy distance, the significance of the effect disappears.

Thus it is established that the target candidate's Korean ethnicity strongly signals more support for the ethnically relevant issue, and that respondents perceive significantly enlarged policy preference distance only on that dimension. Because of this finding, I limit the variables for the mediation analysis to the policy preference distance on suffrage.

\textit{The second and third steps}

How much does the enlarged policy preference distance on suffrage between the respondents and Lim explain the lower support for him compared to Hayashi? To answer this question, at the second step of the mediation analysis, we should confirm that the mediator significantly influences the vote choice. In
other words, we should first establish that the proximity model holds on the suffrage policy dimension.

Figure 3.13 suggests that the proximity model holds up well. The negative effect of \(-.440\) \((p<.001)\) on the arrow from the policy preference distance to vote choice explains that as respondents see more distance between themselves and Hayashi/Lim, they are less likely to vote for him. When the respondent perceives the candidate’s preference as the completely opposite of his own, say, if a hypothetical respondent strongly disagree with the policy of granting suffrage to foreign residents, while he perceives that Hayashi/Lim would be most likely to support that policy, they are predicted as being 44 points less likely to vote for Hayashi/Lim. When the average popularity of Hayashi/Lim and Suzuki is approximately split in half (50% for each candidate), this has an almost decisive effect. The ADE of \(-.037\) is the treatment effect that is not explained by this mediation process: after considering this causal process, respondents are about 3.7 points less likely to vote for Hayashi than Lim due to his ethnicity manipulation.

Finally Figure 3.14 illustrates an estimate of the causal mediation due to the policy preference distance on suffrage for international residents. The estimated ACME is \(-.022\), which means that of the 5.9 points that Lim loses because he is Korean, 2.2 points are lost through the hypothesized mechanism. In other words, 37.2% of the total negative effect is mediated by a shift in the respondents’ perception of a candidate’s policy position, which in turn expands the policy distance between the respondents’ own preference points and those of Lim.

The size of its mediation, 37.2%, is comparable to that of the trait-driven mechanism, but much smaller than that of the affect-driven mechanism. As before, I performed sensitivity analysis. The result suggests that the estimated ACME would again vanish to zero if the unexplained variation in the policy preference distance was correlated with the vote choice by more than \(-.3\). Thus the level of vulnerability
of this mediation is comparable to the other two proposed mediations.

To summarize, the first half of the analyses suggested that candidate Lim's Korean ethnicity functioned as a specific policy preference heuristic: respondents in the treatment group L interpreted Lim's ethnic background as meaning he was more likely to support an ethnically relevant policy that mainly benefits Korean Japanese groups, specifically the suffrage of foreign residents. Respondents did not make the same interpretation for non-ethnically relevant policies such as tax and welfare. This occurred not only when Lim expressed liberal policy views on the rights of foreign residents, but also when he clearly opposed the suffrage of foreigners. By shifting the candidate’s perceived policy preference to the more liberal end of the spectrum, respondents expanded the policy preference distance between Lim and themselves. The further voters’ ideal policy preference point is from the candidate’s, the less likely it is that voters will support the candidate: there was a 2.2 percentage points drop in vote choice for the target candidate under condition L than under condition H. This mediation is estimated to explain about one third of the total effect of the ethnicity manipulation, which was 5.9%.

The corroboration for this mechanism shows that the negative effect of the candidate's ethnicity on vote choice can also stem from the realistic group threat or from policy interests. Although the affective process of anxiety is superior in explanatory power, this alternative policy-oriented mechanism can potentially explain a substantively large portion of the causal process.

3.5 What have we found so far? Summary and discussion

This section briefly summarizes the results and discusses some general implications for the future study on this topic. The main results are summarized in Table 3.3.

The table shows that most hypotheses are confirmed. The overall ATE on absolute vote choice was -6.2
percentage points, meaning, as expected, that the effect of changing the candidate’s ethnic background from Japanese to Korean was negative overall. Although the details of this finding are rather complicated, the treatment effect is on average attenuated in the partisan context, probably because the respondents activated and weighted other considerations in their vote choice. At least, the more politically relevant information, i.e. partisanship, changed the nature of the treatment effect. More importantly, two strong moderating effects were found. Just as racial resentment was a key moderating variable in the US, attitudes towards ethnic minorities significantly moderates the treatment effect in Japan: the effect size varies with the respondents’ level of trust in Zainichi Koreans. This echoes Tesler and Sears’ findings (2010) that the effect of Obama’s race on vote choice in the 2008 Presidential election in the US was cancelled out by two opposite camps on the racial attitudes. In Japan, while the overall effect is substantively negative, those with strong negative feelings towards Zainichi Koreans are a lot less likely to vote for a Korean Japanese candidate. In addition, differences in ethnically relevant policy attitudes also moderated the effect. Whether respondents prefer or oppose the suffrage of foreign residents determines even the direction of the treatment effect. Two moderating variables however, are most likely endogenous. Thus some part of the observed moderated effects by policy attitudes can ultimately originate in affects and attitudes towards Zainichi Koreans, and vice versa. On the other hand, the third proposed moderating variable did not have the same impact: I found that the strength of respondents’ own ethnic identity does not change the overall magnitude of the effect.

To further investigate the causal mechanisms implied by two different theories, I performed step by step mediation analyses. Surprisingly, the respondents’ perceived traits of and affect towards Hayashi/Lim did not significantly affect the ATEs. Instead, I found that respondents who were shown the Korean candidate Lim improved their perceived traits of and felt less anxious about the competing candidate, Suzuki. Therefore, a smaller proportion of respondents voted for Lim than for Hayashi. Although the
two mediations of candidate traits and affects are closely related, their mediating effects are estimated separately. The candidate impression mechanism is estimated to mediate about one-third of the total effect, while the affect-driven mechanism mediates as much as two-thirds of the effect. Finally, an alternative mechanism based on the realistic group conflict theory was also examined and confirmed. Lim's ethnicity signaled that he was more likely than Hayashi to support the suffrage policy, which on average increased the policy preference distance between the respondents' position and Lim's position. A significant shift like this was observed only on the ethnically relevant policy dimension of suffrage, not on other policies such as increasing tax or welfare spending. By expanding the policy preference distance, an estimate showed that the relevant policy cue mechanism mediates about one-third of the total effect.

3.5.1 How generalizable are these results? Some challenges to this study

Two groups of theories hold: negative affects and attitudes, and realistic group conflict. Yet comparatively, the affect-driven mechanism, or more precisely, the negative treatment effect of decreasing the level of anxiety about an opponent candidate, has more power in explaining the impact of the ethnicity manipulation. The examinations of the moderating effects also suggest the same conclusion. Despite the differences in the measurement scale, the size of the moderation is stronger for the level of trust than for policy attitudes on the suffrage. Does this hold true across time and space? Would we observe, at least a similar degree of moderations and causal mechanisms in a real electoral context? Would this same effect be seen in another country, even if its ethnic environment was starkly different to Japan’s?

Answers to these questions are confined to speculation, until similar studies replicate and extend of this study. However, I point out two micro-findings that maybe generalizable and useful in future studies.
using experimental settings. First, because the expected effect size is quite small, a large number of observations are preferred. Although the effect size would largely depend on the kind of sample, as well as the design of the experiment, in a typical experiment with two hypothetical candidates who look equally competitive like Hayashi/Lim and Suzuki in this study, the expected size of ATE on vote choice would be about 5 points at best. Assuming that the sample is randomly taken from some hypothetical population that yields a true difference of 5 points due to an ethnicity manipulation, a power analysis suggests that the experiment needs a total of 2,462 respondents (two-sided test) in order have a 70% chance of detecting such a difference between the treatment group and the control group. In a typical case of an experiment at a university, with 200 respondents, the estimated power, or the likelihood of detecting such a difference, is 5.1% in a two tailed test and 6.2% in a one tailed test. This is so even if we assume that university students have potentially the same level voting preference shift as the general population.

Remember, as is discussed in the end of Chapter 2, that Japan is considered the “most likely case” to have this kind of effect, and the low information nature of the experiment design must have contributed to detecting the ATEs in this study. Furthermore, when respondents are subdivided into several different conditions (i.e. candidates expressing a different policy platform, a non-partisan and partisan context, etc.), or when the effect is moderated by some variables, generally a larger sample size is necessary. Accordingly, when the expected effect size of the ethnicity manipulation is small, but as in this study, detecting such a small difference (if any) is crucial to the research question, using a large sample is recommended, if possible. Smaller samples can lead to type II errors, a possibility which is often neglected by researchers, or considered negligible. However, I believe that reporting and concluding there is no effect of ethnicity at all, based on a small sample or non-replicated studies is a problem in this study field, given the theoretical concerns raised in Chapter 2.
Second, two competing candidates are necessary to make good inferences about the possible causal mechanism for voting behavior. In a Single Member District, voting for a candidate is an active decision to *choose* one among others, and this action usually involves comparing the alternatives. The final outcome of vote choice is very likely a product of this relative comparison, and thus it is hard to examine this process in depth in an experiment with only a single candidate. In examining the trait-driven and affect-driven mechanisms, for example, we observed that respondents in the treatment group improved some aspects of their perceived traits of and affects towards the opposition candidate (Suzuki), when respondents recognized the ethnic minority background of the target candidate (Lim). And this is considered a strong causal mediating factor, triggering a lower support for the target candidate. In a single candidate design this process would certainly not be observed. Although it did not make a significant difference to policy preference distance, respondents' perception of Suzuki’s policy preference was also influenced by the opposing candidate's ethnic background. Thus a competitive electoral context can be inherently different from a single candidate condition, where respondents are effectively asked to give a vote of confidence. While inferences from a single candidate can also be useful and informative, this study suggests that an experimental design with two or three competing candidates gives more leverage. In addition to simply improving external validity by simply increasing the mundane realism of the experimental setting, I believe that this design allows detecting a crucial property of the effect of candidates’ ethnicity.
4 Empirical test II: Experiments in Canada

4.1 Introduction: Selecting an ethnic group

Canada makes a good contrast to Japan in many respects. Even if it is sometimes symbolic, Canada officially embraces the ethnic and cultural diversity of its population through its multiculturalism policies, accepts a steady number of high-skilled immigrants from various countries, and has developed political institutions to integrate minority groups into society (for the political history and social context, see Reitz 2004; Reitz and Banerjee 2007). Among democracies, Canada is among the most ethnically diverse counties in the world: according to the recent estimates, more than 20% of its population is foreign-born, and there are 13 different ethnic groups which have over 1 million members (Statistics Canada 2014).

While ethnic diversity in the general population keeps increasing scholars often point out that the political representation of ethnic minorities, especially “visible minorities” lags behind (Andrew, Biles, Siemiatycki and Tolley 2008; Anderson and Black 2008; Black 2008a). Visible minorities are officially defined by the Employment Equity Act as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour”, which includes the following groups: “Chinese, South Asian, Black, Arab, West Asian, Filipino, Southeast Asian, Latin American, Japanese and Korean” (Statistics Canada 2012). The most recent data from Black (2013) suggests that 28 ethnic minority candidates were elected in the 2011 Federal election, which is 9.1% of all the MPs. While the share of visible minorities in the Canadian population increased from 9.4% in 1993 to 19.1% in 2011, the proportion of visible minority MPs increased from 4.4% to 9.4% over the same period.

Despite this representation gap, two studies suggest that visible minority candidates do not suffer
electoral costs. Black and Erickson's observational study of the 1993 Federal election (2006) showed that after controlling for other variables, the average vote share of the visible minority candidates was not significantly lower than the average vote share of other candidates. Bird's experimental study (2011) also showed no particular electoral penalty for a visible minority candidate among non-visible minority voters, and it further suggested an electoral reward for the candidate among visible minority voters. As the “least likely case” of negative cross-ethnic voting, does the Canadian case show that a candidate’s ethnic background has no effect on vote choice? Doesn't it make any difference at all to the voters' perceptions of the candidate?

I doubt this. One possible problem with the existing studies may be that participants in Bird's experiment may have not recognized the candidate's ethnic background. In other words, visible minorities may not always be visible in the voters' eyes. While there are a number of choices for the visible minority background to be used in this experiment, this study use Indian Punjabi origin. Although the Punjabis make up a small proportion of the visible minority population total (approximately 1.2% in 2011), they have a long history of settlement in Canada, going back to the 19th century. There are also several methodological advantages. First by using the picture, I can make the most of the visible features of this ethnic group. This will make sure that respondents recognize that the target candidate is from the visible ethnic minority. Second, Canadians themselves think that Punjabi people and the larger category of “Indians” are vulnerable to discrimination and negative prejudice. According to the opinion poll conducted by Environics and Canadian Heritage in 2004, Canadians view Muslims (43%), Aboriginal peoples (36%), and Pakistanis or East Indians (32%) as the groups most often the subject of discrimination in Canadian society (Jedwab 2004). India was also the source country for the third highest number of permanent residents in 2012 (Government of Canada 2013). Third, a typical male

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42 The detail of this experiment is not clear or available from Bird (2011).
Punjabi name can also be interpreted as an European-origin name (the implications of this are discussed below).

Accordingly, this study aims to examine the theories set out in Chapter 2 and test hypotheses by manipulating Punjabi ethnic background in the Canadian federal electoral context. In the following section, I describe the program and strategies of the two experiments in detail.

4.2 Survey design

4.2.1 Two studies

Two online studies were conducted in Canada. Like the study in Japan, the first survey recruited students of the University of British Columbia (UBC, N=414), who participated in the UBC Political Science Subject Pool program in December 2012 and April 2013. The students scheduled their session, and came to the UBC Political Opinion Laboratory to participate in the study program. As in the Japanese study, the true intention of the study was not introduced before the study started, but they were debriefed in detail at the end. While the entire session which included three or four studies took about an hour, the relevant part of this study took about 10 minutes.

In the second survey, eligible Canadian voters above 18 years old were recruited through an online survey company, Research Now in December 2013. They were recruited from all regions of Canada except Quebec. In total, there were 3,020 participants. Similarly, the participants were informed that

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43 The Political Science Subject Pool program (Director: Professor Paul Quirk) recruited the UBC students who took particular political science courses which included content on political behavior, and asked them to participate in a bundle of several experiment programs develop by UBC researchers for about an hour. The students who participated in the program or did an alternative assignment were rewarded with one bonus point in the relevant course.

44 This survey appeared after several other political science experiments, whose contents are not related to this study.

45 This omission is largely due to my linguistic and financial limitations on designing another online
the study “aims to understand how Canadian voters make their vote choice using information available in elections.” After they completed all the questions, they were debriefed about the study. They were rewarded later for their participation according to the rewarding scheme of Research Now.

The basic information about the two surveys is summarized in Table 4.1. As with the Japanese case detailed in Chapter 3, the two survey datasets are merged for the analysis.

4.2.2 Survey program and features

The basic structure and most questions were the same in the two surveys. In both studies, the respondents were first asked some basic demographic questions plus questions about partisanship, voting behavior in previous election, and attitudes on several policies. Then the respondents were shown the pictures, short biographic profiles and policy platforms of three candidates on a single web page, and were told to assume that they were running in the next federal election in their riding. Respondents were also told that the profiles would not be shown again, and therefore asked to read them carefully before they would be asked to vote for one of the candidates. After they viewed the profiles, respondents were asked about their perceived traits of the candidates, and their affective reactions to them, before being asked which candidate they would like to vote for. The next battery of questions asked about the perceived policy preferences of each candidate on five issues (tax, welfare, crime, immigration and multiculturalism), followed by a manipulation check question on the candidates' ethnicity, and a question on the respondents’ level of trust in four ethnic/language groups (English, French, Indian [Punjabi] and Chinese Canadian). Lastly, a few questions were asked to measure the level of social survey for Quebecois voters in French. Because Bloc Québécois fields their candidates only in Quebec, including Quebecois sample requires introducing additional BQ candidates to the standard design in English Canada, which further complicates the survey design. This omission certainly produces some loss in generalizability of the findings, yet I bet that the general findings can also be applicable to Quebec, when I presume the direction and size of the treatment effect of the candidate’s Punjabi backgrounds would be similar for Quebecois.
desirability, along with other demographic questions including their ethnic identifications and the strength of their first choice of identity. The study was then debriefed; almost all the respondents consented to the study after they were debriefed.

When respondents saw the profiles of three candidates, one of 24 conditions were randomly assigned to them in the first study, while there these same 24 groups plus 12 additional conditions in the second study. The common conditions are composed of (1) two patterns of one particular candidate's ethnic background (discussed below), (2) six patterns of the three candidates' profiles and expressed platform combinations; and (3) two partisan contexts (whether the candidate's party affiliation appears or not).

**Condition 1: one candidate's ethnic background**

First for the manipulation of the candidate's ethnic background, one particular candidate named “Andy Gill” is described either as implicitly of European origin (the control group, or condition “E”) or explicitly of Punjabi origin (the treatment group, or condition “P”). As occurs typically with the ethnic majority candidates in Japan or Canada, no references were made to the other two candidates' ethnic backgrounds. In other words, in the control group, all three candidates were (implicitly) shown as a European-origin, Caucasian-looking candidates, while in the treatment group only one of the three candidates is explicitly referred to as having a Punjabi origin, while the two other candidates are (implicitly) of European-origin and Caucasian appearance.

Three candidates have a fixed name: Andy Gill, whose name is used to represent either an European or Punjabi candidate; Bruce Sanderson, and Christopher Moore. The latter two candidates are always implicitly European-Caucasian. The name of Andy Gill was chosen, because its first name can pass both as a typical male name in European (Andrew) and as a typical Punjabi name (Amardeep). “Gill” is also
a very common European and Punjabi surname, too.\footnote{The validity of this use of “Gill” was checked by the author’s consultation with two Punjabi graduate students prior to the experiment.}

As we saw before, all three candidates were introduced with a picture of a middle-aged looking male, followed by his profile and platform.\footnote{All three candidates are shown to have equally prestigious career credentials and potential as viable candidates. For details of profile, see Appendix A2.} Unlike the Japanese study however, I could not use the same picture for European Gill and Punjabi Gill as this would lead the respondents to question the validity of the ethnicity-picture combination. But using different pictures for the candidates in a control group and a treatment group causes a problem in causal identification, because it inevitably introduces the potential for unintended effects derived from any difference in the pictures.\footnote{These include for example, the physical attractiveness of the candidate, their outfit, posture, facial expression, and so on.} Morphing the picture is one solution to this problem, but it creates another problem of artificiality in manipulating the shape, colour and other properties of the pictures.\footnote{In other words, by showing a merged and morphed image of two totally different-looking individuals, the respondents may notice the “unnatural” nature of the candidate picture, or perceive Andy as having an atypical looking European or Punjabi background.}

Thus as one solution to these problems, the experiment was programmed to randomly display three pictures chosen from relevant pools of five to 20 pictures for each ethnic group.\footnote{A total of 10 pictures (five for European and five for Punjabi candidates) in the first study, and 25 (20 for European and the same five for Punjabi) were used in this experiment, and all of them were purchased on the commercial site, Shutterstock (http://www.shutterstock.com). I consulted with the above-mentioned Punjabi graduate students in choosing five relevant “Punjabi-looking” pictures. See Appendix A2 for all the pictures used in this study.} More precisely, two (in the treatment group) or three (the control group) pictures were randomly chosen from a pool of 10 or 20 pictures of an European-looking, Caucasian male and they were randomly allocated to the candidates, while one Punjabi-looking picture was randomly picked from a pool of five pictures of a Punjabi-looking male, and was allocated to Andy Gill in a treatment group. A picture of an European Caucasian male, introduced as Bruce Sanderson for one participant, can be a picture for Andy Gill (in a control group) or Christopher Moore. The aim of this set up is to offset a...
significant portion of the unique characters of each picture within the respective ethnic group.\footnote{This device however, does not perfectly overcome the problem of possible correlation between unique characteristics of pictures and vote choice. The problem would be especially serious, if there were significant differences in the perceived attractiveness between two ethnic groups. Needless to say, none of the pictures of a Punjabi-looking male was or could have been used as an “European” candidate in the control group, and none of the European Caucasian-looking pictures were used as a Punjabi candidate. Hence Punjabi (European) candidates could have been perceived as more physically attractive than European (Punjabi) candidates overall. This possibility will be examined in future studies.}

To articulate Andy Gill’s ethnic minority background to the treatment group, in addition to showing a Punjabi male-looking picture, his biographic description starts with a reference to his birthplace and his first generation immigrant status. More precisely, under one condition the profile starts with, “\textit{Andy Gill was born in 1963 in Punjab, India, and immigrated to Canada in 1968 with his family}” (the expression varies across the different biographic profiles, but conveys the same message). For respondents in the control group who see European Andy Gill, the profile starts with a year of birth without mentioning the birthplace, and then introduces his occupational background.

\textit{Condition 2: Profile-platform combinations.}

Second, three profile-platform sets are matched to these names, creating six different combinations.\footnote{This is as if three different profiles are permutated on each candidate name card, such that $3P_3 = 6$ combinations. See Appendix A2 for this illustration more visually.} All three profiles include the candidate’s year of birth (set so the candidate is around 50 years old), his education, occupation, marital status and the number of children he has. All the platforms contain candidates’ policy statements on corporate tax and some reference to his principal ideas about economic policy. In the common 24 conditions only, the platforms include statements on immigration and the accommodation of minority groups. In the 12 conditions of Study 2, the policy platform mentions only the corporate tax and the economic policy without referring to the immigration policy. The detail of this design effect is discussed below.
All these policy statements were adopted from the official policy platforms of the Conservative Party, Liberal Party, and New Democratic Party (NDP) during the 2011 federal election. After the author consulted their contents, references to and positions on these two policies were rephrased or paraphrased in the stimulus materials. In short, the platform of the Conservative Party (hereafter called the condition “C”) advocates keeping the corporate tax low, while having a tough stance on illegal immigrants, saying that it “speeds up the legal process to deport foreign criminals linked with terrorist organizations.” Both the Liberal Party’s (hereafter the condition “L”) and NDP’s (the condition “N”) propose halting the current corporate tax cuts (thus implying some increase). While the platform of the condition L “emphasizes the importance of fiscal balance” without reference to the actual balance in taxation, the condition N platform says that “large companies should pay a fair amount of taxes”, implying a preference for more redistribution. On the immigration policy, both the L and N platforms promise to speed up the immigration selection process, and in the condition L, the platform further states that the “government should better accommodate immigrants to embrace their diverse cultural backgrounds.” The platform for condition N does not mention this last point, but it argues that “the current restrictive immigration policy” should be abolished “to reduce the accumulated backlogs.” See Appendix A2 for the full statements.

Condition 3: Partisan context

Finally, one third of all the experimental groups are in a partisan context. Unlike the Japanese study, only “intuitive” sets of party-platform combinations are created, so that the candidate’s partisan affiliation matches its policy contents (for example, a Liberal Party candidate always appears with a condition L policy platform). Due to the limitations of the statistical power of the sample size, and in

order to avoid over-complexity in design, partisan context appears only with the full policy platform which includes references to immigration policy.

*Parallel encouragement design*

In the Japanese study, one mediator of the perceived policy preference distance between candidates and respondents was indirectly manipulated. This was done by randomly assigning a different policy position on the suffrage of foreigners in candidates’ platforms. In other words, as respondents’ perception of candidates’ positions cannot be directly manipulated, respondents were *encouraged* to perceive a certain policy position in the candidates (Imai, Keele, Tingley and Yamamoto 2011). Some recent studies however contend that this approach generally does not help in identifying and estimating a causal mediation effect (Bullock, Green and Ha 2010; Imai, Tingley and Yamamoto 2013). Following Imai, Tingley and Yamamoto (2013), the Canadian study adopts a modified version of a parallel encouragement design, in which respondents are split into two experimental groups with or without manipulating the key mediating variables. In this experiment, because omitting the platform completely can cause problems, I decided to include or exclude the relevant policy section of the platform: for 12 experimental groups under the non-partisan context, Andy Gill’s ethnicity and the three candidates' policy platforms are manipulated *without reference to their views on immigration policy* (thus, perceptions of the candidates’ positions on this dimension are not encouraged), whereas for another 12 groups under the non-partisan context, the policy platform is manipulated with the candidate’s views on immigration policy (encouragement design). To provide the results of the analysis with this design in advance, I found no substantive difference in point estimates or confidence intervals between two estimates using a conventional mediation analysis and estimates using an alternative method recommended by Imai, Tingley and Yamamoto (2013). This design however, provides the additional benefit of examining the case in which an ethnic minority candidate does not mention the ethnically
relevant policy. By comparing the perceived position of Andy Gill on the ethnically relevant policy (public funding for ethnic minorities to preserve their culture) between the encouragement and non-encouragement groups, this design allows us to make an additional inference about the impact of the candidates' ethnic background: how voters perceive the candidate in absence of such information.

*Randomized block design*

Another feature of this study is that it adopted a randomized block design in order to control for the effect of important confounding covariates that can strongly predict the vote choice. The randomized block design helps balance the important candidate properties across experimental groups) when the random assignment by itself cannot guarantee that they are identical (Imai, King and Stuart 2008; Kirk 2009; Moore 2012). This makes the treatment effect more visible. While the causal variable of interest in this thesis is that of candidates' ethnic background, the Japanese case suggested that the estimated effect is relatively small, and that vote choice largely depends on the candidates' policy statement or partisan affiliation. While these variables are important, they are not the primary focus of this study. Thus it is reasonable and more efficient to block respondents, especially when the number of observations in each experimental group is relatively small (the expected 3,000 respondents divided by 36 groups = 83 individuals).

Yet due to the limitations of the existing survey tools as well as my own skills, it is computationally too demanding to program an experiment to measure, calculate and adjust many pretreatment variables to create homogeneous blocks during a one-time experiment. Instead, I decided to use only two crucial variables for blocking: the respondent’s answer to two policy questions on corporate income tax and immigration policy. Because the platforms mention these two issues, the answer to these variables was expected to strongly predict the vote choice. And in fact, some ancillary analyses (not shown here) show
that the respondents' policy attitudes on these two issues predicted their vote choice generally more strongly than their attitudes on other issues such as welfare, crime, and environmental protection.

The structure of the randomized block is the following. The answer options on the corporate tax and immigration policy questions is a three-point scale (asking if the government should reduce tax/immigration, keep them at the same level, or increase tax/immigration) plus two possible answers of “don't know” and “refuse” which were combined. The respondents were therefore grouped into four groups on each question. As there are two such questions, $4 \times 4 = 16$ answer patterns that can be identified, and respondents are categorized according to their answer cluster. Then within each cluster, one of the 36 conditions is assigned in a random order, until all the 36 conditions are assigned. As there is an equal probability of any of the 36 conditions being assigned, the actual probability of being assigned to one experimental group or another depends only on the order of the respondent’s entry to the survey.\[^{54}\] This procedure is illustrated in Appendix A2.

**Questions and the issue of question order**

As with the second study in Japan, four candidate trait questions (inspiration was used instead of leadership in this study but measures the same concept, along with competence, compassion, and integrity) and the respondent’s level of anxiety and hope about the candidates were asked on a seven point scale, right after the candidate profiles. When respondents were asked about their perceptions of the policy positions of the three candidates, they are also asked to show their own position on the same seven point scale, in order to measure the perceived policy distance more precisely. This measurement is therefore used to calculate the policy distance, although the result is comparable to when the policy attitude questions asked prior to the stimulus were used. All the question wordings and answer options

\[^{54}\] I assume that this order does not correlate with the probability of assignment to a particular experimental group, or greatly bias the estimates.
Finally, the question order raises problems. Unlike the Japanese respondents, who displayed the same level of trust in Zainichi Koreans regardless of the ethnicity manipulation, Canadian respondents' answers on this question seem more sensitive to the treatment. An ancillary analysis suggest that the respondents in a treatment group (P) rated their trust level in the Punjabi group slightly higher (+ 0.30 out of the maximum difference of 6 points, $p<.001$ in a $t$-test) than the respondents in a control group (E). This shift maybe the result of viewing a well-qualified Punjabi candidate, endorsed by a major party in the partisan context, or simply based on social desirability.\textsuperscript{55} This is likely to lead to upward bias, on the estimates of the moderating effect that trust has on the relationship between Andy Gill's ethnicity and votes for him.\textsuperscript{56}

### 4.3 Hypotheses

Hypotheses are tested in the same manner as they were in Chapter 3. First, to estimate the ATEs and other effects, this study uses a logistic regression analysis with a binary dependent variable where respondents vote for Andy Gill (1) or for one of the other two candidates (0). Unlike the dichotomous choice between Hayashi/Lim and Suzuki in Chapter 3, three choices are available in the current study (Gill, Sanderson and Moore), which means multinomial logistic regression is a more suitable statistical model to estimate the effect on multiple vote choices against one another. This study however, combines

\textsuperscript{55} My ancillary analyses (not shown here due to space limitation and because the topic is outside the scope of this thesis) suggest that a large part of this shift is the product of social desirability, or at least both social desirability and the effect of seeing a well qualified Punjabi candidate. The analyses suggest that the variables that measured the level of social desirability strongly moderated the effect of ethnicity manipulation on the trust variable, and the level of trust of Punjabi was indistinguishable between two groups for the “sincere” respondents, who are least likely to provide socially desirable answers.

\textsuperscript{56} I adopted another battery of questions to tap the affective reactions to Punjabi Canadians without priming the ethnicity issue, but it failed a validity check: the Person's product-moment correlation coefficient between the trust and the alternative measure was below 0.1.
the two choices of voting for Bruce Sanderson or Christopher Moore. There are two reasons for this decision: (1) presentation of the effects is more efficient and comparable to the Japanese case, when only one estimate (against two other choices) is shown; and (2) the most important and relevant comparison is between Andy Gill and the other two, as only Gill's ethnicity is manipulated. No additional benefits can be drawn by comparing the two effects of Gill against Sanderson and Gill against Moore. Accordingly, all the estimates that explain the respondents’ vote choice will be based on the coefficients in logistic regression models.

Hypotheses are summarized in Table 4.2. Except for the candidates' names and some other properties of the ethnic identity and the ethnically relevant policy, they are almost identical to those in Chapter 3. To reiterate the main point from the top of the table, the negative cross-ethnic voting hypothesis posits that the respondents in the treatment group P are less likely to vote for Andy Gill than the respondents in the control group E. The partisan inhibition hypothesis in the second line of the table predicts that the effect size should be attenuated under the partisan condition.

### 4.3.1 Moderated effects

To test the moderated effect hypotheses, three separate interaction effects are estimated using the respondents’ strength of ethnic social identity (the co-ethnic identity moderation hypothesis), their level of trust in Punjabi Canadians (the negative attitudes/affects hypothesis), and their attitudes on the policy to increase funding for ethnic minorities’ cultural heritage and traditions (the realistic group threat hypothesis). Again, all the estimates are based on the coefficients of the interaction variables in logistic regressions.

First, the co-ethnic identity moderation hypothesis suggests that the cause of lower support for an ethnic minority candidate stems from the favoritism shown to members of the ethnic in-group. Further, the two
questions on the strength of ethnic identity ask about the respondents’ first choice of ethnic identity. Thus I need to restrict the observations only to the respondents with the same primary ethnic identity as the candidate. While there are a number of possible options for this, I created a group of respondents who chose English, Scottish or Irish as their first choice of ethnic identity, and those who chose “Canadian” for the first choice and chose one of the above three ethnicities as the second choice. This choice is based on the fact that the typical origins of the family name “Gill” are English, Scottish and Irish, and thus it is expected that the respondents with those ethnic identities would be most likely to perceive that they have a co-ethnic background with Andy Gill.57

Similarly to the Japanese study, the negative attitudes/affect moderation hypothesis predicts that the negative effect size of the treatment is stronger among the respondents who said they had a lower level of trust in Punjabi people. Finally, the realistic group threat moderation hypothesis predicts that as respondents opposition to the public funding for ethnic minority culture grows, the negative effect size increases.

### 4.3.2 Mediating effects

Mediation hypotheses will be tested in three steps again. In the first step, I examine the ATEs on the mediator variables using OLS regression. While the trait-driven mechanism predicts that the ethnicity manipulation damages the respondents’ impression of Andy Gill, the affect-driven mechanism anticipates that the ethnic manipulation increases the level of anxiety about him. In a similar manner, the

57 I did further analyses using other ethnic identity groups such as English only, English, Scottish and Irish in the first choice only, English, Scottish, Irish and “Canadian” in the first choice and nothing else, and so on. The results are generally unstable and depend on which groups are included, but because the number of respondents who identify themselves English, Scottish and Irish only in the first choice is much smaller than other combinations, all the moderated effects in those analysis were far from statistically significant. On the other hand, 72.5% of the respondents chose “Canadian” as the first choice, and the second choice for this group varied a lot. This simply suggests that the category “Canadian” as a concept can be highly inclusive of multietnic groups.
first step of the policy preference cue mechanism predicts that Gill’s Punjabi background makes respondents perceive that he is more likely to support the relevant policies of 1) admitting more immigrants to Canada; and 2) increasing funding to preserve ethnic minority groups’ cultural heritages and traditions. The hypothesis subsequently predicts that this effect increases the perceived policy distance between Gill and the respondents on these two issues. As a placebo test of this hypothesis, I also examine if it influences the perceived likelihood of candidate support and the perceived policy distance for other policy proposals: reducing corporate tax, cracking down on crime, and increasing spending on welfare programs.

In the Japanese case, a large portion of the treatment effect was mediated through decreasing the respondents’ level of anxiety about the opponent candidate. In the same manner, Canadian respondents may also feel better about Sanderson or Moore when Gill is Punjabi, which leads to lower support for Gill. Thus as a further test of the trait-driven and affect-driven mechanisms, I also examine whether the ethnicity manipulation boosts the respondents’ impressions of Sanderson and Moore, and if it lessens their anxiety about those two candidates, too.

In the second and third step, the direction and size of ACMEs and ADEs are estimated and examined. In the second step, the effect of the mediator on vote choice and ADEs are estimated. If the trait-driven mechanism holds in the first step, then Gill’s better perceived traits should increase the likelihood of voting for him, whereas the Sanderson’s or Moore’s better traits should decrease the likelihood of voting for Gill. Similarly, the affect-driven mechanism predicts that a lower level of anxiety about Gill, or a higher level of anxiety about Sanderson and Moore increases the likelihood of voting for Gill.

If the policy preference cue mechanism holds in the first step, in other words, if Gill's Punjabi background increases the perceived policy preference distance between him and the respondents, then
such an expanded distance should decrease the chance of voting for him. Mediation analyses will be performed individually to estimate the size of the ACME and its percentage of mediation. As in the Japanese case, ancillary sensitivity analyses will be performed to assess the vulnerability of the causal mediation.

4.4 Results

Results of the analysis will be reported in the order of the hypotheses in Table 4.3. No particular restrictions on the sample are made.

4.4.1 Average treatment effects (ATEs)

Figure 4.1 summarizes the ATEs under different experimental conditions.\(^{58}\) The figure first suggests that the overall effect of Punjabi background is negative. With two datasets combined, the ATE of changing the ethnicity of Andy Gill from implicitly European to Punjabi is negative 5.3 percentage points, and this is statistically significant at the 1% level \((p=.003, t=2.96)\). To restate this effect in a different way, while 37.1% of the respondents in a control group (or the condition E) voted for Gill, 31.8% voted for him in a treatment group (P), thus the difference of \((P: 31.8) - (E: 37.1) = -5.3\) points.

Even when the datasets are broken down to two studies, the effect sizes are similar. The estimated ATE of Study 1 (UBC students) in the second row from the top is -4.8 points \((p=.328)\), and the ATE of Study 2 (eligible Canadians) is -5.4 points \((p=.005)\). While the effect is statistically insignificant for the UBC students, the sample size is small \((N=381\) in the analysis), and it is rather surprising that the effect size is comparable to the one with the eligible Canadian sample. One possible explanation for this similarity is

\(^{58}\) Again, except for the top estimate for the entire the sample, the estimates of the ATEs are all based on the coefficients of the interaction between an ethnic manipulation dummy and each experimental condition dummy.
the similar average level of the key moderating variable, trust in Punjabi Canadians. Unlike the large
difference between the Chuo University students and the eligible Japanese sample on the equivalent
measure the difference between the UBC students and the eligible Canadian sample in the second study
is virtually none.\(^{59}\)

On the difference in policy platforms, the ATEs vary according to which platform Gill supports: the
negative effect is strongest, when he adopts the NDP's policy platform (ATE=\(-.085, p=.006\)), with a
somewhat weaker effect for the Liberals’ (ATE=\(-.056, p=.064\)), and a very weak negative effect for the
Conservatives’ (ATE=\(-.018, p=.563\)). This result looks similar to the Japanese case: the electoral cost of
Gill's ethnic minority background looks higher when he expresses a more liberal view on the
ethnically-relevant policy. This simple speculation however, needs to be treated with caution: first, it is
impossible to disentangle the effect of different parts of the platform, especially the economic policy and
immigration policy. Second, it is the Liberals’, not NDPs’ platform that expressed a clear support for
better accommodating the diverse cultures of immigrants. Third, the different degree of the respondents'
response may depend on the inferred party affiliation of Gill rather than the substantive contents of the
platform.\(^{60}\)

To consider this issue more in depth, I turn to the bottom two estimates in Figure 4.1 that compare the
ATEs between two groups with and without a view on the immigration policy in the candidates' platform.

\(^{59}\) On a seven point scale of the trust in Punjabi Canadian (7: most Punjabi Canadians can be trusted),
the average of the UBC students is 4.63, and that of the eligible Canadian adults is 4.64. On the other
hand, on another key moderating variable, the UBC students are more liberal than the eligible Canadian
adults on the policy to publicly assist ethnic minority culture. On a standard four point agree-disagree
scale (4: strongly disagree with the policy), the average of the UBC students is 2.43, while the average
of the eligible Canadian is 3.19. Despite this difference, the two ATEs are fairly comparable, because the
strength of moderation by this variable is much weaker. The detail of this analysis will be discussed in
the following subsection.

\(^{60}\) This is very likely, when ancillary analyses of the three-way interaction of ethnicity manipulation,
policy type and partisan context show varying results. See the following subsection for this detail.
Both groups were in the non-partisan context. When three candidates express their views on an immigration policy, the effect of changing Gill's ethnicity from European to Punjabi is -7.2 points, whereas it is -8.1 points, when they do not address the issue. They are fairly comparable, but the effect is slightly larger when the candidates do not mention their views on an immigration policy. When this is broken down by platforms again, it turns out that the candidate’s stated view on immigration policy does not moderate the treatment effect by much.

As Figure 4.2 indicates, the variance in the treatment effects is larger, when the candidates do not mention their views on immigration policy. The three estimates at the top of the figure suggest that the negative effect size is larger when Gill supports small businesses (NDP's platform, ATE=-.143, p=.015) than when he advocates lower tax for businesses (Conservative platform, ATE=-.027, p=.616).

Surprisingly though, when Gill expresses his conservative views on immigration control policy, the negative effect size increases to -.066 (p=.200) for the Conservative policy platform, while the effect is attenuated to -.094 (p=.058), when Gill adds his more liberal views on the immigration policy, although all of these estimates are statistically insignificant at the 95% level.

Putting these findings together, a difference in the candidate’s views on immigration policy does not strongly determine the magnitude of the effect. Regardless of the rather clearly stated difference in his view on an immigration policy, the effect does not vary. Respondents seem to have taken Gill's ethnicity into consideration even more than when Gill stays silent on immigration policy. Why this occurs will be further examined by analyzing the ATEs on the perceived policy positions of the candidates in subsection 4.4.5

4.4.2 An inhibition effect of partisan information

The seventh and eighth rows of Figure 4.1 seem to confirm the partisan inhibition hypothesis, at least
superficially. The negative effect size is larger under the non-partisan context (ATE=-.076, \( p<.001 \)) than under the partisan context (ATE=-.007, \( p=.820 \)). If this is broken down by party, however, the inhibition effect appears to be more complex. When Gill is introduced as a Conservative Party candidate with the Conservative party's platform, the ATE is positive (+.052, \( p=.352 \)), although the effect is statistically insignificant. With the same policy, the ATE under the non-partisan context is -.055 (\( p=.145 \)). In short, the sign of the effect is flipped by the party affiliation with its magnitude being the same. Thus in the case of the Conservative Party's platform, the party affiliation seems to have altered the perception of the Punjabi candidate rather than inhibit the effect of his ethnicity.

On the other hand with the NDP's platform, the ATE is as large as -.116 (\( p=.002 \)) under the non-partisan context, but this is clearly attenuated to -.022 (\( p=.684 \)) under the partisan context. Further in contrast to these two, the effect size doesn't change at all for the Liberal's platform (ATE=-.059, \( p=.108 \) under the non-partisan context, ATE=-.052, \( p=.334 \) under the partisan context). Accordingly, although the party inhibition effect is observed in aggregate, an aggregation effect seems to exist. Rather than simply inhibiting the effect of the ethnicity background, the candidate's partisan information seems to alter the perceived meaning of the ethnic minority background in a complex manner.

4.4.3 Moderated effects

In this section, moderated effects are examined to test three hypotheses. The marginal effects of the ethnicity manipulation at different values of the three moderating variable are summarized in Figure 4.3. As in Chapter 3, gray vertical lines represent the means of the moderating variables, and their distributions are illustrated at the bottom. In short, the figure does not confirm the co-ethnic identity moderation hypothesis, but it underscores the negative attitudes/affects moderation hypothesis, and also the realistic group threat hypothesis, though to a much lesser extent. The effect sizes of the last two
moderations are however, much smaller than those found in the Japanese case.

*Ethnic identity and co-ethnic voting*

Similarly to the Japanese case, the ethnic identity and co-ethnic voting moderation hypothesis does not hold. The left-side column of the figure illustrates the moderated effect by the strength of respondents’ ethnic identity, when the respondents are restricted only to those who identified themselves as English, Scottish, or Irish in their first choice, and those who identified as such in the second choice, after they picked the category of “Canadian” for their first choice (N=726). Despite the smaller sample and thus a larger confidence interval, the line curve implies no moderated effect: regardless of the strength of the respondents’ English, Scottish or Irish ethnic identities, the marginal effect does not significantly change. Rather, the observed trend is in the opposite direction to the prediction, which stated that the curve should go down from the top left to the right bottom. For example, at the point where ethnic identity is weakest the estimated marginal effect is -.021 (p=.839), yet at the other extreme, the marginal effect is +.01 (p=.879) among the respondents with the strongest ethnic identity. All of these estimates cannot be distinguished from a zero effect, which means that for this group of respondents, Andy Gill’s ethnicity does not affect their vote choice (i.e. the estimated ATE was zero).

*Negative attitudes and affects to ethnic minority groups*

The increasing trend of the marginal effect line in the centre figure in Figure 4.3 again supports the negative attitudes /affects moderation hypothesis. Compared to the Japanese case however, the slope of the line in the Canadian case is flatter. From the respondents with the least trust to the most trust in Punjabi people, the magnitude of the negative marginal effect shrank from -.161 (p<.001) to .001 (p=.848). This is perhaps partly because the possible magnitude is capped by the number of candidates: in contrast to the two candidate race in Japan, when the vote share of Hayashi/Lim in a control group
was about 50%, the vote share of European Gill in a control group is 37.1%. Thus if we take a look at
the estimated vote share for Gill at the lowest value of this mediator variable, only 19.2% of the
respondents with the least trust in Punjabi people voted for Punjabi Andy Gill in the treatment group,
while 35.3% of the comparable respondents voted for European Gill in the control group. In a
three-candidate race or in a tri-party competition, this difference is substantively large.

However the high magnitude of this moderated effect should be somewhat discounted, given the
distribution of this moderating variable at the bottom of the figure. Only 4.9% answered that “almost all
the Punjabi Canadian are untrustworthy”, and only about 20% of the respondents answered below the
neutral point of “4” for this question, which is not the case in the Japanese sample. Although the
moderated effect is still observed from the midpoint of the variable to its highest value, the absolute
magnitude of the strong negative effect among the respondents with the least trust in Punjabi people is
smaller.

*Attitudes towards a realistic group threatening policy*

The magnitude of the moderated effect by the policy attitude towards funding for ethnic minority culture
is smaller (see the right column of Figure 4.3). While virtually no effect is observed for Andy Gill's
ethnicity manipulation among the respondents who strongly support a policy to financially assist
minority groups to protect their cultural heritage (+.002, \( p=\) .969), the ethnicity effect is negative but not
so strong (-.075, \( p=\) .006) among those who strongly oppose the policy. Ancillary analyses were
performed using immigration gate keeping policy (i.e. asking respondents if the number of immigrants
should be increased or reduced). The magnitude of the moderated effect was very similar to that of
policy protecting immigrants’ culture (-3.8 points to -9.1 points). Furthermore, unlike Japanese case the
correlation between the policy attitude on funding ethnic minority culture and the level of trust in
Punjabi is not strong (Kendall’s tau-b is -.19). While it is still likely that this moderated effect is in fact rooted in affects and attitudes towards Punjabi Canadians, ancillary analyses suggested that the policy attitudes independently moderates the treatment effect among the lowest and the highest level of trust in Punjabi Canadians. All in all, even though the effect is slightly moderated by the respondents’ attitudes to a realistic group threatening policy, the magnitude of this moderation is not as strong as that observed in the Japanese case.

To summarize the findings, two moderated effects of Gill’s ethnicity manipulation are found: negative attitudes/affects (measured by respondents trust in Punjabi people), and a slight moderation by attitudes to a realistic group threatening policy. In contrast, the moderated effect was not confirmed for the strength of English ethnic identity among respondents. Although the effect cannot be directly compared to the Japanese cases due to many differences in the properties of the experiment, the magnitude of the two moderated effects seen here are relatively weaker. In other words, the heterogeneity of the treatment effect is relatively smaller in Canada. In the following sections, I turn to the analysis of the causal mechanisms.

### 4.4.4 Trait-driven and affect-driven mechanisms

A candidate trait-driven mechanism and an affect-driven mechanism are tested in three steps. In the first step, I examine whether the ethnicity manipulation of Gill influenced the mediators.

*The first step*

The ATEs on the four measures of candidate traits and the two measures of affects towards each candidate are shown in Figure 4.4. First, on the left column of the figure for Andy Gill, both the trait-driven and affect-driven hypotheses predict that the ATEs of all measures should be located left of
the red vertical line, which denotes point zero (i.e. no effect) This is because the prediction was that a Punjabi background should damage Gill's image or induce negative affects in respondents. The fact that all the estimates for Gill are located on the right side of the red line simply means that we reject these hypotheses. The respondents in the treatment group reported that Punjabi Gill was perceived as more inspiring, competent, caring and trustworthy than European Gill. More precisely, the respondents in the treatment group P rated Andy Gill as more inspiring than the respondents in the control group E did. The gap between the two groups was .216 on a scale of 1 to 7, and this difference is statistically significant ($p<.001$). Regarding the affective reaction, the respondents in the treatment group felt less anxious about Punjabi Gill than those in the control group felt about European Gill: the difference was .254 ($p<.001$).

Thus the trait-driven and affect-driven mechanisms through which a Punjabi background damages the image of Gill and respondents affective reaction to him already fail in the first step. This however, was observed in Japan, too.

What was also observed in Japan is that these mechanisms worked through another route. As the middle and right columns of the figure suggest, the ethnicity manipulation of Andy Gill diffuses to improve the respondents’ impression of the other two candidates, Sanders and Moore, and lower the level of anxiety about them. The respondents in the treatment group reported generally better impressions of the inspiration, competence, care and trustworthiness of Sanderson and Moore, as well as a lower level of anxiety about them, when compared to the respondents in the control group. More specifically, the ATEs on inspiration were +.120 ($p=.036$) for Sanderson, and +.162 ($p=.005$) for Moore. The ATEs on the reversed scale of the level of anxiety (positive values mean less anxious) were +.304 ($p<.001$) for Sanderson, and +.223 ($p<001$) for Moore. As was the case in Japan, changing Gill's ethnic background from implicitly European to Punjabi did not worsen the perceived traits of or feelings about him, but improved responses to the two other candidates. As the first causal mechanism was rejected, the
following analysis focuses on the latter pattern of a diffused reputational benefit for the opponents of a Punjabi candidate. As in the Japanese case, a standardized additive index from 0 (worst) to 1 (best) of the four measures of trait was created for Sanderson and Moore.\textsuperscript{61} To make the analysis more efficient, the perceived traits of the two non-Punjabi candidates and the reversed anxiety scores of these two candidates are averaged so that the score capture the changes for either candidate.

\textit{The second and third steps}

As the second step, I check whether the mediator influences vote choice. Did the improved traits of and lessened anxiety about Sanders and Moore, caused by the ethnicity manipulation of Gill, lead to lower support for Gill? As the top of Figure 4.5 suggests, the better candidate traits of Sanders and Moore on average lead to a decrease in the chance that respondents will vote for Andy Gill, and the bottom of this figure suggests that the lower level of anxiety about them also decreases the likelihood of voting for Gill, too. More precisely, the right top arrow on the top figure suggests that when the respondents improve their average perceived traits of Sanders and Moore by 10\% of the theoretically possible change (0 to 1), the likelihood of their voting for Gill drops by 6.2 points. The comparable figure at the bottom of the figure suggests that if the respondents felt less anxious about both Sanders and Moore by one point on a scale from 0 to 1, the likelihood of voting for Gill decreases by 3 points (note that this scale is reversed). Both estimates are statistically significant at the conventional level ($p<.001$).

Figure 4.5 also suggests that the larger portion of the ATEs remains unexplained by the process proposed

\textsuperscript{61} I ran two confirmatory factor analyses individually for Sanderson and Moore with the four variables with only one latent factor variable. Although they loaded statistically significant coefficients on each item, the model fit index suggests that they have a bad fit (The RMSEAs are .189 for Sanderson and .214 for Moore). Although models with two correlated latent variables that separately predict two items (one for inspiration and competence, and the other for care and trust) produced a better fit, because there is no theoretical reason to divide these items into two measures, and because the results of the subsequent analyses were very similar, they are omitted here. The Cronbach's alphas of the four measures were approximately .85.
by the two mechanisms, as the ADEs suggest relatively higher values. After taking the effect of the average traits of the candidates on vote choice into account, the ethnicity manipulation still decreases the chance of voting for Gill by 3.3 points ($p=.087$). As for the affect-driven mechanism, the ADE is -4.0 points ($p=.026$). This implies that the effect size captured by the proposed causal process could be relatively smaller. Figure 4.6 illustrates this point.

The estimated ACME of the trait-driven mechanism is -.012, in other words, the respondents in the treatment group were estimated as 1.2% less likely to vote for Gill, when his Punjabi background improved the respondents of the other two candidates. The estimated share of the ACME out of the total effect in this sample was 26.1%. On the right hand of the figure, the estimated ACME of the affect-driven mechanism is as small as -.007 (-0.7 points), which is 14.9% of the total effect. Obviously, the affect-driven mechanism that was clearly observed in Japan cannot be found in Canada.

The ancillary sensitivity analyses suggest that these causal processes are also vulnerable to possible confounding variables. They show that the estimated ACME would disappear, if the correlation between the error terms of the mediator and of vote choice exceeded -.20 for the trait-driven mechanism and -.10 for the affect-driven mechanism. These figures suggest that the observed mediation is quite vulnerable to any violation of the assumption that the two error terms are uncorrelated.

To summarize, the analysis found that Gill's ethnicity manipulation improved the respondents’ perceived traits of Gill’s opponents, Sanderson and Moore, and decreased the level of anxiety about them, though not about Gill. Through this process, Gill's Punjabi ethnicity suppressed his support by about 1 percentage point. The estimates suggest that this process mediates about 26% (trait-driven) or 15% (affect-driven) of the total effect. However, these estimates can be unstable. Comparatively, the overall degree of mediation by these processes is a lot smaller than those observed in Japan.
4.4.5 Relevant policy preference cue mechanism

In this final results section, the relevant policy preference cue mechanism is examined step by step. Before examining the ATEs on the perceived policy preference distance however, I examine the mean score of Gill's perceived positions on each policy issue.

First step

Figure 4.7 presents the averaged perceived policy position of Gill on five issues: cutting corporate tax, increasing welfare spending, cracking down on crime, accepting more immigrants and funding the preservation of ethnic minority culture, showing how these vary with party policy platform conditions. If the relevant policy preference cue mechanism holds, the perceived position of Gill should shift only on the ethnically relevant policy issues that are considered to benefit Punjabi people. These are accepting more immigrants and providing funding to preserve ethnic minority cultures. That is the case, as the two triangles show in the figure. Regardless of the party platform conditions, the locations of the treatment group’s triangles are to the right of the control group’s triangles. For example, the average perceived position of European Gill on immigration policy (a red triangle) is 3.11 on the scale of 1 to 7, when he supports the Conservative Party's platform (at the top of the figure). This average point moves to 4.52, a more than one point jump, when Gill is Punjabi. Note that under this condition C, Andy Gill actually promises to tighten up immigration and prevent bogus applicants. Despite this strong statement, the respondents rated Gill's position as if they discounted his stated policy promise. A similar effect is seen under conditions L and N, even thought the magnitude of the shift is a little smaller. Overall, this suggests that independent of the platform effects, Punjabi Gill is perceived as more likely to support immigration and financial assistance for ethnic minorities than European Gill.

Figure 4.7 almost passes a placebo test, too. With the exception of welfare, the locations of other
perceived policy positions are not so influenced by the ethnicity manipulation. For example, the average perceived positions of the candidates on a corporate tax cut (blue circles) under the platform condition C are 5.11 (E) and 5.14 (P). Although these positions shift to the right with party platform effect, there is no difference between European and Punjabi Gill under the platform condition L or N. The same is true for the perceived positions on cracking down on crime (blue diamond). However, significant shifts can be observed between the control and treatment group on increasing welfare spending but their magnitude is rather smaller compared to the two more ethnically relevant policies.

In order to investigate the nature of the treatment effect further, Figure 4.8 breaks it down by the encouragement conditions. In a non-encouragement condition at the top of the figure, candidates do not express their views on an immigration policy, whereas they do state them in the encouragement condition at the bottom of the figure. As the shifting locations of two triangles suggest, the magnitude of changes in candidates’ perceived position between a control group and a treatment group is larger, when Gill does not mention his view on an immigration policy. For example, the perceived policy positions on funding to preserve ethnic minority cultures (blue triangles) under the non-encouragement condition (top) shift from 4.17 to 5.72, a +1.55 point jump, when Gill changes his ethnicity from European to Punjabi. The same change under the encouragement condition (bottom) however, produces a milder shift from 4.40 to 5.43, when Gill states a policy on immigration. The same trend can be observed on accepting more immigrants (red triangles) and welfare (red squares). These results point to an interesting finding: the effect of a candidate’s ethnicity on the perceived policy position seems to be independent of what the candidates actually say, or what they don’t say. Rather, the ATE on the perceived relevant policy positions (immigration) are even stronger when the candidates do not mention their position, probably because Gill’s ethnicity is the only credible information from which to infer his

62 I performed several ancillary analyses that further break these shifts down by the party of the platforms, and found that this trend holds across platform types.
policy position.

The ATEs on the candidates' perceived policy positions across these conditions are summarized in Figure 4.8. In total, the left side of the figure reveals that Punjabi Gill was perceived to be more likely than European Gill to support accepting more immigrants by +1.007 (p<.001), and funding ethnic minority culture by 1.178 (p<.001). The ATE on increasing welfare spending is smaller (+.415), but statistically significant (p<.001). Unlike the Japanese case, diffusion effects to respondents’ perceptions of the other candidates is not observed here: even if we see significantly large shifts on the ethnically relevant policy position for Gill, there are no reactive shifts in the opposite direction for Sanderson or Moore, (see the middle and right columns of the figure).

Moreover, these shifts also increased the perceived policy preference distance on the two immigration issues between Gill and the respondents. As the left column of Figure 4.9 illustrates, the ethnicity manipulation significantly increased the distance on funding ethnic minority culture (+.12, p<.001) and to a lesser extent on accepting more immigrants (+.055, p<.001) using a standardized scale of 0 to 1.\(^{63}\) Again, with the exception of welfare spending (+.046, p<.001), no significant changes can be seen for Gill on the policies which are not ethnically relevant: for the corporate tax increase the shift in policy distance is -.010 (p=.412), while for cracking down on crime it is -.008 (p=.461). No significant shifts in the perceived policy distance are observed for Sanderson or Moore, except for a smaller shift on welfare (+.025, p=.022) between the respondents and Sanderson.

Accordingly, Gill's Punjabi ethnicity significantly shifted his policy position in respondents' mental map, leading them to perceive that he supports the policy benefiting his own ethnic group (i.e. immigration).

\(^{63}\) The perceived policy distance is calculated by subtracting the perceived policy position of the candidates from the respondents' position on the same scale. The score was rescaled to range from 0 to 1 to ease the interpretation and illustration. All the estimates are based on the coefficients of the ethnicity manipulation dummy variable of OLS regression models.
These shifts occurred regardless of the contents of his platform, and moreover, the magnitude of the shift was even bigger when he does not state his policy view. In short, Gill's ethnicity functioned as a strong policy preference cue. The cue subsequently increased the perceived policy preference distance for many respondents, especially on the policy to publicly fund ethnic minority culture. In the final stage of this analysis, I will focus on this variable, and estimate the ADE and ACME to assess how much of the total effect is explained by this mediation process.

*The second and third step*

As the second step of the mediation analysis, I examine whether the mediator, the perceived policy distance on funding ethnic minority culture, decreases the likelihood of voting for Gill.

As the negative sign on the arrow from the center to the “vote choice” box in Figure 4.11 suggests, this mediator significantly decreases this likelihood. When the respondents increase their perceived policy position distance on this issue by 10 points, then they are about 3.5 points less likely to vote for Gill. While this magnitude sounds small, this causal process seems to absorb a large part of the treatment effect. In the bottom figure, the estimate of ADE is nearly zero, which means that there is no leftover effect of the treatment, once this mediation is taken into account. Figure 4.12 endorses this point. The estimated ACME is -.043, and this mediates about 90% of the total effect of Gill's ethnicity manipulation. In other words, respondents in the treatment group were 4.3 percentage points less likely to vote for Punjabi Andy Gill by, when they increasing the distance of the perceived policy positions on funding for ethnic minority cultures.\textsuperscript{64} This is a significantly large mediation, which was not confirmed in Japan. In

\textsuperscript{64} I repeated this analysis using the perceived policy distance on accepting more immigrants and increasing welfare spending, but the estimated ACMEs were smaller in scale: -2.7 points (59.5%) for accepting more immigrants and -1.7 points (32.0%) for increasing welfare. Like the suffrage of foreign residents in Japan, the government funding for more theoretically relevant policy in Canada as it provides specific benefits exclusively to ethnic
the Canadian case, or at least in this experiment, the effect of ethnicity manipulation occurs through the respondents’ use of a relevant policy cue and their own attitudes on that particular policy. Finally, the ancillary sensitivity analysis shows that this mediation is also quite vulnerable to the threat of unobserved confounding factors. It suggests that the estimated ACME would vanish completely, when the two error terms in the two equations implied in Figure 4.11 (that of the mediator and vote choice) has a correlation greater than -.20. This means that the estimated ACME would actually be zero if there was an unobserved confounding variable that could positively predict some part of the remaining variation in perceived policy distance and at the same time negatively predict the unexplained variation in vote choice.65

If we take advantage of the parallel encouragement design, the ACME can be estimated by subtracting the ADE in the encouragement condition (-.028, p=.412) from the ATE (or the total effect) in the non-encouragement condition (-.080, p=.012), which yields -.052 (Imai, Tingley and Yamamoto 2013: 11-13).66 The estimate of 65% (-.052/.080) of the total mediation is a little more conservative than the 90%, figure noted above, but this figure confirms the conclusion that a substantively large portion of the treatment effect is mediated by the relevant policy preference cue mechanism.

To recap the major points in this subsection, the expanded policy preference distance between Gill and minorities, and thus can be perceived as a more group threatening policy than immigration or welfare spending.  

65 An obvious possibility for such a variable would be, the respondents’ impression of or affective reactions to Andy Gill (or the other candidates). Although I do not base the models strongly on theories, I checked several simple structural equation models to check the robustness of the relevant policy cue mechanism. I found that introducing those variables as an exogenous predictor (or simply, confounder) indeed decreases the estimated ACME to some extent, yet it did not disappear. Building a structural equation model demands a stronger theory and assumptions, and doing so is not the aim of this thesis, thus this part of the analysis is omitted. Building and testing more sophisticated models are part of a future research agenda.

66 To make the experimental groups in both conditions comparable, I used only the non-partisan conditions for this calculation. If I include the respondents under the partisan condition, the estimated ACME is much larger.
the respondents in the treatment group decreased their likelihood of voting for him. The estimated ACME suggests that a large part of the treatment effect, as much as 90%, can be explained by this process. This estimate however, is as vulnerable as the trait-driven mechanism to unobserved confounding variables.

4.5 What have we found so far? Summary and discussion

Table 4.3 summarizes the results of the analyses in this chapter. First, negative cross-ethnic voting was observed in Canada. Even in a multiethnic environment with a more diverse population and more inclusive political institutions, (making Canada a “least likely case” in which to find this effect), the results of this experiment suggests that ethnic minority candidates can still be penalized for their background. The estimated ATE in this experiment was -5.3 points across all conditions in a three-candidate race. This effect varies depending on the party platform that candidates endorse. A partisan inhibition hypothesis was confirmed *prima facie*, when the ATE is close to zero under the partisan context. This result however, should be treated with caution, because some heterogeneity was observed among the ATEs under different partisan conditions.

As was the case in Japan, two moderated effects were confirmed, whereas the co-ethnic identity moderation hypothesis was rejected. A stronger moderation was found for negative attitudes/affects: the less trust that respondents have in Punjabi Canadians, the stronger the negative treatment effect becomes. Nonetheless, it is noteworthy that this moderated effect was generally weaker than that observed in Japan, and also that the absolute frequency of answers displaying the lowest level of trust in Punjabi Canadian was fairly small. Furthermore we observed a smaller magnitude of moderated effect by a realistic group threatening policy than in the Japanese case.

Finally the results of the mediation analyses show some contrast to the findings in Japan. Both
trait-driven and affect-driven mechanisms about Andy Gill were simply rejected, because his ethnicity manipulation did not damage his candidate image or the respondents' feelings about him. Instead, as we observed in Japan, Gill's Punjabi background improved the respondents’ perceived traits of the other two candidates, or made the respondents to feel less anxious about them. This led some respondents to vote for the two candidates. Although this “back-door” route for the mechanisms was confirmed, the estimated ACMEs were very small, -1.2 points for the trait-driven mechanism, and -0.7 points for the affect-driven mechanism. In contrast to the weaker mediation of these two mechanisms compared to the Japanese case, the policy preference cue mechanism explained a much larger portion of the treatment effect. Gill's Punjabi background worked as a policy preference heuristic, making the respondents perceive that he is more likely to support increased immigration to Canada and public funding for ethnic minority cultures. Importantly, this occurred regardless of Gill’s claims in the platform. Thus this shift causes an increase in the policy preference distance between Gill and respondents on average, which resulted in a -4.3 percentage point drop in vote share.

4.5.1 Implications of the common findings for future experiments

Although the political and social contexts are starkly different, as were many properties of the experimental design, we observed a comparable level of negative cross-ethnic voting in Japan and Canada. This may well be just a coincidence, but, the same two theories of negative affects and attitudes and realistic group conflict that we saw in the Japanese experiments were also confirmed in the Canadian experiments, too. A closer look at their moderated and mediated effects however, reveal differences: moderated effects by negative affects/attitudes to the ethnic minority group and group threatening policy attitudes, and the estimated larger mediated effect of the relevant policy preference cue mechanism. While a number of speculations are possible, little is gained by discussing the possible causes of those differences, when there are many stark differences between the two countries. Rather
than the differences between the two countries, below I focus on some important common lessons related to the experimental design, and briefly discuss their implications. A more general review of the results will be discussed in the final chapter.

First, the Canadian case again highlights the importance of building an experiment around a race with two or more candidates. The undamaged image of the target ethnic minority candidate makes an interesting contrast to the damage that his ethnicity does to his electoral support. While the ethnicity manipulation did not worsen the reported candidate image or affective reactions to the target candidate, instead there was a “backdoor” mechanism. The manipulation instead improved the image of and feelings about the opposition candidates. Although this process mediated a much smaller portion of the treatment effect, the ATEs on candidate traits and anxiety about the candidate were observed in Canada, too. The fact that the same process was observed not only in Japan but also in Canada endorses the robustness of this process, and an experiment with only a single candidate risks missing this causal mediation process.

Second, providing different patterns of a candidates' policy orientation and partisan contexts help us understand how political information interacts with the candidate's ethnicity. The finding that the candidate's ethnic minority status “signals” that he supports a certain policy is clear, because it repeatedly observed in different policy and partisan contexts in both countries. Looking at the treatment effect in several partisan contexts reveals that it does not simply or always inhibit the effect. While there are an infinite number of choices and combinations of contexts, some focused comparisons of crucially different situations or politically important contexts should greatly contribute to the understanding of when the treatment works and when it doesn't.
5 Empirical test III: An observation in Canada

5.1 Introduction: Do the results of the experiments hold in the real political world?

In the last two chapters, three theories and two mechanisms were examined using the experimental data. They suggest among other things, that ethnic minority candidates suffer electoral costs, that partisan contexts provide a rather complex influence on the effect, and that there is heterogeneity among voters in terms of affect and attitudes about ethnic minority groups and also in terms of attitudes on ethnically relevant policies. Although experimental studies like these have the advantage of controlling the information and the context that participants experience, they have built-in limits as regards external validity (McDermott 2011). In other words, the reality of actual politics may not be reflected faithfully in experimental setups. In a real election, with more information about parties and a dynamic campaign process, the effect of candidates' ethnicity can be drastically different from what is observed in experiments. Also, the hypothetical election setup of the survey experiment may have been patently unrealistic to some subjects. For example, asking respondents who live in an ethnically homogeneous area to see an unfamiliar, ethnic minority candidate may sound “irrelevant” to them, because it is difficult for them to imagine such a candidate running in their district. What is worse, the Hawthorne effect is a serious problem in experiments: Participants in experiments may change their behavior, if they think they know the intentions of experimenter.

All of these concerns boil down to this question: will we observe negative effects of candidates' ethnic minority background on voting in real elections? Observational studies often have difficulties in identifying causality (e.g. endogeneity), but it is important to have a “reality-check” of experimental results with observational data. Accordingly, the primary purpose of this chapter is to examine several hypotheses that were supported in the previous chapters with the Canadian election data. Using the 2008
Canadian Election Study and coding of candidates' backgrounds, this chapter investigates whether Canadian voters are more or less likely to vote for a visible minority candidate (VMC) than for other candidates, and in particular, ethnic “majority” candidates. More specifically, individual-level vote choice in the 2008 Canadian Federal election is examined to test three hypotheses. First, I indirectly explore a partisan inhibition hypothesis that an expected negative effect of candidates' visible-minority background is washed out by partisan and other politically relevant information. Then I test two effect-moderation hypotheses: negative attitudes/affects and realistic group threat moderations. To preview the conclusions, first, the seemingly negative effect of candidates' visible minority background is statistically indistinguishable from zero after controlling politically relevant variables such as party identification, ideology, and candidates' competitiveness. Yet some evidence for moderated effects is found. I report a robust pattern that those who have relatively more negative affect towards ethnic minorities and those who oppose policies that benefit ethnic minorities are less likely to vote for the party of the VMCs. Below I first point out several problems with the existing observational studies, and then introduce some research strategies.

5.1.1 Problems with existing studies

As we briefly reviewed in Chapter 2, a number of observational studies on the US examined the effect of candidates’ race (typically African- or Hispanic-American candidates) on voting, and many of them reported little impact on average, after controlling for other variables relevant to voting behavior (Bullock III 1984; Citrin, Green and Sears 1990; Highton 2004; Kaufmann 2004; Abrajano, Nagler and Alvarez 2005; Hopkins 2009). In Canada, a series of seminal empirical works on ethnic minority

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67 This is the appropriate terminology in Canada where the study is conducted. It means exactly what it implies: people whose outward appearance – mainly, but not limited to skin colour – distinguish them from the white majority. See Section 4.1 in the fourth chapter for the Canadian government’s official definition. Just to be clear for American readers: there is no equivalent to “African-American” or “Hispanic” ethno-racial-historical categories in Canada.
representation is by Black (Black 2000; Black 2002; Black 2008a; Black 2008b; Black 2011a; Black 2011b; Black 2013; Anderson and Black 2008; Black and Hicks 2006a; Black and Hicks 2006b). His work is exceptionally valuable, as his are the only studies that counted and reported the numbers and percentages of elected visible minority candidates with a consistent method since the 1993 Canadian Federal election. His aim however, is limited to descriptions of changes and contexts with some semi-normative reflections on the issue of minority representation. In other words, Black's work admittedly does not aim to test causal hypotheses that encapsulate the mechanisms driving to the electoral outcomes he describes.

The only exception is Black and Erickson’s study (2006) with aggregate election data. As I already introduced in Chapter 4, they reported that they could not find evidence that VMCs suffer at the polls. They carefully interpret their results, arguing that no correlation between VMCs and their vote share at district level does not “necessarily rule out discrimination on the part of voters” against VMCs at micro level (Black and Erickson 2006: 549). Indeed this can be true. A potential problem with their study is an ecological fallacy. Any studies that draw inferences about individual voters' behavior from aggregate election data can produce misleading conclusions. The possibility of estimation bias always exists, even if a sophisticated method is adopted (Tam Cho and Manski 2008). To be sure, studies based on aggregate-level data provide important evidence, but individual-level analysis plays a pivotal role in making solid inferences about voters' choices and behavior facing VMCs. Furthermore, as I showed in the last two chapters, observational studies that do not consider ethnic attitudes and policy attitudes on ethnically relevant issues on can miss important heterogeneity among voters.

No studies have been conducted in Canada to examine the effect of VMCs on vote choice at individual level, using available Canadian election study data, as far as I can tell. One possible exception is Cutler (2002), who demonstrated that voters use their sociodemographic proximity to major party leaders as an
easy shortcut in deciding their vote. Although the purpose of this study is narrower than Cutler's, I made two refinements based on his study in the method (discussed more in the following section) and the data. Unlike the use of the voter-to-party leader combination in Cutler's study, I examine the voter-to-candidate combination, which has inherently greater variation. Further, by accommodating Quebec voters in the same model, this study tries to extend the scope to cover the whole country. Thus I believe that this is the first study that systematically examines the individual-level response to VMCs using a nationally-sampled survey.

Thus to test the causal theories to explain the possible negative effect of candidates' ethnic minority background with Canadian observational data, a better research strategy with more fined-grained data are necessary. In the following section, I introduce such a strategy and the data to accommodate these needs, and then review the hypotheses tested in this chapter.

5.2 Research strategy: data, coding, and statistical models

5.2.1 Data and coding

First, it is imperative to have a merged individual-level dataset of candidates and voters. For voters, I use Canadian Election Study (CES) 2008\textsuperscript{68}, and for candidates, a team of undergraduate research assistants\textsuperscript{69} and I coded their ethnic backgrounds using various sources, including the websites of Elections Canada (2010a; 2010b), CBC news (2012), Parliament of Canada (2012), major Federal parties, and some individual web pages.\textsuperscript{70} To measure candidates' ethnic background, I followed previous work which did

\textsuperscript{68} The CES 2008 was conducted by the Institute for Social Research at York University, and the study was financed by Elections Canada. The principal investigators are Elisabeth Gidengil, Joanna Everitt, Patrick Fournier, and Neil Nevitte.

\textsuperscript{69} I greatly appreciate Professor Benjamin Nyblade for providing resources and opportunity to form a research assistance team. I also appreciate Katrina Chapelas, Chaerean Kim, Johann Lingohr, Oren Newson and Sorina Moldovan for their great help coding the candidates' backgrounds.

\textsuperscript{70} I will not list individual websites that I referred to in detail here, because there are too many, and
the same, Black and Lakhani (1997) and Tossutti and Najem (2002). I first coded candidates' ethnic backgrounds based on candidates' surname and first name (when their surname does not indicate much, or when the first name strongly suggests a particular ethnic group), then checked their biography if that information is available on the internet. In order to code ethnic background from surnames, I mainly relied on Hank's (2004) surname dictionary. Whenever necessary, some multiethnic dictionaries were also used.71 While any attempt to classify ethnic groups can be potentially problematic, for the pragmatic purpose of analyzing the data, I adopt a static notion of ethnicity here, and coded both candidates’ and voters’ backgrounds according to the categorization used in the CES 2008.72

Among all 1601 candidates whose ethnicities were identified, 136 cases (8.5%) are the result of our “best educated guess” based on a website search.73 Naturally, multiple origins are available for 540 cases, and whenever their visible ethnic minority status is obvious, candidates are coded as such.

Following the official definition of “visible minority” in the Employment Equity Act (Statistics Canada 2012; see Section 4.1 of Chapter 4), I created a dummy variable for VMCs (1 if applicable) or not (0). In the end, we have 121 VMCs (7.6%).74 The distribution of their partisan affiliation and the relationship

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71 These dictionaries include those for English (Reaney 1997), Americans (Robb and Chesler 1995), French (Morlet 1991), Italian (Francipane 2005), German (Rosa and Kohlheim 2000).

72 Although the definitional issues of ethnic background (as well as normative argument surrounding it) are important in itself, I leave that argument side. See Chandra’s review (2006) on this issue in political science. In this study the public perception of ethnicity is important. A classification is made inevitably arbitrarily, but for the purpose of answering the research question, it is reasonable to code ethnicity according to CES 2008 classification, and lump some ethnic minorities together into a “visible minority” category, as long as this reflects what Canadian citizens would think about the candidates they face.

73 Whenever possible, I referred to the CBC’s “Canada Votes 2008” websites, which often contained candidates' pictures and sometimes birthplace information.

74 Compared to Black’s (2011) counting of 107 VMCs excluding candidates of Green and other parties/independent, my counting of 93 individuals is conservative. If Black's number is correct however, the direction of potential bias in the estimate is unknown, although I expect that the estimates standard errors would be larger (thus possibly more conservative estimate of a test), due to the small subsample size of VMCs, though this could be offset if my coding is a more accurate reflection of what voters
with important variables is shown in Table 5.1.

Basic descriptive statistics in Table 1 underscore previous findings reported in Black and Erickson (2006) and Tossutti and Najem (2002) in three senses. First, two columns on the left suggest that the distribution of VMCs are fairly proportional across major four parties. Leaving aside the Bloc Québécois (BQ) and the Green parties, about 10% of the candidates of the major parties are VMCs. Second, three middle columns demonstrate that VMCs performed as well as other candidates in the 2008 election. The difference in their average voter support is only 5 percentage points. This coincides with the conclusion of the above-mentioned studies that visible minority background does not impair electoral success.

Finally, two columns on the right suggest that VMCs are much more likely to run in ethnically diverse districts. Although errors in coding can bias the estimates in any direction at any analytical stage, at least a validity check with the other two exiting studies suggests a robust similarity to them overall.

Finally, the candidate data was merged to the Canadian Election Study data in a way that individual respondents in the survey data are paired with each candidate in their district.  

5.2.2 Statistical models

Although the focus of this study is to examine whether voters are more or less likely to vote for a VMC, the dependent variable should not be a dummy variable indicating whether respondents voted for a VMC or not. Like the experiment data in the previous two chapters, a dummy variable for the candidate's VMC status is treated as a main independent variable of interest, while the respondents' reported vote choice in general serves as a dependent variable. In 228 out of 308 districts (75%) VMCs are absent,

would know about the backgrounds of candidates.

The district-level data of visible minority population is obtained from the Census Canada 2006 from Statistics Canada (2011).

In other words, the CES 2008 data is expanded to make multiple respondent-candidate pairs per respective district. See Cutler (2002) for a simpler version of this procedure.

For a similar inference in the US, see Highton (2004).
which means that the respondents in these districts have no choice to vote for a VMC. One way of solving this choice set problem is certainly to drop 228 districts, and focus on 80 districts with VMCs. Obviously, this is inefficient, a waste of information. On the other hand in two ethnically diverse districts (Mississauga - Brampton South in Toronto, Ontario and Richmond in British Columbia), all the candidates of the four major parties (Liberal, Conservative, NDP, and Green) had ethnic minority backgrounds. Thus in these districts, unless voters want to support a candidate of some minor party or an independent, there is virtually no choice but to vote for one of VMCs. In other words, the base probability of voting for a VMC is 100% in these districts. So a solution to this problem is to use all the districts, assuming 228 districts without VMCs as a hypothetical “control group” compared to “a treatment group” of 80 districts with VMCs. To do so, the choice of respondents' party vote should be a dependent variable, while other important candidate-specific or voter-specific factors that influence their choice should be controlled for. The choice of four major parties (Conservative, Liberal, NDP and Green) is available almost everywhere in the 2008 Federal election; in Québec, the choice set also includes the BQ.

The dependent variable in this study is therefore a voter-specific, multinomial vote choice of a party reported in the Post-election study of the (PES) CES 2008, whereas the key independent variable is a candidate-specific dummy variable for visible minority status. There are some methodological challenges in estimating the effect. First, the choice of the BQ s is available only in Quebec. Second, some voters faced more candidates in their district than others, but many of them (i.e. independents) may be irrelevant to their vote choice, no matter how many are running. In such situations, if the data is analyzed using a conditional logit or multinomial logit model, the estimates can be biased, because these models assume a so-called “independence of irrelevant alternatives” (IIA) assumption (Train 2009). The

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78 In the 2008 election for example, one district had 10 candidates, whereas most districts had four (84 districts) or five (125 districts) candidates.
above two situations clearly violate the IIA assumption, because for some voters, two or three vote choices can share common unobserved characteristics which can influence their vote (Glasgow 2001). Thus I use mixed logit model, which relaxes the IIA restriction, and allows modeling more flexibility and efficiently than the alternative multinomial probit model. Like conditional and multinomial logit model, mixed logit models can estimate effects of both alternative-specific (candidate or candidate relative to voter) and individual-specific (voter) characteristics on multinomial outcomes (party/candidate choice) with random components which capture unobserved, varying “tastes” over the specified variables for individuals. The utility function of a mixed logit model, which works with the utility that individual $i$ would gain by voting for a candidate among $j$ number of candidates, can be expressed as:

$$U_{ij} = \beta_j X_{ij} + (Z_{ij}\eta_i + \varepsilon_{ij})$$

where $X_{ij}$ is a vector of independent variables in a format of either candidates’ unique character, voter’s attributes relative to each candidate, or voter’s unique attributes. The main independent variable, VMC or not, is included here. $\beta_j$ is a vector of fixed coefficients for $X_{ij}$, and $Z_{ij}$ is a vector of independent variables whose effect randomly varies over voters or candidates. $Z_{ij}$ can overlap some or all of $X_{ij}$, and $\eta_i$ and $\varepsilon_{ij}$ are both vectors of random terms whose means are assumed to be zero. $\eta_i$ is a specific random term that can vary over voters to capture varying voters’ “taste” differences on the independent variables in $Z_{ij}$. In this study, the size of variance of random terms ($\eta_i$) are not of interest, but voters’ preferences

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79 In ancillary analyses, I examined the difference of two coefficients by dropping one option with conditional logit models by seemingly unrelated estimates (the generalized version of Hausman’s test). The results show that coefficients are significantly different, meaning that the IIA is violated.

80 See Glasgow (2001: 119-120) and Train (2009: 137-141) for more details of this model. Note that this formula does not have a “constant” as in an OLS regression formula, $Y = \beta_0 + \beta_iX$. In conditional logit or mixed logit model, dummy variables in a choice set can be manually introduced as independent variables to capture the average probability shift relative to the other choice. An omitted category (in the following analysis, Conservative party) is the base category.
for VMCs may vary, even after the fixed effect is captured by a dummy variable. Introducing ethnic minority characteristics both to $X_{ij}$ and $Z_{ij}$ allow us to examine such a possibility.

5.3 Hypotheses

Out of ten hypotheses tested in the previous two chapters, three are chosen due to the nature of the dataset and limitations on the available variables. Table 5.2 summarizes them.

First at the top of the table, note that the ATE is just an assumed potential effect, which may not be observed or even exist. Yet if we can assume such an effect in a real electoral context, the individual voters' potential probability of voting for a VMC is lower than that for a non-VMC.

If some politically-relevant information quashes the assumed treatment effect, we would expect to observe that lower support for VMCs on average disappears, once partisanship, ideological proximity, or competitiveness is introduced to predict vote choice. So, similarly to the partisan inhibition hypothesis, a politically relevant information inhibition hypothesis predicts that potential lower support for VMCs, if any, will not be observed, once candidates' party affiliation, voters' partisanship, their ideological proximity to each party, or the party vote share in the 2006 Federal Election is controlled for.\textsuperscript{81}

Following Cutler (2002: 472), partisanship and absolute ideological distance are introduced as candidate vis-a-vis voter variables.\textsuperscript{82} To measure candidates' competitiveness (or viability), I used the party vote

\textsuperscript{81} This approach in fact does not mimic well a true difference between a partisan context in the real world and a hypothetical non-partisan context. Instead, I examined if nonpartisans are more or less influenced by the candidates’ ethnicity, assuming that nonpartisans are less influenced by partisan context. The analysis however, suggested the effect of VMCs is similarly negligible between partisans and nonpartisans, after controlling politically relevant variables.

\textsuperscript{82} Partisanship is coded as 1, only if voters' partisanship matches with the major five parties of a candidate. Other minor partisans are excluded. Also, the partisan dummy includes those who feel “a little closer to” one of the parties in PES. This operationalization assumes that the effect of partisanship on vote choice is constant across parties. This is mainly in order to increase the efficiency in estimation as well as simplicity of presentation, but also to avoid a chronic problem of failing to achieve
share in the prior 2006 election. Introducing this variable to the model may be over-controlling for the potential confounders, because some VMCs ran in the 2006 election. Because the party vote share in the 2006 election factors in the possible effect of candidate’s ethnicity, and I assume a temporal stability of the effect over the two elections, at least a part of the effect can be swamped by this control. Thus this measure may not be an ideal measure of competitiveness, but should be an effective proxy.

This first hypothesis is a tricky one however, because a negative finding does not guarantee that the above-mentioned variables suppress the potential effect of candidate’s ethnicity on voting—such an assumed effect may not exist in the first place. Turning to the “positive” side of the ledger, I examine two theories that predict voter heterogeneity. The negative attitudes/affects moderation hypothesis predicts that a negative treatment effect would be observed among those with relatively colder feeling towards ethnic minorities. In a similar manner, realistic group threat moderation hypothesis also predicts a negative treatment effect among those who oppose preferential policies towards ethnic minorities. In other words, as we saw in Chapter 3 and 4, these two hypotheses posit that the effect size differs depending on the respondents' negative and positive feeling about ethnic minorities and their attitudes on ethnically relevant policy that can threat their (majority) position.

As two moderating variables, a feeling thermometer deviation of the score on racial minorities from the mean thermometer score on political objects and groups is used as a measurement of negative attitudes/affects, while a question asking how much more or less be done for racial minorities is used to measure attitudes on a realistic-group-threatening policy. To construct the first variable, I subtracted the convergence in maximum likelihood estimation. I tried models with 4 partisanship introduced separately, by which I can examine its different effects by party, but the results were strikingly similar. Ideological distance is measured by subtracting each voters' self-reported left-right position (11 point scale) from the average placement of each party by top 13% of the knowledgeable respondents measured by 4 quizzes on politics. The rated position is very similar, if I use the average placement for each party by the tertiary educated respondents.
average score of eight feeling thermometer scores from that on racial minorities, and rescaled it to range from 0 to 100 (0 represents the coldest and 100 the warmest feelings relative to their mean thermometer score). The latter variable is a 5 point scale answer ranging from 0 to 4, with 0 meaning the attitude most opposed to preferential treatment of ethnic minorities. Question wordings and answer options used in the analysis are available in Appendix B3.

In estimating the effect, I assume that the relevant voters in districts with VMCs are aware of their existence. Although this is a strong assumption, when many Canadian voters are generally uninformed about or oblivious to the political issues (Fornier 2002), and as Matsubayashi and Ueda (2011) contends in the US, the effect of candidates’ ethnicity is not observed, when voters simply do not know about candidates’ backgrounds in their district especially in low information contests. Respondents reported their vote in PES however, after they went through the election campaign through media, canvassing, networking, and so on. Because VMCs’ minority status is more visible in their appearance in images and many voters must have seen their “atypical” names at the ballot which signaled their visible minority status, it is reasonable to assume some voters noticed VMCs in their district in a voting booth or when reporting their vote in PES.

83 Feeling thermometer questions are on a 0 to 100 point scale, and other thermometer variables used to calculate the mean score includes scores on “politicians in general”, “Canada”, “USA”, “Quebec”, “Aboriginal people”, “feminists” and “gays and lesbians”. Taking the respondents’ deviation from their own mean score like this is preferred to a raw score of the feeling thermometer on racial minorities, because this treatment can negate possible individual differences in anchoring their answer point of their first choice. Using the raw feeling thermometer score on racial minorities produced similar but weaker results.

84 To maximize the efficiency in producing the results and for the sake of simplicity, other control variables are omitted. I tested with more different control variables, including voters’ socio-demographic backgrounds, economic perceptions, policy positions other than ideology, etc, but the basic patterns were similar to those reported in the following section. On note of efficiency, I used Hole's (2007) mixed logit package in Stata, and found fewer independent variables are preferred to yield results with model convergence. In general, when a lot of random coefficients are introduced, and when independent variables have strongly correlated, the model failed to converge.
5.4 Results

In this section, I report the result of the analyses in order.

5.4.1 ATEs and possible inhibition by politically relevant information

Table 5.3 reports the result of four mixed logit models. First, Model 1 shows a raw relationship between candidates' visible minority background and vote choice. Only five constants, or the average level of support for four parties and others/independence were introduced as controls. Because I set the base category as Conservative, each constant can be interpreted as the relative change in support level compared to Conservative party. Drawing a meaningful inference from this simple model may be a little naive, but it serves as a useful base for comparison when other control variables are introduced.

According to the results of Model 1, visible minority background is negatively related to vote choice, and this relationship is statistically significant at \( p = .033 \). Because the coefficient of -0.31 in a mixed logit model does not give an intuitive sense of the effect size, predicted marginal effects by party are reported for four models altogether in Figure 5.1.85 The figure suggests that the strongest effect is among Conservative candidates. When a Conservative candidate is a VMC, and none of the other candidates (Liberal, NDP, Bloc, Green and Independent) are visible minority, respondents' probability of voting for a Conservative party is on average 14.2 points lower than when a Conservative party candidate is not a VMC, and this is statistically significant (\( p < .001 \)). This difference is smaller, when the VMC is running from Liberal (-5 points, \( p = .036 \)), NDP (-3.8 points, \( p = .030 \)) or BQ (-7.7 points, \( p = .095 \)), and even smaller for Green (-1.5 points, \( p = .024 \)). Back to the bottom of Table 5.3, the random

\[ \text{Prob}(j) = \exp(\beta_j X_{ij})/\sum_{k=1}^{k} \exp(\beta_n X_{in}), \]

where \( n \) represents a respective candidate choice of available \( k \) choices, and \( n \in k \).

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85 Because the mixlogit package is not linked to a standard marginal effect calculation method with simulations in Stata, I calculated the predicted probabilities and marginal effects using nonlinear combination of estimators (\textit{nlcom}) function. For simplicity and insignificant effect, random components are not considered in this calculation (the mean is zero anyway). A fixed part of individual \( i \)'s probability of voting for a party \( j \) was calculated using the following formula: \( \text{Prob}(j) = \exp(\beta_j X_{ij})/\sum_{j=1}^{k} \exp(\beta_n X_{in}) \), where \( n \) represents a respective candidate choice of available \( k \) choices, and \( n \in k \).
coefficient of 0.71 for visible minority suggests an individual-level variance or the “taste” over VMCs. The number is relatively large, but the \( p \)-value falls under the conventional significance level (\( p = 0.169 \)). Thus, this variance can be neglected, and is hereafter omitted from my analysis.\(^{86}\)

Models 2 to 4 in Table 5.3 test the inhibition hypothesis, which predicts that the effect of VMCs would vanish after controlling for partisanship, ideological distance and competitiveness. Needless to say, all these variables predict vote choice well, and the model-fit statistics (percentage of correct prediction) improves over that of Model 1. To start with the results of Model 2, we find a somewhat surprising result. As expected from the hypothesis, the effect size decreased only a little, and the estimated effect is still negative, even after controlling for voters' partisanship (\( b = -0.23, p = 0.092 \)). In Model 3, the effect size shrank further, and its \( p \)-value exceeded the conventional threshold (\( p = 0.43 \)) after controlling for the ideological distance, but the estimated effect is still negative. The effect sizes are illustrated in Figure 5.1 again. The estimated effect size and party variance shrank a little in Model 2 and 3 (middle two figures) overall.\(^{87}\) Thus when partisan or policy information is controlled for, a strong treatment effect is not observed.

Second, Model 4 suggests that a small marginal effect of VMCs, if any, can simply be due to a difference in the candidates' viability: voters may not have voted for a VMC, because he or she was not

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\(^{86}\) This means that this taste variation can be assumed to be constant across individuals in this model. Because readers may be interested in the size (and significance) of this variance, I kept it in the random component. The model without this term does not substantively change the result.

\(^{87}\) Upon this result, one may consider that ideological distance, or policy attitude is a more important confounder. Yet this result must be due to the reduction in the sample: compared to Model 1, Model 3 lost about 1,300 observations (about 48 percent), thus the loss of statistical significance. This is due to sample attrition in CES 2008, because I use ideological position question available only in the mail-back survey section. This issue is serious, if the loss occurs systematically. A mere fact of non-significant result of Model 3 itself implies a less-than-robust effect of VMCs. Nonetheless, there is no guarantee that the respondents who drop out at the mailback wave are randomly distributed across their vote choice and their probability of favoring/disfavoring VMCs. In other words, if voters who are more likely to discriminate against VMCs are disproportionally dropped from the PES to mail-back samples, then this result is partly due to the systematic missing data bias.
likely to win. As the miniscule coefficient of -.02 suggests, the effect totally vanishes ($p=.829$), when the party vote share of the 2006 Federal election was controlled for. Thus this single variable obliterates the negative effect of VMCs. Turning back to Model 4 component in Figure 5.1 (right), all the estimated marginal effects are lined up on zero point. This means that for all parties, no difference exists in respondent's probability of choosing candidates between visible minority and other ethnic background in this model. Thus the first hypothesis is strongly supported by these Model 4 results.

5.4.2 Moderated effects

However, this is not an end of the story. As the two moderation hypotheses posit, the effect of VMCs may be buried under voter heterogeneity, because some voters holding negative racial/ethnic attitudes may respond to VMCs quite differently from voters with positive attitudes. Thus a crucial test of these hypotheses would be to examine the interaction effects of feelings about racial minorities and attitudes on racially-oriented policy, after controlling for voters' partisanship and candidate viability.

Because there is no point in reviewing a number of coefficients of interaction terms by different party, which are hard to interpret, the marginal effects of VMCs at different points of the two moderating variables are illustrated by party in Figure 5.2 (negative attitudes/affects moderation hypothesis) and Figure 5.3 (realistic group threat moderation hypothesis). Although none of these effects reach the conventional level of statistical significance ($p>.05$), the overall results suggest a consistent pattern of effect moderation. Each section of the figure segmented by party means the marginal effects on voting for a candidate of that party, when only that party’s candidate is a VMC.

First, Figure 5.2 strongly suggests that the effect of candidates' visible minority background depends on

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88 The model failed to converge when the ideological distance variable is introduced and so I had to drop this variable.

89 The regression tables comparable to Table 5.3 are available in Appendix C.
voters' feeling about ethnic minorities. For example, when the Conservative Party fielded a VMC in a district where all the other candidates were non-VMCs (the top left subsection of the figure), the estimated effects vary from \(-.17 \ (p=.257)\) for respondents with the relatively coldest feeling towards ethnic minorities (at 0 on the horizontal axis ) to \(+.09 \ (p=.455)\) for those with the warmest (at 100 on the same axis). In other words, despite its statistical insignificance, if respondents have negative affects towards the ethnic minorities, they were estimated less likely to vote for a Conservative Party candidate, when he or she was a VMC, but on the other hand if they have positive affect, they were more likely to vote for the party.

Similarly, with the same degree of shift in the level of feelings about ethnic minorities, the marginal effects vary from \(-.08 \ (p=.181)\) to \(+.11 \ (p=.328)\) when the Liberal Party fielded a VMC. Although the level of magnitude declines significantly, a slightly increasing tread can be observed for NDP from \(-.07 \ (p=.183)\) to \(-.01 \ (p=.932)\) and for BQ from \(-.08 \ (p=.236)\) to \(+.01 \ (p=.978)\). The trend is not clear for Green, but this is probably because the absolute vote share of this party is significantly smaller, thus there is not much room for the effect. Again, some of the effects fall below the threshold of statistically significance, yet the overall tendency of the marginal effect points to the negative affects/attitudes moderation.

Furthermore, Figure 5.3 gives a somewhat weaker, but similar trend as was seen in Figure 5.2. The top left section of the figure again gives estimates of marginal effects for respondents with different attitudes on racial minority policy, when only a Conservative Party candidate was a visible minority in a district. Although all the estimates are statistically insignificant \((p>.15)\), when respondents answer that “much less” should be done for ethnic minorities, they were estimated 11.5 points less likely to vote for the Conservative VMC \((p=.182)\), but if respondents think that “much more” should be done, the estimated marginal effect is \(+6.8\% \ (p=.376)\). With the same changes in the attitudes from “much less” to “much
more”, if a Liberal Party candidate is a visible minority, the marginal effect changes from -0.04 ($p = .126$) to +0.08 ($p = .224$). Again, the magnitude of change decreases in the cases of NDP, BQ and Green party candidates, but some of the effects are even statistically significant (when NDP candidate is a VMC, and if respondents think “somewhat less” should be done for racial minority, the marginal effect is -0.47, and $p = .047$). Note that all these estimates were obtained with the respondents’ partisanship and the party vote share in the previous election were controlled for. The trend lines indicate that voter heterogeneity exists alongside their policy attitudes on how much policy benefits they think ethnic minority should have.

As the final analyses of the two figures, histograms at the bottom right suggest an important implication of this result from a different angle: even though voter heterogeneity is suggested, with a possible strong negative effect among the respondents with the feeling or policy attitudes of strong opposition, there is only a small share of the population that are measured as holding such attitudes. For example, only 0.38% of the sample in the model had the relative coldest feeling category of 0 to 9, and even a group with a relatively colder feeling of 0 to 30 all included, is still only 2.9%, and those with relatively colder feeling from the average (0 to 50 with a gray dotted line) shares only 26.5% of all the respondents. On the second variable, only 4.5% of the respondents in Model 6 answered “much less”, and with including “somewhat less”, still only 15.9% of all the respondents. In other words, in the real political context, the negative effect of the ethnicity minority background is limited only to this slim population (perhaps about 10% at best) in Canada.

All in all, the second and third hypotheses were moderately supported, suggesting that voters’ response to VMCs is heterogeneous by racial affects and attitudes. Voters who hold negative ethnic attitudes and who think that the ethnic minority should not gain more policy benefits are predicted to be less likely to vote for VMCs, while candidate's visible minority background does not influence vote choice for most voters who have moderate to positive racial attitudes.
5.5 Summary and discussion

In this final section, I review the major findings in the chapter, followed by a discussion of the limitation and implications of this study. The main results are summarized in Table 5.4.

Although a null finding of a treatment effect is not equivalent to a confirmation of an inhibition hypothesis, the observed negative relationship between having one or more VMCs in a district and respondents' vote choice was attenuated after introducing respondents' partisanship and ideological proximity to the party in the model, and completely vanished after controlling for the previous party vote share. Second, at least the predicted sign on the two moderating effects is observed: a negative effect of VMCs on vote choice is stronger among those with relatively more negative feeling about ethnic minorities and among those who think that less should be done for ethnic minorities. Although the patterns are clear, most of the estimated effects are statistically insignificant; therefore “a qualified yes” is appropriate for the result of these tests.

With the results obtained in Chapter 4, I summarize these results as overall small, if not totally absent, average effects of candidates' ethnic background on vote choice in the actual electoral context due to the interaction with the more politically important, relevant information. Despite the similarity of the moderated effects to what was found in the lab setting, the share of the total voters who are most influenced by this information would be very small. This leaves some potential for an effect if, for example Canadian politics and voters were deeply divided and polarized on some ethnically relevant policy.

5.5.1 Can we generalize this result? Limitations and implications for future observational studies

So in contemporary Canadian Federal elections, is the potential influence of candidates' ethnicity on
voting behavior negligibly small or extremely limited to only a small set of voters? We may not want to jump to such a hasty conclusion. Observational studies like this have a shortcoming in identifying the causality in the first place. This problem is serious, particularly when self-selection is involved. As discussed in Chapter 2, candidates and parties may strategically choose, or allocate particular districts for candidates of different types. If this type of endogeneity exists, the estimated causal effect of VMCs can be biased. For example, assume a VMC or her party chooses to run in an ethnically diverse district because voters in this area conceivably favor electing a visible minority. This hypothetical scenario sounds very likely; it is obviously a manifestation of assumptions about choice homophily by visible minority voters and candidates. If so, the estimated effect of VMCs within these electorates is biased towards zero, thus the estimates of ATEs in this chapter are conservative compared to the “true” effect, if the all Canadian voters faced at least one VMC. In short, VMCs could have suffered more if they were to have run in more majority-dominated districts.\(^90\)

An opposite pattern can be assumed that the estimated causal effects of VMCs in this paper are overestimated, although such a scenario is unlikely. For example, imagine that VMCs chose districts that provide better party resources and access to various human networks, (thus contributing positively to their winning), \textit{but} those voters are more likely to discriminate against VMCs. If VMCs select such districts \textit{despite} the cost of accepting lower support among some voters, then the estimates are negatively biased. VMCs may not be as discriminated against as is shown in this paper in other, not selected districts. I believe this case is much less likely than the former case, because it would be politically suicidal for VMCs at least for the short term. The structure of the unobservable is by

\(^90\) Although Black and Erickson (2006) and Tosstti and Najem's (2002) studies suggest this is not the case, I disagree with their points for two reasons. First, any estimates we draw based on existing data can be \textit{already biased} by this selection mechanism. In other words, we do not know what would happen if VMCs ran in an ethnically homogeneous area. Second, their study, at least as published, does not test an interaction effect between VMCs and the percentage of ethnic minority population, which is the crucial variable to test this claim.
definition unknown however, thus further speculation is not very helpful.

Other limitations of this study include fewer controls of confounders, model misspecification, and measurement errors especially in coding ethnic background. In general, testing with new or more data, improvement of the measurement, and replication of studies lead to more confident inferences. The first two problems may be addressed by testing the data with different statistical methods or models, although it was challenging to accommodate an adequate set of independent variables in a mixed logit model. Principally, with observational data like this, it is impossible to take a perfect balance between the treatment and control group by regressions with controls or matching on observables. The power of studies like this would be greater, perhaps, if future studies strategically compare several different elections over time to see the effect of switching between VMCs and non-VMCs within districts over time as in Street's study (2014), or use local elections to examine lower-information contexts to test inhibition hypotheses.
6 Conclusion

Thus far we have tested the hypotheses derived from three theories to explain the negative treatment effect of candidates’ ethnicity on voting using experiments and observational data from two countries. In this final chapter, I summarize the major common findings in this thesis and discuss implications and avenues for future research. Despite starkly different social and political contexts in the two countries, the similarities across the three studies are striking. The main results in the empirical chapters are summarized in Table 6.1.

6.1 Similarities and differences across studies

Table 6.1 highlights two important similarities across three chapters. First, two types of voter heterogeneity work as expected across all of the studies. As the middle section of the table shows, similar moderating effects of the treatment were repeatedly observed across three study types. In both Japan and Canada, as the level of negative attitudes or affect about ethnic minorities increases, voters are less likely to vote for an ethnic minority candidate. Even though the magnitude is smaller, a similar relationship was detected regarding attitudes toward ethnically relevant policy. On the other hand, no moderating effect was found for the strength of the ethnic identity of the major or dominant ethnic group. Although intuitive, these voter heterogeneities are important for two reasons. First, the true treatment effect is buried in these heterogeneities. Even if an average treatment effect of ethnicity is not observed in studies, many voters do respond to the candidate’s ethnicity, they may simply respond in a heterogeneous fashion. Second, the potential effect size of candidates’ ethnicity can largely depend on the nature of the distribution of these attitudes in the society. For example, the fact that only a small share of the Canadian voters who expressed strongly negative affects towards racial minorities predict that the ATE would be small or negligible. In Japan, the difference in the size of the ATE between the
first (Chuo University students sample) and other studies (eligible Japanese voters across Japan) is largely attributable to the difference in the level of negative affect to ethnic minorities between the two samples.

Second, the bottom section of the table indicates that the two proposed causal mechanisms are generally supported in each of the studies, although there is an important difference in the strength of the mechanisms. For the trait- and affect-driven mechanisms, it is striking that the target ethnic minority candidates (Lim and Punjabi Gill) were not perceived more negatively than the comparable candidates (Hayashi and European Gill) in the control group. In both cases, the effect was mediated by improving perceived traits and affective reactions toward the candidate’s opponent(s). Methodologically, this highlights the importance of having a competing electoral context in a survey experiment. Substantively, this consistent pattern implies that consciously or unconsciously, voters may use a pretext to differentiate ethnic minority candidates from others for their social desirability concerns. In future studies, designs that manually manipulate the level of impression or anxiety about the ethnic minority candidates as well as minority candidates’ opponents could help refine this analysis, and contribute to further understandings of this causal mechanism.

The most important difference across the studies lies in the first two rows of Table 6.1. After controls, a significant treatment effect was not found in the observational study, while statistically significant negative ATEs were repeatedly found in the experiments. This presents an important challenge, particularly in cases where the partisan inhibition hypothesis is unlikely to hold. Future studies need to keep tackling the question of why the expected effect of candidate's ethnicity is not consistently found in observational studies. Is this simply a problem of external validity with the experiments, or a problem of internal validity with the observational studies (some voters simply may not recognize ethnic minority candidates in the first place)? Identifying factors and forces that counteract the potential negative impact
of candidates’ minority ethnic status in the real political world is an important task for further research.

A second important difference is in the relative strength of causal mediations between Japan and Canada. While the affect-driven mechanism was supported more strongly in Japan, the relevant policy preference cue mechanism dominated in Canada. Examining these mechanisms with observational data is hard, but comparative studies across countries can potentially contribute a lot to unraveling this difference. More experiments would also be helpful, because this observed difference could be an artifact due to differences in the design of the experiments. For example, the Canadian experiments presented subjects with three candidates, the policy of funding ethnic minority culture could be more relevant in Canada than the policy of granting local suffrage to the permanent foreign residents in Japan, and the nature of discourse surrounding Zainichi Koreans in Japan may be substantively different from discourse surrounding Punjabi in Canada. Future experiments examining the same causal mechanism using different ethnicity of candidates or measuring preferences on more policy areas within a single country would help tease out whether the distinctions found across these studies are substantively robust or tied to experimentally design.

6.2 Implications

Both the similarities and differences in the findings across my three studies suggest important implications for both our understanding of political representation in multi-ethnic contexts and for how we go about researching the topic.

In general, my findings echo Moser (2008), which suggests that the potential influence of candidates’ ethnicity depends on the social context of how much the ethnic minority groups are accepted in the host society. Positive consequences from electing ethnic minority candidates may take some time. While it is possible to increase the number of ethnic minority politicians in a short time by institutionally reserving
seats for ethnic minorities, an average improvement of voters' affect or attitudes towards ethnic minorities is unlikely to occur in a very short term. Thus future research may need to more carefully utilize longitudinal data to address how changes in ethnic minority representation over time may be related to accommodation and integration of minorities.

My studies found that the relevant policy preference cue mechanism is relatively more steady across both countries. The evidence for first step was firm and clear: the target candidate's ethnic minority background “tells” the respondents that the candidate would give more support to a policy beneficial to their ethnic minority members. Importantly, this was observed mostly on the ethnically relevant policies. As a litmus test of this hypothesis, even when the target candidates explicitly opposed such a policy, the respondents still judged on average that he would be relatively more likely to support that policy. Further, the second experiment in Canada suggests that this effect is even stronger in the non-encouraged group, when candidates were mute about the ethnically relevant policy. Putting these findings together suggests that the policy preference cue mechanism may be strongest in low-information electoral contexts. When voters do not know about policy preferences of ethnic minority candidates, when candidates are equivocal about the relevant policies, or when such information is simply unavailable, many voters may infer from the ethnic identity of the candidate their position ethnically relevant policies. This highlights one key condition that may greatly influence the degree to which candidate ethnicity affects voting behavior.

To consider the broader implications for citizens' electoral capacity, these results can be interpreted as a sign of both voters' hard-wiredness in processing the ethnicity information and their capacity of strategically utilizing such information. Voters are stubborn, when they discount the ethnic minority candidates' expressed policy, and their judgment is most likely to be based on their negative ethnic stereotypes. On the other hand, making such an inference may be reasonable, when the candidates'
ethnicity is more reliable information for voters. Political elites' talk is sometimes cheap: they can modify or waffle on previously stated positions. However, candidates usually cannot change their ethnic background: the information is often widely available or simply visible. Membership of an ethnic group can be perceived by voters as a hard evidence for some future commitment to that group. Thus voters' commitment to using candidates' ethnicity to inform their beliefs about policy positions, and their subsequent vote choice, could be regarded also as the result of their “reasoned choice”, even though for many voters, their motivations may be more tied to negative stereotypes.

Another important area of research that future studies can challenge is to examine possible temporal changes in the treatment effect, as voters accumulate information about ethnic minority candidates. The treatment effects in the experiments are observed in very unusual situations where respondents see totally unfamiliar candidates with quite limited information about them. The respondents made their vote choice decisions very quickly, too. This is an obviously different situation from real electoral contexts. They may know more about candidates from the past elections, from voters' family, colleagues and friends, through the media, and by their direct communication with the candidates during and outside the election campaigns. Through such processes, voters can build more (or even less) trust in candidates, take candidates' policy positions more (or less) seriously, or simply change their minds. Especially if voters were informed over time that an ethnic minority candidate consistently opposed to a policy that benefits ethnic minority group, the treatment effect is expected to be attenuated.

Voters' response to campaign messages over time, and its effect on vote choice is not simple (Chong and Druckman 2010). Even in its simplest form, a decision made after considering the same information over time can be different from that made in haste. When voters are provided with enough time to seriously consider the candidates' positions, they may deliberate more on the message or on other issues,

91 I appreciate Professor Yoichi Hizen to provide this viewpoint and interpretation.
and the significance of candidates' ethnicity may decay. Thus future research can address the problem of time and examine how it can interact with the effect of ethnicity.

Ultimately, this dissertation extends the experimental study of ethnicity and voting behavior in a comparative direction. In doing so, I find striking commonalities across my different studies, finding important effects in experiments in studies conducted both in Canada and Japan. However, my research highlights the importance of incorporating context in our experimental studies (in particular, providing subjects with both minority candidates and non-minority opponents to evaluate), the importance of studying how voter heterogeneity conditions treatment effects, and the importance of multiple potential causal mechanisms. The link between ethnicity and voting behavior is complex and while the studies presented in this dissertation help shed some light on the links, they also highlight how further research is needed.
## Tables and Figures

Table 2.1  Summary of the major studies examining the effect of candidates' racial/ethnic background on voting by experiment

<table>
<thead>
<tr>
<th>Work</th>
<th>Country</th>
<th>N</th>
<th>Participants</th>
<th>Work Country</th>
<th>Background</th>
<th>Assumed Party</th>
<th>N contest</th>
<th>Party control</th>
<th>Average treatment effect on voting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terkildsen (1993)</td>
<td>US</td>
<td>348</td>
<td>White</td>
<td>White and light/dark-skin Black</td>
<td>Governor</td>
<td>1</td>
<td>No</td>
<td>Yes</td>
<td>Cross-ethnic negative -0.1 to -0.2 out of max 3 (1-4)</td>
</tr>
<tr>
<td>Sigelman et al. (1995)</td>
<td>US</td>
<td>659</td>
<td>White</td>
<td>White, Black and Hispanic</td>
<td>Senate</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>Cross-ethnic negative -</td>
</tr>
<tr>
<td>McDermott (1998)</td>
<td>US</td>
<td>934</td>
<td>Mixed</td>
<td>White and Black</td>
<td>President</td>
<td>2</td>
<td>No</td>
<td>N/A*</td>
<td>Cross-ethnic, negative -</td>
</tr>
<tr>
<td>Reeves (1997)</td>
<td>US</td>
<td>253</td>
<td>White</td>
<td>White and Black</td>
<td>Mayor</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>Cross-ethnic negative -</td>
</tr>
<tr>
<td>Dunning and Harrison (2010)</td>
<td>Mali</td>
<td>824</td>
<td>12 groups</td>
<td>12 groups</td>
<td>National Assembly</td>
<td>1</td>
<td>No</td>
<td>Yes</td>
<td>Co-ethnic positive OR cross-ethnic negative +.61 out of max 6 (1-7)</td>
</tr>
<tr>
<td>Aguilar-Pariente (2010)</td>
<td>US and Mexico</td>
<td>530</td>
<td>Mexican, mixed in phenotype</td>
<td>European White, Indigenous and “middle”</td>
<td>Democratic primary and governor</td>
<td>3</td>
<td>Yes</td>
<td>Yes</td>
<td>Co-ethnic, complicated -10 to +18 out of max 100 (%)</td>
</tr>
<tr>
<td>Brouard and Tiberj (2011)</td>
<td>France</td>
<td>2009</td>
<td>French and “immigrant”</td>
<td>French and Sub-Saharan African</td>
<td>Local</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>Co and cross-ethnic both positive +8 to 12 out of max 100 (%)</td>
</tr>
<tr>
<td>Weaver (2012)</td>
<td>US</td>
<td>2138</td>
<td>White</td>
<td>White and light/dark-skin Black</td>
<td>Federal</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>Cross-ethnic negative -</td>
</tr>
<tr>
<td>Street (2014)</td>
<td>Germany</td>
<td>825</td>
<td>Mixed</td>
<td>German and Turkish</td>
<td>Federal</td>
<td>1</td>
<td>No</td>
<td>Yes</td>
<td>Cross-ethnic negative -8 out of max 100 (%)</td>
</tr>
</tbody>
</table>
a. No comparison in vote choice is made between two experimental groups.

b. No effect on vote choice, but the percentage of “undecided” increased significantly (+27 points) for a group in which an affirmative action policy is primed.

c. Mali has major 12 ethnic groups of Bambara/Bamanan, Peulh/Fula, Sonrhai, Soninke/Sarakole, Maninka/Malinke, Dogon, Bobo, Senoufo, Mianka, Khasone, Tuareg, Bozo (Dunningn and Harrison 2010: 4). In their paper, these were classified into two types of same or different ethnic group.

d. Combined sample of immigrants (N: 1,006) and French representative (N: 1,003).
<table>
<thead>
<tr>
<th>Problems</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td><strong>Details</strong></td>
</tr>
<tr>
<td>1. Lack of theories</td>
<td></td>
</tr>
<tr>
<td>Conditions under which the effect is observed are not theoretically</td>
<td>*</td>
</tr>
<tr>
<td>tested.</td>
<td>x</td>
</tr>
<tr>
<td>Causal mechanisms are unclear: what characters voters infer from</td>
<td></td>
</tr>
<tr>
<td>candidates' ethnicity are not examined.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Threats to the measurement validity of key variables</td>
<td></td>
</tr>
<tr>
<td>The dependent variable does not examine vote choice (often only one</td>
<td>x</td>
</tr>
<tr>
<td>candidate is examined).</td>
<td>x</td>
</tr>
<tr>
<td>An important mediator, perceived policy preference of candidates on an</td>
<td></td>
</tr>
<tr>
<td>ethnicity-related issue is not measured properly or tested.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Selection bias</td>
<td></td>
</tr>
<tr>
<td>Little attention is paid to candidates' natural or strategic selection</td>
<td>*</td>
</tr>
<tr>
<td>bias in their district and party choice</td>
<td>x</td>
</tr>
</tbody>
</table>

\[\text{Obs.} \quad \text{Exp.}\]

<table>
<thead>
<tr>
<th>Type</th>
<th>Details</th>
<th>Obs.</th>
<th>Exp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lack of theories</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conditions under which the effect is observed are not theoretically tested.</td>
<td>*</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Causal mechanisms are unclear: what characters voters infer from candidates' ethnicity are not examined.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Threats to the measurement validity of key variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The dependent variable does not examine vote choice (often only one candidate is examined).</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>An important mediator, perceived policy preference of candidates on an ethnicity-related issue is not measured properly or tested.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Selection bias</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Little attention is paid to candidates' natural or strategic selection bias in their district and party choice</td>
<td>*</td>
<td>x</td>
</tr>
</tbody>
</table>

\[\text{Obs.} \quad \text{Exp.}\]

a. Middle columns represent which type of studies, observational (obs.) or experimental (exp.) study coped with the problems. While “x” represents the relevant study type mainly coped with the problem, “*” signifies that it partly accommodated it.
Table 3.1  Summary of three studies

<table>
<thead>
<tr>
<th>Study number</th>
<th>Participants</th>
<th>Sample</th>
<th>Total response</th>
<th>Japanese respondents</th>
<th>Experiment groups and design difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FPS students at Chuo University(^a)</td>
<td>N/A(^d)</td>
<td>163</td>
<td>152</td>
<td>A 2 (ethnicity) x 2 (policy) x 2 (picture) design, nonpartisan context only.</td>
</tr>
<tr>
<td>2</td>
<td>Eligible Japanese in the Nikkei Access Panel Monitor(^b)</td>
<td>15,716</td>
<td>3,260</td>
<td>3,231</td>
<td>The same 2 x 2 x 2 design as the study 1, nonpartisan context only.</td>
</tr>
<tr>
<td>3</td>
<td>Eligible Japanese in the Nikkei Access Panel Monitor(^c)</td>
<td>10,709(^e)</td>
<td>3,310</td>
<td>3,292</td>
<td>The same 8 groups in the nonpartisan context + 16 groups of partisan context: 2 x 2 x 2 x 2 (partisanship manipulation).</td>
</tr>
</tbody>
</table>

a. The survey was announced in the classes of Professor Kiichiro Arai and Steven Reed. Neither the total number of students attending these classes nor the FPS students who heard about this opportunity through words of mouth is known.

b. This study was conducted as a part of the larger research project, “Studies on Diachronic Formation of Public Opinion” (Principal Investigator: Masaru Kohno), supported by the Ministry of Education, Science, Sports and Culture, Grant-in-Aid for Scientific Research on Priority Areas Grant number: 19046001 (A sub-section of this study is “A Study on Political Institutions”, Principal Investigator: Yoichi Hizen).

c. This study was conducted as a part of the larger research project, “Studies on the Japanese Citizens’ Preference Formation Mechanism on Diplomacy” (Principal Investigator: Masaru Kohno), supported by the Ministry of Education, Science, Sports and Culture, Grant-in-Aid for Scientific Research (grant number: 23243030).

d. Due to the sampling process in which we announced the opportunity to participate in the survey to a large, unspecified number of students, we do not have a definite figure for this item.

e. Two types of sample respondents are included here. The first is the 1,324 respondents who continued from the previous study conducted in October 2011. The study has no direct relationship with this study. Of these individuals, 1,239 participated in this study. The other 9,385 are the fresh sample who received an invitation e-mail to join a rolling study for the first time. Of these, 2,071 participated.

f. This number excludes ineligible participants such as non-ethnic Japanese or non-Japanese citizens.
Table 3.2  Summary of hypotheses

<table>
<thead>
<tr>
<th>Hypothesis in short</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average treatment effect (ATE)</strong></td>
<td></td>
</tr>
<tr>
<td>Negative cross-ethnic voting</td>
<td>The relative vote of Korean Lim (treatment) is lower than that of Japanese Hayashi (control).</td>
</tr>
<tr>
<td>Partisan inhibition</td>
<td>The size of ATE is smaller under the partisan condition than under the non-partisan condition.</td>
</tr>
<tr>
<td><strong>Moderation</strong></td>
<td></td>
</tr>
<tr>
<td>Co-ethnic voting with identity</td>
<td>The negative treatment effect is magnified as the strength of ethnic social identity increases.</td>
</tr>
<tr>
<td>Negative attitudes/affects</td>
<td>The negative treatment effect is magnified, as Rs have more negative attitudes or affects towards Zainichi Koreans</td>
</tr>
<tr>
<td>Realistic group threat</td>
<td>The negative treatment effect is magnified, as Rs oppose the suffrage of foreign residents.</td>
</tr>
<tr>
<td><strong>Mediation</strong></td>
<td></td>
</tr>
<tr>
<td>Trait-driven mechanism (Hayashi/Lim)</td>
<td>Perceived traits of Hayashi/Lim mediates the treatment effect.</td>
</tr>
<tr>
<td>Trait-driven mechanism (Suzuki)</td>
<td>Perceived traits of Suzuki mediates the treatment effect.</td>
</tr>
<tr>
<td>Affect-driven mechanism (Hayashi/Lim)</td>
<td>Anxiety about Hayashi/Lim mediates the treatment effect.</td>
</tr>
<tr>
<td>Affect-driven mechanism (Suzuki)</td>
<td>Anxiety about Suzuki mediates the treatment effect.</td>
</tr>
<tr>
<td>Policy preference cue mechanism (Hayashi/Lim)</td>
<td>Policy preference distance on suffrage between respondents and Hayashi/Lim mediates the treatment effect.</td>
</tr>
</tbody>
</table>
### Table 3.3  Summary of results

<table>
<thead>
<tr>
<th>Hypothesis in short</th>
<th>Confirmed?</th>
<th>Effect size (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average treatment effect (ATE)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative cross-ethnic voting</td>
<td>Yes</td>
<td>-6.2</td>
</tr>
<tr>
<td>Partisan inhibition</td>
<td>Yes</td>
<td>Non-partisan: -7.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partisan: -3.5</td>
</tr>
<tr>
<td><strong>Moderation</strong></td>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>Co-ethnic voting with identity</td>
<td>No</td>
<td>-5.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-8.6</td>
</tr>
<tr>
<td>Negative attitudes/affects</td>
<td>Yes</td>
<td>+10.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-25.7</td>
</tr>
<tr>
<td>Realistic group threat</td>
<td>Yes</td>
<td>+9.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-15.6</td>
</tr>
<tr>
<td><strong>Mediation</strong></td>
<td></td>
<td>ACME</td>
</tr>
<tr>
<td>Trait-driven mechanism (Hayashi/Lim)</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Trait-driven mechanism (Suzuki)</td>
<td>Yes</td>
<td>-2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(37.7%)</td>
</tr>
<tr>
<td>Affect-driven mechanism (Hayashi/Lim)</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Affect-driven mechanism (Suzuki)</td>
<td>Yes</td>
<td>-3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(66.6%)</td>
</tr>
<tr>
<td>Policy preference cue mechanism (Hayashi/Lim)</td>
<td>Yes</td>
<td>-2.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(37.2%)</td>
</tr>
</tbody>
</table>
Table 4.1 Summary of the two studies

<table>
<thead>
<tr>
<th>Study number</th>
<th>Participants</th>
<th>Sample</th>
<th>Total response</th>
<th>Valid response&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Experiment groups and design difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UBC students&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N/A</td>
<td>414</td>
<td>414</td>
<td>A 2 (ethnicity) x 6 (policy) x 2 (partisan context) design with the policy platform referring to immigration and ethnicity policy.</td>
</tr>
<tr>
<td>2</td>
<td>Eligible Canadian voters outside Quebec in Research Now’s monitor</td>
<td>25,200</td>
<td>3,462</td>
<td>3,020</td>
<td>The same 2 x 6 x 2 design as in the study 1 + 12 groups without reference to the immigration and ethnicity policy under a non-partisan context of 2 (ethnicity) x 6 (policy).</td>
</tr>
</tbody>
</table>

a. The survey was conducted as a part of the Political Science Subject Pool program, directed by Professor Paul Quirk at the University of British Columbia. The total number of students who had opportunity to participate in the program is not available.

b. While no restriction is imposed on the UBC students sample, in the second survey, respondents from Quebec, respondents who are not eligible Canadian voters and those who refused to consent to the research were excluded from the valid responses.
<table>
<thead>
<tr>
<th>Hypothesis in short</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average treatment effect (ATE)</td>
<td></td>
</tr>
<tr>
<td>Negative cross-ethnic voting</td>
<td>The relative vote share of Punjabi Gill (treatment) is lower than that of implicitly European Gill (control)</td>
</tr>
<tr>
<td>Partisan inhibition</td>
<td>The size of ATE is smaller under the partisan condition than under the non-partisan condition</td>
</tr>
<tr>
<td>Moderation</td>
<td></td>
</tr>
<tr>
<td>Co-ethnic voting with identity</td>
<td>The negative treatment effect is magnified as ethnic social identity increases among the Rs with English, Scottish, Welsh and Irish ethnic identities</td>
</tr>
<tr>
<td>Negative attitudes/affects</td>
<td>The negative treatment effect is magnified, as Rs have more negative attitudes or affects to Punjabi Canadians</td>
</tr>
<tr>
<td>Realistic group threat</td>
<td>The negative treatment effect is magnified, as Rs oppose increasing funding for ethnic minorities' cultural heritage and traditions</td>
</tr>
<tr>
<td>Mediation</td>
<td></td>
</tr>
<tr>
<td>Trait-driven mechanism (Gill)</td>
<td>Respondents’ perceived traits of Gill mediates the treatment effect</td>
</tr>
<tr>
<td>Trait-driven mechanism (Sanderson and Moore)</td>
<td>The average respondents’ perceived traits of Sanderson and Moore mediate the treatment effect</td>
</tr>
<tr>
<td>Affect-driven mechanism (Gill)</td>
<td>Anxiety about Gill mediates the treatment effect</td>
</tr>
<tr>
<td>Affect-driven mechanism (Sanderson and Moore)</td>
<td>The average levels of anxiety about Sanderson and Moore mediate the treatment effect</td>
</tr>
<tr>
<td>Policy preference cue mechanism (Gill)</td>
<td>Policy preference distance on funding ethnic minority culture between respondents and Gill mediates the treatment effect</td>
</tr>
</tbody>
</table>
Table 4.3  Summary of results

<table>
<thead>
<tr>
<th>Hypothesis in short</th>
<th>Confirmed?</th>
<th>Effect size (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average treatment effect (ATE)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative cross-ethnic voting</td>
<td>Yes</td>
<td>-5.3</td>
</tr>
<tr>
<td>Partisan inhibition</td>
<td>Yes, but with caution.</td>
<td></td>
</tr>
<tr>
<td><strong>Moderation</strong></td>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>Co-ethnic voting with identity</td>
<td>No</td>
<td>(The opposite trend)</td>
</tr>
<tr>
<td>Negative attitudes/affects</td>
<td>Yes</td>
<td>+1.0</td>
</tr>
<tr>
<td>Realistic group threat</td>
<td>Yes</td>
<td>+/-0</td>
</tr>
<tr>
<td><strong>Mediation</strong></td>
<td>ACME</td>
<td>(% mediation)</td>
</tr>
<tr>
<td>Trait-driven mechanism (Gill)</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Trait-driven mechanism (Sanderson and Moore)</td>
<td>Yes</td>
<td>-1.2</td>
</tr>
<tr>
<td>Affect-driven mechanism (Gill)</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Affect-driven mechanism (Sanderson and Moore)</td>
<td>Yes</td>
<td>-0.7</td>
</tr>
<tr>
<td>Policy preference cue mechanism (Gill)</td>
<td>Yes</td>
<td>-4.3</td>
</tr>
</tbody>
</table>
Table 5.1  Distribution of VMCs across parties, their vote share and district character

<table>
<thead>
<tr>
<th>Party</th>
<th>Number of candidates</th>
<th>Vote share obtained (%)</th>
<th>Visible minority population (%) in candidates' district</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VMC</td>
<td>Other</td>
<td>VMC</td>
</tr>
<tr>
<td>Conservative</td>
<td>34</td>
<td>273</td>
<td>32.9</td>
</tr>
<tr>
<td>Liberal</td>
<td>27</td>
<td>280</td>
<td>25.6</td>
</tr>
<tr>
<td>NDP</td>
<td>27</td>
<td>283</td>
<td>14.8</td>
</tr>
<tr>
<td>Bloc Québécois (BQ)</td>
<td>5</td>
<td>70</td>
<td>32.5</td>
</tr>
<tr>
<td>Green</td>
<td>11</td>
<td>292</td>
<td>6.9</td>
</tr>
<tr>
<td>Other/independent</td>
<td>17</td>
<td>284</td>
<td>0.6</td>
</tr>
<tr>
<td>All</td>
<td>121</td>
<td>1,480</td>
<td>20.3</td>
</tr>
</tbody>
</table>

\(^a\) The percentage of Bloc Québécois in CES2008 is adjusted, showing the percentage only in Quebec. Other figures are the average including Quebec.
Table 5.2  Summary of hypotheses

<table>
<thead>
<tr>
<th>Hypothesis in short</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average treatment effect (ATE)</td>
<td>The probability of individual respondents' voting for a respective party is lower when the party candidate has a visible minority background than when the candidate is from other ethnic backgrounds.</td>
</tr>
<tr>
<td>Negative cross-ethnic voting (An assumed potential effect)</td>
<td>The assumed potential effect of the VMCs is not observed, when the following politically relevant variables are controlled for:</td>
</tr>
<tr>
<td></td>
<td>1) respondents' partisanship;</td>
</tr>
<tr>
<td></td>
<td>2) left-right ideological distance between respondents and each party's position; and</td>
</tr>
<tr>
<td></td>
<td>3) party vote share in the previous (2006) election</td>
</tr>
<tr>
<td>Politically relevant information inhibition</td>
<td></td>
</tr>
<tr>
<td>Moderation</td>
<td></td>
</tr>
<tr>
<td>Negative attitudes/affects</td>
<td>The negative treatment effect is magnified, as Rs have more negative attitudes or affects to ethnic minorities</td>
</tr>
<tr>
<td>Realistic group threat</td>
<td>The negative treatment effect is magnified, as Rs opposes increasing funding for ethnic minorities' cultural heritage and tradition</td>
</tr>
<tr>
<td>Variables</td>
<td>Model 1 Coef (s.e.)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td>p</td>
</tr>
<tr>
<td><strong>Fixed component</strong></td>
<td></td>
</tr>
<tr>
<td>Visible minority</td>
<td>-0.308 (.144) .033</td>
</tr>
<tr>
<td>Party identification</td>
<td>2.390 (.056) .000</td>
</tr>
<tr>
<td>Ideological distance</td>
<td></td>
</tr>
<tr>
<td>Party vote share in 2006</td>
<td></td>
</tr>
<tr>
<td>Constant (base: Conservative)</td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td>-0.400 (.048) .000</td>
</tr>
<tr>
<td>NDP</td>
<td>-0.742 (.054) .000</td>
</tr>
<tr>
<td>Bloc</td>
<td>0.461 (.084) .000</td>
</tr>
<tr>
<td>Green</td>
<td>-1.774 (.080) .000</td>
</tr>
<tr>
<td>Other/independent</td>
<td>-4.859 (.336) .000</td>
</tr>
<tr>
<td><strong>Random component (SD)</strong></td>
<td></td>
</tr>
<tr>
<td>Visible minority</td>
<td>0.705 (.513) .169</td>
</tr>
<tr>
<td>Party identification</td>
<td>-0.012 (.372) .975</td>
</tr>
<tr>
<td>Ideological distance</td>
<td></td>
</tr>
<tr>
<td>Candidate's vote share (%)</td>
<td></td>
</tr>
<tr>
<td>Model statistic</td>
<td></td>
</tr>
<tr>
<td>N (individual voter)</td>
<td>2,817</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-3641.2</td>
</tr>
<tr>
<td>Correct prediction (%)</td>
<td>43.5</td>
</tr>
</tbody>
</table>
### Table 5.4 Summary of results

<table>
<thead>
<tr>
<th>Hypothesis in short</th>
<th>Confirmed?</th>
<th>Effect size (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average treatment effect (ATE)</strong></td>
<td></td>
<td>Almost zero with the competitiveness and partisanship controlled for.</td>
</tr>
<tr>
<td>Politically relevant information inhibition</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Moderation</strong></td>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>Negative attitudes/affects</td>
<td>Qualified yes</td>
<td>Conservative: +9.5&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Realistic group threat</td>
<td>Qualified yes</td>
<td>Conservative: +6.8&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conservative: -17.8&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conservative: -11.4&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a, b, c, d.</sup> The estimated effects are statistically insignificant \((p>.10)\).
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Overall</th>
<th>Experiments in Japan</th>
<th>Experiments in Canada</th>
<th>Observation in Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative ATE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A (no)</td>
</tr>
<tr>
<td>Under partisan contexts</td>
<td>Not clear</td>
<td>Inhibited, but complicated.</td>
<td>Varies by party</td>
<td>Not significant with controls</td>
</tr>
<tr>
<td>Moderation (voter heterogeneity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-ethnic voting with identity</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Negative attitudes/affects</td>
<td>Yes</td>
<td>Yes, strong</td>
<td>Yes</td>
<td>Yes, but not significant</td>
</tr>
<tr>
<td>Realistic group threat</td>
<td>Yes, but weak</td>
<td>Yes</td>
<td>Yes, but weak</td>
<td>Yes, but not significant</td>
</tr>
<tr>
<td>Mediation (causal mechanism)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait-driven or affect-driven</td>
<td>Yes</td>
<td>Yes, strong through an opponent</td>
<td>Yes, but weak through the opponents</td>
<td>N/A</td>
</tr>
<tr>
<td>Relevant policy preference cue</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, strong</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Figure 2.1  An illustration of shift in the distance of policy preferences on government assistance to ethnic minority culture between voters and a candidate

1) If the candidate is not an ethnic minority

A perceived position of the candidate

Oppose/Disagree       Support/Agree

Voter #1               Voter #2

Distance of policy preference between voter #1 and the candidate

Distance of policy preference between voter #2 and the candidate

2) If the candidate is an ethnic minority

A shifted perceived position of the candidate

Oppose/Disagree       Support/Agree

Voter #1               Voter #2

Shifted distance between voter #1 and the candidate

Shifted distance between voter #2 and the candidate
Figure 2.2  Migration Integration Policy Index (MIPEX) scores and percentage of stock of foreign-born population in 2011, 26 countries compared.

Source: Migration Policy Group and British Council (2014).
Figure 3.1  Manipulation of ethnicity by the pronunciation of the target candidate's name

“Candidate name:” [Name in kanji] (its pronunciation)

Control group (H):  候補者名：林 誠一（はやし せいいち）

Treatment group (L): 候補者名：林 誠一（イム・スンイル）
Figure 3.2  Three steps to examine hypothesized mediations

Step 1

```
+---+ +---+ +---+
|   |  |   |  |
| Mediator | Treatment | Vote choice |
|          |         |             |
```

Step 2

```
+---+ +---+ +---+
|   |  |   |  |
| Mediator | Treatment | Vote choice |
|          |         |             |
```

Step 3

```
+---+ +---+ +---+
|   |  |   |  |
| Mediator | Treatment | Vote choice |
|          |         |             |
```

ADE

ACME
Figure 3.3  The average treatment effect of candidate's ethnicity manipulation on vote choice

<table>
<thead>
<tr>
<th>Control (Japanese: Hayashi)</th>
<th>Treatment (Korean: Lim)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suzuki (50.9%)</td>
<td>Suzuki (57.1%)</td>
</tr>
<tr>
<td>Hayashi (49.1%)</td>
<td>Lim (42.9%)</td>
</tr>
</tbody>
</table>

Treatment effect
Figure 3.4  The ATEs by datasets and experimental manipulations
Figure 3.5  The ATEs by “intuitive” and “counter-intuitive” party-policy conditions
Figure 3.6  Three moderated effects of social identity, negative affects, and relevant policy attitudes
Figure 3.7 The ATEs on traits and affective reaction to the candidates
Figure 3.8  Estimated average direct effects and mediation effects of a trait-driven and an affect-driven mechanisms

Mediator: Perceived traits (an additive index)

Mediator: Anxiety (reversed)

a. The estimated figures on the arrow from the ethnicity manipulation to the mediator variable on the left are the OLS regression coefficient and the standard error in parentheses. The other figures on the arrow from the mediator variable to vote choice are the adjusted marginal effect and the standard errors based on probit regression models, which can be interpreted as the percentage points change in the vote choice variable when there is a one unit increase in the mediator or manipulation variable. The dotted line arrow means that the estimated effect was statistically insignificant (p>.010).
Figure 3.9  Estimated causal mediation effects by a trait-driven and an affect-driven mechanisms
Figure 3.10  The raw average of the perceived policy preference of Hayashi/Lim and Suzuki by ethnicity and policy conditions.
Figure 3.11  The ATEs on the candidates’ perceived policy positions

[Diagram showing average treatment effect on perceived policy preferences of Hayashi/Lim and Suzuki, compared.]
Figure 3.12  The ATEs on the policy preference distance

![Figure 3.12: Average treatment effect on the policy preference distance to Hayashi/Lim and Suzuki, compared.](image-url)
Figure 3.13  Estimated average direct effects and mediation effects of a policy preference cue mechanism

Mediator: Policy preference distance on the suffrage of foreign residents

a. The estimated figures on the arrow from the ethnicity manipulation to a mediator variable on the left are the OLS regression coefficient and the standard error in parentheses. The figures on arrow from the mediator variable to vote choice are the adjusted marginal effect and the standard errors based on probit regression models, which can be interpreted as the percentage points change in the vote choice variable when there is a one unit increase of the mediator or manipulation variable. All the estimated effects were statistically significant ($p<.05$).
Figure 3.14  Estimated causal mediation effects by a policy preference cue mechanism
Figure 4.1  The ATEs by dataset and experimental manipulations
Figure 4.2  The ATEs by immigration policy encouragement conditions
Figure 4.3  Three moderated effects: social identity, negative affects, and relevant policy attitudes
Figure 4.4  The ATEs on candidate traits and affective reaction to the candidates
Figure 4.5  Estimated average direct effects and mediation effects of a trait-driven and an affect-driven mechanisms

Mediator: Perceived traits (an additive index)

Mediator: Anxiety (reversed)

a. The estimated figures on the arrow from the ethnicity manipulation to a mediator variable on the left are OLS regression coefficients with the standard error in parentheses. The figures on the right between the mediator variable and vote choice are the adjusted marginal effect and the standard errors based on probit regression models, which can be interpreted as the percentage points change in the vote choice variable with a one unit increase of the mediator or manipulation variable. Solid lines mean that the estimated effect was statistically significant (p<.001).
Figure 4.6  Estimated causal mediation effects by a trait-driven and an affect-driven mechanisms
Figure 4.7  The raw average of the perceived policy preferences of Andy Gill by ethnicity and policy conditions

![Graph showing perceived policy preferences of Andy Gill by his ethnicity and policy conditions.](image-url)
Figure 4.8  The raw average of the perceived policy preferences of Andy Gill by ethnicity and encouragement conditions.
Figure 4.9  The ATEs on the candidates’ perceived policy positions
Figure 4.10  The ATEs on the policy preference distance between respondents and candidates
Figure 4.11  Estimated average direct effects and mediation effects of a policy preference cue mechanism

Mediator: Policy preference distance on the suffrage of foreign residents

<table>
<thead>
<tr>
<th></th>
<th>Policy preference distance to Andy Gill on funding the ethnic minority culture (0-1, 0: Most proximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+.122 (.014)</td>
</tr>
<tr>
<td></td>
<td>-.354 (.032)</td>
</tr>
<tr>
<td>Ethnicity manipulation</td>
<td>(0: European, 1: Punjabi)</td>
</tr>
<tr>
<td></td>
<td>+.122 (.014)</td>
</tr>
<tr>
<td></td>
<td>-.354 (.032)</td>
</tr>
<tr>
<td>Vote choice</td>
<td>(0: Sanders/Moore, 1: Gill)</td>
</tr>
<tr>
<td></td>
<td>-.004 (.020)</td>
</tr>
<tr>
<td></td>
<td>$p = .860$</td>
</tr>
</tbody>
</table>

a. The estimated figures on the arrow from the ethnicity manipulation to a mediator variable on the left are OLS regression coefficient with the standard error in parentheses. The figures on the right between the mediator variable and vote choice are the adjusted marginal effect and the standard errors based on probit regression models, which can be interpreted as the percentage points change in the vote choice variable when there is a one unit increase of the mediator or manipulation variable. Solid lines mean that the estimated effect was statistically significant ($p < .001$).
Figure 4.12  Estimated causal mediation effects by policy preference cue mechanism
Figure 5.1  Marginal effects of visible minority candidate based on Table 5.3a

Marginal effect of candidates’ visible minority background on voters’ probability of voting for each party

Model 1: No control  Model 2: Voters’ PID is controlled  Model 3: PID and ideological distance  Model 4: Party’s voteshare in 2006

Each dot represents a point estimate of marginal effect on vote choice, and the whisker represents 95% confidence interval. A vertical line at zero point means no difference between VMCs and candidates of other ethnicity. Each letter in the figure identifies a respective party for each effect: C for Conservative, L for Liberal, N for NDP, BQ for Bloc Québécois, G for Green, and I for other party/Independent.
Figure 5.2  Marginal effects of visible minority candidate moderated by affect toward racial minorities (Model 5)\textsuperscript{a}

a. The five windows in the figure represent the estimated changes in marginal effects on vote choice, when the deviation score of the feeling towards racial minorities from the average feeling towards six other groups changes from the minimum value (relatively coldest feeling towards racial minorities to other groups, presented by 0) to the maximum value (relatively warmest feeling). All the dots are point estimates of the marginal effects, whereas the whiskers are 95% confidence intervals. A solid vertical line represents a mean feeling thermometer deviation score by party voters, and a dashed vertical line is a neutral midpoint of 50. A horizontal line at zero point means no difference between VMCs and candidates of other ethnicity. The bottom right window shows the distribution of this score with the average used in the model.
Figure 5.3 Marginal effects of visible minority candidate moderated by realistic group threatening policy attitudes (Model 6)\textsuperscript{a}

\textbf{Marginal effect of candidates' visible minority background at different level of attitude on racial minority policy}

\textbf{Conservative}

\textbf{Liberal}

\textbf{NDP}

\textbf{Bloc Quebecois}

\textbf{Green}

\textbf{Frequency in the model}

\begin{itemize}
  \item Estimated marginal effect  \hspace{1cm} 95\% CI
\end{itemize}

\textsuperscript{a} The figure represents the estimated changes in marginal effects on vote choice, when the racial policy attitudes changes from opposing (“much less”) to favoring (“much more”) implementing policies to benefit racial and ethnic minorities. See note in Figure 5.2 for other marks.
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Appendices

Appendix A Programs of experiment

A1 Japan

A1.1 Introduction and rules of random assignment

Introduction:

“Please assume that you are a constituent of a single member district of the next general election of the House of Representatives, and that two candidates are planning to run in that district. We will introduce a profile and platform of those candidates. After you review their introduction, you will be asked about your impression, your voting intention, and so on.”

“Please read the following information about two candidates below, and check the buttons to proceed.”

Experimental groups:

Respondents saw a single page introduction of two candidates. They were randomly assigned to one of eight (Study 1 and 2) or 16 (Study 3) experimental groups illustrated in Table A1.1 below.
### Table A1.1  Summary of experimental groups

<table>
<thead>
<tr>
<th>Experimental group number</th>
<th>Properties of Hayashi/Lim</th>
<th>Partisan context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pronunciation/ethnicity</td>
<td>Picture</td>
</tr>
<tr>
<td>1</td>
<td>Hayashi</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>Hayashi</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>Hayashi</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>Hayashi</td>
<td>B</td>
</tr>
<tr>
<td>5</td>
<td>Lim</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>Lim</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>Lim</td>
<td>B</td>
</tr>
<tr>
<td>8</td>
<td>Lim</td>
<td>B</td>
</tr>
<tr>
<td>9</td>
<td>Hayashi</td>
<td>A</td>
</tr>
<tr>
<td>10</td>
<td>Hayashi</td>
<td>A</td>
</tr>
<tr>
<td>11</td>
<td>Hayashi</td>
<td>B</td>
</tr>
<tr>
<td>12</td>
<td>Hayashi</td>
<td>B</td>
</tr>
<tr>
<td>13</td>
<td>Lim</td>
<td>A</td>
</tr>
<tr>
<td>14</td>
<td>Lim</td>
<td>A</td>
</tr>
<tr>
<td>15</td>
<td>Lim</td>
<td>B</td>
</tr>
<tr>
<td>16</td>
<td>Lim</td>
<td>B</td>
</tr>
</tbody>
</table>

a. Study 1 and 2 have experimental groups of 1-8, whereas study 3 include all the conditions.

### A1.2 Candidates’ names

1) A target candidate: *Hayashi, Sēichi* (a control group *H*); or *Lim, Sung-Il* (a treatment group *L*).
2) An opponent candidate: *Suzuki, Kōichi* (the same name in a control and treatment group).
A1.3  Candidate pictures

A)  
B)  

A1.4  Candidate profile and platform

1) Policy condition X (LDP’s)

Born in 1960 [as a Zainichi Korean]. [Naturalized to become a Japanese citizen in 1982.] Studied Economics for his undergraduate and graduate degree, and obtained M.A. in Economics. Worked in the investment department of the major bank between 1985 and 1998. In 1998, he ran an IT-solution company, became a chief executive officer, and has worked for 12 years to provide IT business to other companies. Married with his wife in 1988, and has a son and a daughter.”

The pension plan should be reviewed and improved so that the level of the allowance stays. In order to do so, we need to have an overhaul of the entire social welfare system with the budget and its financial resources. In order to respond the increasing social welfare costs in the future, we need a fundamental reform of the tax system, including increasing the consumption tax.

The current Japanese economy has lost its energy. In order to regain the vital Japan, we need to nurture new innovations as well as to enhance the international competitiveness of our industry. For that purpose, we need to decrease the corporate tax, and promote accepting immigrants with the highly technical skills.

Having said that, granting the local election suffrage to the permanent residents (foreigners) is the critical issue that affects the basis of our sovereignty and our democracy. I oppose passing the bill that grants suffrage to foreigners at the local level immediately.
2) Policy condition Y (DPJ’s):

Born in 1961 [as a Zainichi Korean]. [Naturalized to become a Japanese citizen in 1982.] Majored law in the University, and passed the national bar exam in 1984. Worked as a lawyer in a law firm, specializing in the labor dispute issue. In 1999 he ran for the local municipal Council, and has been elected for three times. Married with his wife in 1989, and have a daughter and two sons.

The pension programs should be unified/integrated so that everyone can receive the minimum pension allowance and live the stable elder life. In order to stabilize its budget, the equivalent amount of the entire revenue of the current 5% consumption tax is allocated to pension as the source of budget that secure this minimum allowance.

The current Japanese economy has lost the environment that average/ordinary people can work with the sense of security. We should build better safety net and expand the policies to help laborers so that everyone can work with breath of life and make a living. For that purpose, we need to reorganize and switch from the current tax system which benefits the higher income group relatively more, to tax deduction, allowance, and tax credit with allowance.

Further, in order to be internationally competitive and make Japan more open to other countries, we will improve the environment and the legal framework for foreign labors and permanent residents (foreigners).
A2 Canada

A2.1 Introduction and rules of random assignment

Introduction:

“We would like you to think about three candidates for office.”

“If they were running in your riding in the next federal election, which one do you think you would vote for?”

“Before you proceed, please read all the candidates’ profile.”

“These profiles will never be shown again, after you proceed to the next question section.”

Experimental groups:

As was the case in Japan, respondents saw a single page introduction of three candidates, and they were randomly assigned to one of 24 (Study 1) or 36 (Study 2) experimental groups. The detail of each condition is illustrated in Table A2.1.

Table A2.1 Summary of experimental groups

<table>
<thead>
<tr>
<th>No.</th>
<th>Candidate-profile combination</th>
<th>Andy's ethnicity</th>
<th>Partisan context</th>
<th>Policy encouragement</th>
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</tbody>
</table>

a. Big letters of “A”, “B”, and “C” in the “Candidate-profile combination” column represents candidate’s name, Andy Gill, Bruce Anderson, and Christopher Moore respectively. Subscripts of “C”, “L” and “N” in the same column means that their platform is adopted from Conservative Party, Liberal Party, and NDP.
A2.2 Candidates' pictures

1) Pictures for an Indian (Punjabi) Andy Gill:

   A)  B)  C)  D)  E)

2) Pictures for European Canadian candidates (European Andy Gill, Bruce Sanderson and Christopher Moore):

a. One of these pictures are randomly selected and shown as a candidate without duplicates or without assigning “different” pictures from the candidates' ethnicity.

A2.3 Profile and platform

1) Platform C (Conservative)

[Candidate picture here]

[NAME] was born in 1959. [in COUNTRY. After he immigrated to Canada in 1965 with his family.] He completed an undergraduate and Master’s program in economics, and worked as a manager in a telecommunication company for 15 years. He then launched his own business to provide internet services to business sector. Between 2002 and 2004, he served as a member of the Regional Economic Development Commission.

[NAME] advocates policies for strong economic growth. He wants to keep taxes low for business sectors to stimulate the economy and create more jobs, because this is the only way for prosperity for everyone. {On social policies, [NAME] promises tighten up the current immigration laws to prevent bogus claimants who use legal loopholes to enter Canada illegally. He has also promised to push for changes to speed up the legal process to deport foreign criminals linked with terrorist organizations.}

[NAME] has been married for 27 years and has adult children: a son and daughter.

2) Platform L (Liberal)

[Candidate picture here]

Born in 1961 [in COUNTRY, and immigrated to Canada in 1967 with his family], [NAME] did a Bachelor’s degree in political science, and went on to get a Law degree. He worked as a lawyer for 10 years, then started his own law firm specializing in family law. He has experience as a member of the Premier’s Education Advisory Commission between 2005 and 2007.

[NAME] emphasizes the importance of fiscal balance. He proposes phasing out planned corporate tax cuts so that government revenues can be maintained. And he supports better social programs for all Canadians without creating further debts. {[NAME] has said that fixing the immigration policy should be a top priority. He proposes speeding up the immigrant assessment
process to reduce backlogs. [NAME] also claims that the government should better accommodate immigrants to embrace their diverse cultural backgrounds.)

[NAME] has been married since 1986, has three children.

3) Platform N (NDP)

[Candidate picture here]

[NAME] was born in 1963 [in COUNTRY, and immigrated to Canada in 1968 with his family]. After completing his undergraduate degree in education, he taught at elementary schools for 15 years. He returned to university in 1998 to obtain his Master’s degree in education. He has been involved in community-building initiatives and recently founded the Regional District Multicultural Advisory Committee (RDMAC).

[NAME] thinks that the governments should play more active roles in creating jobs. While large companies should pay a fair amount of taxes, he promises introducing tax credits for small business to create more jobs. {[NAME] claims that the government needs to speed up the immigration selection process, especially easing the family reunification. He promises abolishing the current restrictive immigration policy to reduce the accumulated backlogs.)

Married for twenty-five years, [NAME] has two daughters and a son.

A2.4 Randomized block design

A randomized block design is used for the Canadian survey experiments to make the random assignment of experimental stimulus efficient. Table A2.2 illustrates the procedure. A combination of respondents’ answers to two questions on corporate tax and immigration policy produces 16 different answer patterns (hereafter called cluster). The order of the respondents of each cluster completing the two questions as well as the proportion of each cluster in the entire survey were unknown, when the survey was underway. Hence rather than randomly assigning clusters to the 36 experimental conditions, the order of the 36 conditions (see Appendix A2.1) was randomly ordered, and each condition was assigned to the first 36 respondents in the same cluster on a first-come, first-served basis. Then when the first set of 36 conditions was depleted, the same process was repeated to another 36 respondents in the same cluster accordingly. The same procedure is applied to each cluster in parallel.
For instance, let us assume that the very first respondent answered that the corporate tax should be increased, and that the number of immigrants allowed to enter should be kept about the same (thus cluster #5), and that the second respondent answered that the tax should be kept at the same level, and that he doesn’t know (DK) about the immigration policy (cluster #8). As the first respondent in cluster #5 (block 5.1-1), condition 3 is randomly picked and assigned to the first respondent (see “Within a cluster #x” in the middle part of Table A2.2). Independent from this process, as the first respondent in cluster #8 (block 8.1-1), condition 9 is randomly assigned to the second respondent (the bottom part of Table A2.2). Later, when another respondent answered exactly the same as the first respondent did (cluster #5, block 5.1-2), then condition 14 is randomly assigned, the third respondent in this cluster (block 5.1-3) receives condition 5, and so on. Similarly for the second (block 8.1-2) and third (block 8.1-3) respondents in cluster 8 receive condition 21 and 3 randomly, and this process takes place in parallel to the procedure for the cluster 5.

After the last condition, randomly ordered is assigned to the 36th individual in the same cluster, a new set of randomly ordered 36 conditions is assigned to the next 36 individuals accordingly. In the example above for cluster 5, after the last condition 8 is assigned to the 36th individual (block 5.1-36), the 37th respondent with the same answer patterns receives 23 (block 5.2-1).
Figure A2.1  Blocks of answer combinations

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<th># of immigrants should be...</th>
<th>Corporate tax should be...</th>
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<tr>
<td>More</td>
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<tr>
<td>Same</td>
<td>Cluster #5</td>
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<td>(DK/R)</td>
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Within a cluster #x

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<th>4 (x.1-4)</th>
<th>...</th>
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<td>5</td>
<td>12</td>
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<td>8</td>
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Within a cluster #y

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<td>3</td>
<td>32</td>
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<td>5</td>
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Appendix B  Survey questionnaire and answer options

B1  Survey experiments in Japan

Perceived traits (candidate impressions)

Introduction: “Now we would like to ask your impression of each candidate. Using the scale below, where would you rate them on the following characteristics? For example, a score of 1 of the first characteristics means that you feel that the candidate is “totally competent”; whereas a score of 7 means that you feel that the candidate is ‘totally incompetent’ as a politician. If you feel that the candidate is neither competent or incompetent, please choose 4, and if you cannot’ feel anything about the competency, please answer ‘Don’t know.’”

Question items: There are four items. They were asked for each candidate in the following order.

Note: The three items of competence, trust and care were added and rescaled to range from 0 (worst impression) to 1 (best) to calculate the candidate impression.

Competence

Question: “Did you feel that the candidate is competent or incompetent as a politician?”

Trust

Question: “Did you feel that the candidate is trustworthy or not trustworthy?”

Leadership (asked only in Study 1 and 2)

Question: “Did you feel that the candidate has leadership or lacks leadership?”

Care

Question: “Did you feel that the candidate would care the same sorts of issues as you do?”

Affect towards candidates (asked only in Study 3)

Anxiety

Question: “Because of the kind of person each candidate is, and what he claims, did the
candidate make you feel afraid?”

Hope
Question: “Because of the kind of person each candidate is, and what he claims, did the candidate make you feel hopeful?”

Vote choice (The order of candidates are randomized)
Question: “If you were to vote in this election, which candidate would you like to vote?”

Perceived policy preferences (asked for each candidate)
Introduction: “Then how likely do you think, is it that each candidate supports or promotes the following policies? You can guess candidates’ policy stance from your impression. Please answer by a number from one to seven, using the following index. If you cannot guess at all, please answer ‘Don’t know.’”
Options: “1. Not likely to support at all”, “2”, “3”, “2. Neutral”, “5”, “6”, “7. Likely to support”. Missing: DK and refusal (the basic coding for estimating ATEs is the same as the above number).

Question items: There are four items (policy dimensions). For each policy, respondents were asked to rate the likelihood of support per candidate Hayashi/Lim and Suzuki.
Note: These items were rescaled to range from 0 (Not likely to support at all) to 1 (Likely to support) to calculate the perceived policy preference distance.

Increase tax
Wording for the item: “Increase the consumption tax.”

Aid minority
Wording for the item: “Provide help and aids to foreigners and ethnic minorities to integrate into the Japanese society.”

Increase spending for social welfare
Wording for the item: “Increase the social spending to expand the welfare program.”

Grant suffrage to permanent foreign residents
Wording for the item: “Grant local election suffrage to foreigners.”

Manipulation check
Question: “Do you recall the candidates’ ethnic backgrounds? Please choose one from the following, as long as you can recall.”

Respondents’ policy preferences
Introduction: “Again, we would like to ask your opinions on the actual politics. Do you agree or disagree with the following statements? Please choose only one answer option.”
Options: 1. “Strongly agree” 2. “Agree” 3. “Neither agree or disagree” 4. “Disagree” 5. “Strongly disagree” Missing: DK and refusal (the basic coding for estimating ATEs is the same as the above number).
Items: There are four items (policy dimensions).
Note: Due to the programming error, 2 (agree) and 3 (neither) was merged in the original data for Study 2. A multiple imputations analysis was conducted to produce five different results, and their average scores were calculated. For the sake of efficiency, each imputed value was rounded off to the nearest integer (2 or 3). These items are rescaled to range from 0 (strongly disagree) to 1 (strongly agree) to calculate the perceived policy preference distance.

Increase tax
Wording for the item: “In order to keep the sustainable pension system, consumption tax should be increased.”

Increase spending for social welfare
Wording for the item: “Small government is better, even if the quality of the government service such as the social welfare program becomes poorer.”

Grant suffrage to permanent foreign residents
Wording for the item: “The local election suffrage should be granted to permanent residents (foreigners).”

Aid minorities
Wording for the item: “Ethnic minority groups should be given the Japanese government’s assistance to preserve their customs and tradition.”

Affects/attitudes towards Zainichi Koreans (trust)
Question: “Using the scale below, where would you rate the following ethnic groups in Japan on each characteristic? For example, a score of 1 of the first characteristics ‘Trustworthy/Not trustworthy’ means that you don’t think almost all of the people of that group are trustworthy,”
whereas a score of 7 means that you think almost all of the people of the group are trustworthy, and the score of 4 means neither trustworthy or not trustworthy.
Note: Another question asking about the degree of integration, and items for the other ethnic groups are omitted.

_Zainichi Koreans_

Wording for the question item: “Zainichi Koreans who have been living in Japan for a long time.”

_ Ethnicity_

Question: “If you classify yourself by ethnicity, not citizenship, which ethnic background do you think you belong to?”

_Strength of ethnic identity_

Question: “We would like to ask about your ethnic and cultural backgrounds. Please indicate how much you agree or disagree with each statement.”
Items: There are three items.
Note: This question was asked only in Study 1 and 2. Two items were reversed and added and rescaled to range from 0 (weak) to 1 (strong).

_Sense of belonging_

Wording for the item: “I have a strong sense of belonging to my own ethnic group.”

_Attachment_

Wording for the item: “I feel a strong attachment towards my own ethnic group.”
B2 Survey experiments in Canada

Respondents’ policy preference on immigration (used for the randomized block)

Introduction: “Now please choose an option that best describes your opinions on the following government policies.”
Question: “Do you think Canada should admit more immigrants, fewer immigrants, or about the same as now?”

Respondents’ policy preference on corporate tax (used for the randomized block)

Question: “Should CORPORATE TAXES be increased, decreased, or kept about the same as now?”

Perceived traits (candidate impressions)

Introduction: “Now we would like to ask your impression of each candidate. Using the scale below, where would you rate the candidates you’ve just seen on the following characteristics? For example, a score of 1 of the first characteristic—“competent”—means that you think that the candidate is totally incompetent; whereas a score of 7 means that you think that the candidate is totally competent.”
Items: There are four items. They were asked for each candidate in the fixed order of 1. Andy Gill, 2 Bruce Sanderson, and 3. Christopher Moore.

Competence
Question: “Did you think that the candidate is competent or incompetent?”

Trust
Question: “Did you feel that the candidate is trustworthy or not trustworthy?”

Inspiration
Question: “Did you feel that the candidate is inspiring or uninspiring?”
Care

Question: “Did you feel that the candidate would care the same sorts of issues as you do?”

Affect towards candidates

Anxiety

Question: “Because of the kind of person each candidate is, and what he claims, did the candidate make you feel uneasy?”

Hope

Question: “Did the candidate make you feel hopeful”

Vote choice (The order of candidates are randomized)

Question: “If you were to vote in this election, which candidate would you like to vote? Your vote is confidential”

Perceived candidates’ policy preferences and the respondent’s own positions

Introduction: “Now we would like to ask you to guess those candidates’ views on some policies, then rate your own position on the same scale. How likely do you think that each candidate supports following policies? And on the same scale, how much would you support the same policies? If you are at all uncertain it is totally fine to answer ‘Don’t know.’”
Options: “1. Not likely to support at all” “2”, “3”, “4”, “5”, “6”, “7. Likely to support” Missing: DK and refusal (the basic coding for estimating ATEs is the same as the above number).

Question items: There are five items (policy dimensions). For each policy, respondents were asked to rate the likelihood of support per candidate as well as their own policy position on the same scale.

Note: These items are rescaled to range from 0 (Not likely to support at all) to 1 (Likely to support), and perceived candidates’ preference was subtracted from the respondents’ own position to calculate the perceived policy preference distance.

Increase corporate tax

Wording for the item: “reducing corporate tax?”
Admit more immigrants to Canada
Wording for the item: “admitting more immigrants to Canada?”

Crack down on crime
Wording for the item: “crack down on crime and take tough stance against criminals?”

Increase spending on welfare
Wording for the item: “increasing spending on welfare programs?”

Fund ethnic minorities
Wording for the item: “increasing funding for preserving ethnic minority groups’ cultural heritages and tradition?”

Manipulation check
Introduction: “We would like to ask you to recall the candidates’ backgrounds. Please try to answer as much as you can. If you do not remember at all, it is totally fine to answer that you “don’t remember.”


Trust in Punjabi Canadians
Question: “Using the scale below, where would you rate the following ethnic groups in Canada on each characteristic? For example, a score of 1 of the first characteristic -- “trustworthiness” -- means that you think almost all of the people in that group are “untrustworthy,” whereas a score of 7 means that you think almost all of the people in the group are “trustworthy.” A score of 4 means you think that members of that group are not generally towards one end or another. You may choose any number in between.”


Question items and wording: There are four items, and the third one is relevant. “3. Indian (Punjabi) Canadian.”

Note: Another question asking about the degree of integration, and items for the other ethnic groups are omitted.
Social desirability

Introduction: “Listed below are a number of statements concerning personal attitudes and traits. Please read each item and answer how accurately each statement describes you personally.”

Question items and wordings: There are four items. 1. “I sometimes try to get even rather than forgive and forget”, 2. “There have been occasions when I took advantage of someone”, 3. “I like to gossip at times”, 4. “I’m always willing to admit it when I make a mistake.”


Ethnicity

Question: “To what ethnic or cultural group do you belong? Please choose up to three in order of importance for you.”

* Note: The list of ethnic/cultural group below is not exhaustive. If you cannot find an appropriate group that best describes your background, you can fully describe it after you choose the ‘Other’ group.”

“The most important group for you is:


Note: For those who answered 1. “Canadian”, the following question was asked to see if they have other ethnic backgrounds. “In addition to being Canadian, if any, to what ethnic or cultural group do you think you belong?” In the follow-up question, the first option (“Canadian”) was omitted.

Strength of ethnic identity

Question: “On your primary ethnic and cultural group you just answered that you belong to, how much you agree or disagree with each statement?”

Items: There are three items.
Note: Two items were reversed and added and rescaled to range from 0 (weak) to 1 (strong).

Sense of belonging
   Wording for the item: “I have a strong sense of belonging to my own ethnic group.”

Attachment
   Wording for the item: “I feel a strong attachment towards my own ethnic group.”
B3  Observational study in Canada (Canadian Election Study 2008)

Vote choice in the 2008 Federal election

Question: “Which party did you vote for?”

Partisanship

Question on partisanship: “In federal politics, do you usually think of yourself as a Liberal, Conservative, N.D.P, [Bloc Quebecois], Green Party, or none of these?”
Question on a closer party: “Do you generally think of yourself as being a LITTLE closer to one of the federal parties than to the others?--Which party is that?”
Note: Answers to the closer party question is integrated to the partisanship question, and dummy variables of partisanship are created for each party.

Left-right ideology

Question on own position: “In politics people sometimes talk of left and right. Where would you place yourself?”
Questions on parties’ position: “Using the same scale, where would you place the:”
Items: There are five items for parties, Liberal, Conservatives, NDP, Bloc Quebecois and Green party.
Note: Ideological distance is calculated by subtracting each voters' self-reported left-right position from the average rating of each party by top 13% of the knowledgeable respondents.

Political knowledge

Introduction: “We would like to see how widely known some political figures are.”
Items: There are four items.
Question wordings: 1. “Can you recall the name of the REPUBLICAN running for president of the United States?” 2. “And the name of the Premier of your Province? Do you happen to recall the name of the Premier of your Province?” 3. “And the name of a cabinet minister in the federal government? Do you happen to recall the name of a current cabinet Minister in the federal government?” 4. “And the name of the Governor-General of Canada? Do you happen to recall the name of the Governor-General of Canada?”
Note: Four dummy variables of 1. “Correct” and 0 “Incorrect and others” were created, and they
were added to represent the total number of correct responses. The average score of the left-right ideology rating was calculated based only on the scores by those who correctly answered all four questions (13.7%).

**Feeling thermometer deviation**

Introduction: “How do you feel about the Federal POLITICAL PARTIES in general. Use a scale from Zero to ONE HUNDRED. Zero means you REALLY DISLIKE them and one hundred means you REALLY LIKE them. [...]”

Question on racial minorities: “And now some questions about countries and groups. [...] And racial minorities? Use any number from zero to one hundred. Zero means you really DISLIKE racial minorities, and one hundred means you really LIKE racial minorities.”

Options: 0-100, Missing: DK and refusal.

Note: To construct the deviation measure, the mean feeling score is calculated from each ranting on “politicians in general”, “Canada”, “USA”, “Quebec”, “Aboriginal people”, “feminists” and “gays and lesbians” for each respondent. Then this average is subtracted from the rating on racial minorities.

**Attitudes on racial minority policy**

Introduction: “Now some questions about government policy.”

Question: “How much do you think should be done for RACIAL MINORITIES: much more, somewhat more, about the same as now, somewhat less, or much less?”

Appendix C  Regression tables not presented in Chapter 5 (observational study in Canada)

Table C1.1  Mixed logit estimates of vote choice of 2008 Canadian Federal Election for Figure 5.2 (negative attitudes/affects towards racial minorities)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coef</th>
<th>(s.e.)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed component</strong></td>
<td></td>
<td></td>
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<tr>
<td>Visible minority</td>
<td>-.747</td>
<td>(.721)</td>
<td>.300</td>
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<tr>
<td>Party identification</td>
<td>2.325</td>
<td>(.079)</td>
<td>.000</td>
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<tr>
<td>Party vote share in 2006</td>
<td>.023</td>
<td>(.003)</td>
<td>.000</td>
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<tr>
<td>Feeling thermometer deviation on racial minorities from the average</td>
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</tr>
<tr>
<td>Conservative</td>
<td>-.052</td>
<td>(.036)</td>
<td>.150</td>
</tr>
<tr>
<td>Liberal</td>
<td>-.047</td>
<td>(.036)</td>
<td>.200</td>
</tr>
<tr>
<td>NDP</td>
<td>-.043</td>
<td>(.036)</td>
<td>.230</td>
</tr>
<tr>
<td>Bloc</td>
<td>-.029</td>
<td>(.037)</td>
<td>.430</td>
</tr>
<tr>
<td>Green</td>
<td>-.029</td>
<td>(.037)</td>
<td>.430</td>
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<tr>
<td>Interaction of visible minority X affects towards racial minorities</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>.013</td>
<td>(.013)</td>
<td>.310</td>
</tr>
<tr>
<td>Liberal</td>
<td>.017</td>
<td>(.013)</td>
<td>.200</td>
</tr>
<tr>
<td>NDP</td>
<td>.007</td>
<td>(.014)</td>
<td>.620</td>
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<td>Bloc</td>
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<td>(.016)</td>
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<td>Green</td>
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<td>Liberal</td>
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<td>Green</td>
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<td><strong>Random component (SD)</strong></td>
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<tr>
<td>Visible minority</td>
<td>.694</td>
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<td>.080</td>
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<td>Party identification</td>
<td>.183</td>
<td>(.534)</td>
<td>.730</td>
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*Model statistic*

| N (individual voter) | 2,334   |
| Log likelihood       | -1846.2 |
| Percentage of correct prediction | 74.4   |
Table C1.2  Mixed logit estimates of vote choice of 2008 Canadian Federal Election for Figure 5.3
(relevant policy attitudes, or perceived group threat from racial minorities)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coef</th>
<th>(s.e.)</th>
<th>p</th>
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<td>Do more for the racial minority (0-4)</td>
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<td>Liberal</td>
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<tr>
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<td>.190</td>
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<tr>
<td>Liberal</td>
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<td>(.160)</td>
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<td>NDP</td>
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<td>(.164)</td>
<td>.840</td>
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<td>Bloc</td>
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<td>Green</td>
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<td>(.219)</td>
<td>.480</td>
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<tr>
<td>Liberal</td>
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<tr>
<td>NDP</td>
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<td>(.202)</td>
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<tr>
<td>Green</td>
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<td>(.273)</td>
<td>.000</td>
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<tr>
<td>Bloc</td>
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<td>(.353)</td>
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<td>Visible minority</td>
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<td>.520</td>
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<td>Party identification</td>
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<td>(.519)</td>
<td>.770</td>
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<td><strong>Model statistic</strong></td>
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<tr>
<td>N (individual voter)</td>
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<td>Log likelihood</td>
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<tr>
<td>Percentage of correct prediction</td>
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