

**VOTER BEHAVIOUR IN THE NEW BRUNSWICK PROVINCIAL ELECTION  
OF 2014**

by

Joseph Sanford

B.Sc. (Hons), University of New Brunswick, 2012

B.A., University of New Brunswick, 2014

A Thesis Submitted in Partial Fulfillment  
of the Requirements for the Degree of

**Masters of Interdisciplinary Studies**

in the Graduate Academic Unit of Interdisciplinary Studies

Supervisor(s):      Joanna Everitt, Ph.D., Political Science  
                             Lisa Best, Ph.D., Psychology  
                             J.P. Lewis, Ph.D., Political Science

Examining Board:    Mary McKenna, Ph.D., Kinesiology (Chair)  
                             Rob Moir, Ph.D., Economics  
                             Stewart Hyson, Ph.D. Political Science

This thesis is accepted by the  
Dean of Graduate Studies

THE UNIVERSITY OF NEW BRUNSWICK

September, 2015

©Joseph Sanford, 2015

## **ABSTRACT**

Voter behaviour has been studied extensively in Canada at the national level. Limited research exists at the provincial level. The province of New Brunswick has a unique political climate in that it has been dominated by its two major parties, the Progressive Conservatives and the Liberals. This project used the Miller and Shanks (1996) bloc-recursive approach to analyze the different roles of distant and proximate factors on vote choice in the 2014 provincial election. Social identities, demographics, values, attitudes, beliefs, partisan identity and economic perspectives are used in a linear regression equation to determine which factors contributed to voters policy preferences leadership evaluations and vote choice.

## **Dedication**

Thanks is due to Jared Allan Joseph Rector for the many great memories created together during his life and the strong push his untimely passing gave me to reach my full potential and ultimately pursue higher education. In addition to Jared, my son Luc Joseph Sanford has strongly influenced my desire to pursue higher education and has provided me with the many joys that come with being a parent. I will be forever grateful for having both Jared and Luc in my life, and also how their influence has shaped me into who I am today. This work is dedicated to both of them.

## **Acknowledgement**

Many people deserve thanks for their undivided support throughout the investigation and writing of this thesis. Some are mentioned here: Laurrett Nwaonumah (wife), Cindy and Darren Sanford (mother and father), Matthew Sanford (brother), Anne and Dennis Gaidamasciuk (paternal grandparents) and Rosalie and Billy Ingersoll (maternal grandparents). Also, Dr. Lisa Best deserves special credit for her contributions throughout the thesis, but notably regarding the statistical analyses portion of the document. Finally, Dr. Joanna Everitt spent a considerable amount of time guiding and editing my work and with her patience and excellent mentorship; this paper sits before you today.

## Table of Contents

<b>ABSTRACT</b> .....	<b>ii</b>
<b>Dedication</b> .....	<b>iii</b>
<b>Acknowledgement</b> .....	<b>iv</b>
<b>Table of Contents</b> .....	<b>v</b>
<b>List of Tables</b> .....	<b>vi</b>
<b>List of Figures</b> .....	<b>viii</b>
<b>Introduction</b> .....	<b>1</b>
<b>Chapter 1 - Literature Review</b> .....	<b>3</b>
<b>Chapter 2 - Methods</b> .....	<b>34</b>
<b>Chapter 3 - Policy Orientation</b> .....	<b>42</b>
<b>Chapter 4 - Leadership Evaluations</b> .....	<b>59</b>
<b>Chapter 5 - Vote Choice</b> .....	<b>72</b>
<b>Chapter 6 - Discussion</b> .....	<b>85</b>
<b>Bibliography</b> .....	<b>103</b>
<b>Appendix A</b> .....	<b>109</b>
<b>Curriculum Vitae</b>	

## List of Tables

Table 1: Number of Respondents in Each Group .....	38
Table 2: Applicable Independent Variable Mean Values .....	49
Table 3: The Influence of Variables from Block 1, Block 2, Block 3 and Block 4 on Opinions towards the Fracking Policy in New Brunswick using 651 survey respondents (column entries are linear regression standardized Beta coefficients). 50	50
Table 4: The Influence of Variables from Block 1, Block 2, Block 3 and Block 4 on Opinions towards Increased Abortion Access in New Brunswick using 651 survey respondents (column entries are linear regression standardized Beta coefficients).. 55	55
Table 5: Mean Values of Leader Evaluations .....	60
Table 6: The Influence of Variables from Block 1, Block 2, Block 3 Block 4, and Block 5 on Leader Evaluations of David Alward using 651 survey respondents (column entries are linear regression standardized Beta coefficients). .....	62
Table 7: The Influence of Variables from Block 1, Block 2, Block 3 Block 4, and Block 5 on Leader Evaluations of Brian Gallant using 651 survey respondents (column entries are linear regression standardized Beta coefficients). .....	65
Table 8: The Influence of Variables from Block 1, Block 2, Block 3 Block 4, and Block 5 on Leader Evaluations of Dominic Cardy using 651 survey respondents (column entries are linear regression standardized Beta coefficients). .....	68
Table 9: Significant Variables Affecting Leader Evaluations .....	71
Table 10: Variables Influencing Liberal Vote Choice using 651 survey respondents (column entries are B values obtained using binomial logistic regression).....	76

Table 11: Variables Influencing PC Vote Choice using 651 survey respondents (column entries are B values obtained using logistic regression). ..... 80

Table 12: Comparing Significant Variables Influencing Vote Choice ..... 84

## List of Figures

Figure 1: Funnel of Causality.....	11
------------------------------------	----

## **Introduction**

The thesis is structured as follows. The first chapter is an introduction to the proposed research project in which the reasons for conducting the project, the central problem leading to the utility of the research and the significance of the study are presented. The research questions addressed in the project are also explored. It also comprises the literature review, reviewing what other scholars have written and highlighting relevant findings and pertinent theories that provide the foundation to the argument. Gaps in the literature are also identified. Finally, the main concepts and expectations in this research project are defined and presented. The second chapter outlines the methodology used including the research design, the data source, the variables used and how they are operationalized and the limitations of the study.

Chapter three is the first of three chapters focused on the analysis of the data. It examines respondents' policy preferences based on their self-reported social identity variables. Not only does the analysis review if any specific independent variable is linked to a particular policy preference, but the analysis also investigates whether different combinations of social identities lead to stronger relationships with policy preferences. This enables a more accurate prediction of policy orientation. A similar analysis is performed using leadership evaluations in chapter four. Based on multiple social identities, a prediction model could accurately determine how an individual feels about a specific political leader in New Brunswick. Vote choice is then analyzed in a similar manner to policy preferences and leadership evaluations in chapter five. A

predictive model can again be brought forward, but in this case, we employ social identity characteristics to predict an individual's overall vote choice.

In chapter six the main findings in the research are discussed within a broader framework, taking into account voting behaviour literature, and reviewing the results of the New Brunswick study in the context of the findings from larger studies such as the Canadian Election Studies.

## Chapter 1 - Literature Review

Since Aristotle's time, researchers in political science have focused on understanding people, power, leadership, and political structures by asking questions such as "In whose interests do these leaders serve?" It is the voter who ultimately decides, to a degree, who gets elected, leaving us with the question "Why do voters make the decisions they do?" Although modern voting behaviour research began in the United States, these questions have also been studied from a Canadian perspective (Gidengil et al. 2012; Anderson and Stephenson 2010; Blais et al. 2002; Nevitte et al. 1995). Similar questions have been explored within the domain of political psychology, a discipline that examines the internal variables that motivate an individual to make political decisions.

One of the key concepts in this field is that of social identities, which has often been used to explain, to some degree, the motivations behind voting. A key model explored later in this paper, the *Social-Psychological Model*, describes voting as the result of an integrated decision involving the internal biases and social background characteristics of individuals (Campbell et al. 1960). In many instances, these internal biases affect individuals' judgements of a party's leadership or its policy orientations and are caused by the voters' personal attachment to a political party. Those social background characteristics that can affect a vote choice include: social identities such as gender, urban or rural residency, religious affiliation, linguistic identity, and geographical location.

A great deal of research exists using these theories and concepts to better understand voter behaviour in Canada at the federal level (Blais et al. 2010; Gidengil et

al. 2003). More recently, a series of provincial election studies, including the Comparative Provincial Election Project (CPEP), provide more information about voter behaviour at the provincial level (Berdahl and Raney 2013; McGrane and Berdahl 2012). In spite of this, limited research exists in regards to the New Brunswick electorate leaving us with the question of whether the conclusions drawn using these theories and identities from the Canadian population at the national level are also applicable to the isolated New Brunswick population. It is this question that drives the research in this thesis. To understand these dynamics I began by exploring the theoretical explanations of vote choice, the explanations from these theories of Canadian voting behaviour at the national level in the 21<sup>st</sup> century, and the existing literature on voter behaviour in the province of New Brunswick.

This analysis allows me to conclude that voter behaviour of New Brunswick residents has shifted from its traditional roots, something that is shown throughout this thesis by empirical analysis of New Brunswickers policy orientation, leader evaluations and vote choice.

### *Politics in New Brunswick*

The province of New Brunswick is one of the four founding provinces of Canada and, as such, has a long and diverse history. This history has been characterized by tensions between French settlers, known as the Acadians, who moved to the area in the 17<sup>th</sup> century, and English settlers, most notably the Loyalist who populated southern New Brunswick in the later part of the 18<sup>th</sup> century (Thorburn 1961). Due to the strong and competing local pressures resulting from these diverse populations party politics

were impractical for much of the province's early history (Thorburn 1961, 8). However, by the early 20<sup>th</sup> century party politics had taken root and party attachments in New Brunswick were seen as stable and long-term (Fitzpatrick 1972, 122). The two parties that emerged were the Liberals and the Conservatives, the two parties that have formed the government of New Brunswick throughout its history.

Despite a relatively high level of prosperity in its early days, the province experienced significant economic problems after Confederation and has been in decline since that point in time (Thorburn 1961, 12). As a result, Thorburn's description of the province as lacking "economic power, unique and rich natural resources, and sufficient population to constitute significant political power" (Thorburn 1961, 20), while written over 50 years ago, still essentially rings true today.

Even at the time of Thorburn's writing, New Brunswick's youth were likely to leave for more prosperous areas of Canada while immigrants usually bypassed the province altogether, creating the conditions for very little change in New Brunswick's political climate (Thorburn 1961, 43). Another characteristic of the province is the percentage of French speaking people and Roman Catholics which has historically been high; Catholics comprised 50 percent of the population in 1951, with 74 percent having French origins (Thorburn 1961, 44). This pattern holds true in other studies (Aunger 1981) and the percentage of Catholics in New Brunswick has not changed significantly as of the 2011 census (Statistics Canada 2013). Thorburn identified Acadians as religious, rural, attaining lower educational achievement, concerned mostly with local matters and unified through their shared history of expulsion at the hands of the British (Thorburn 1961, 46).

The southwestern part of the province, settled by the mostly Protestant Loyalists, was seen as largely rural and possessing a strong conservative tradition and anti-Catholic sentiments (Thorburn 1961). Over the last 50 years, the New Brunswick urban rural divide has moved towards an even split, with half of residents living in rural areas and half of residents living in urban areas, yet it is still one of the most rural provinces in the country. On the limited opportunities for the young and educated in New Brunswick, Thorburn said “Perhaps such conditions, existing over a prolonged period, account for much of New Brunswick’s charm, but they are also responsible for its static and traditional outlook, its strong local loyalties, and its calm and resigned acceptance of things.” (Thorburn 1961, 51). This quote illustrates the view of New Brunswick as an unchanging entity, still similar in many respects to how it was at its inception. While this view continues to be popular it has been challenged however, by Ian Stewart’s research (1994) which has argued that New Brunswick alongside the other Maritime Provinces was changing and was more in line with the Canadian mainstream than popularly believed.

Throughout much of its history voter behaviour in New Brunswick at both the national and provincial levels appeared to be dominated by its ethnic divide. Vote choice in the province has long been linked to language and religion (Beck 1970; Fitzpatrick 1972; Thorburn 1961). In Jenson’s study of the 1974 national election, the only significant factors related to vote choice at the federal level in New Brunswick were these two characteristics (1976, 121) and the results showed the Liberals received 78 percent of the Francophone vote and 79 percent of the Catholic vote. The Progressive Conservative Party vote share was 48 percent Anglophone and 62 percent non-Catholics

(Jenson 1976). These ties had gained strength with the Liberal Premier Louis Robichaud's Equal Opportunity legislation in the 1960s, but they were somewhat alleviated with the introduction of single member constituencies at the provincial level in 1974 (Fitzpatrick 1972, 126; Beck 1976, 179-80). With such strong party ties linked to the rigid social background characteristics of language and religion, scholars argued that a change in government in New Brunswick was often reflective of the voters' desire for a new leader, or rather a change in personality rather than a shift in party allegiances (Hyson 1973; Cosgrove 1973).

In the 1990s, the belief that the Maritimes, including New Brunswick, were more 'traditional' in their politics was confronted by scholars who pointed out that these beliefs were rooted in research that emerged in the 1950s and 1960s (Mellon 1992). Stewart (1994) challenged the political stereotypes of the Maritimes in existence at the time: traditional, corrupt, non-ideological, deferential, and disaffected. Other stereotypes critiqued by Stewart were that the Maritimes shared a political culture with little difference across provincial borders, that they are a pre-modern hinterland dominated by traditional loyalties and corruption, and that the Loyalists played a large role in the political culture of both New Brunswick and Nova Scotia (1994, 3-4).

Using survey data administered in 1983, 1984, and 1985 in the three Maritime Provinces, Stewart wrote an updated account of politics in the region. He noted that Maritime Canadians are not disaffected, there are unique political cultures in each respective province, the Loyalist impact was not that significant on modern Maritimers and, the political culture of each respective province is more reflective of the Canadian

mainstream than previously thought (Stewart 1994, 155-57). A new story of New Brunswick's political culture began to emerge.

Additional challenges emerged in the early 2000s to the traditional view of New Brunswick political culture and the link between language and vote choice. Strong evidence emerged to suggest that past levels of support between Francophones and the Liberal Party, and Anglophones and the Progressive Conservatives had significantly weakened through the 1980s and 1990s (Cross and Stewart 2002, 53). It seemed that language had been accommodated by both of the major New Brunswick parties as both language groups were represented in each party's leadership and activist base. Furthermore, electoral support was found in both Anglophone and Francophone communities for both parties (Cross and Stewart 2002, 53-54). Together these factors and their conflicting results point to the need for a more up to date and in depth analysis of the voting behaviour of the New Brunswick electorate.

Voting behaviour in New Brunswick electorate has not been as closely examined as other regions in Canada. Because of the Canadian Election Studies (Gidengil et al. 2012; Blais et al. 2002; Nevitte et al. 2000) plenty of research exists on the voting behaviour of Canadians nationally, but less has been done to examine provincial populations. As a result, this particular research project is important in that it allows us to gain insight on the voting behaviour of the New Brunswick electorate and therefore better understand what has kept the two dominant parties, the Liberals and the Progressive Conservatives, in power throughout the province's history.

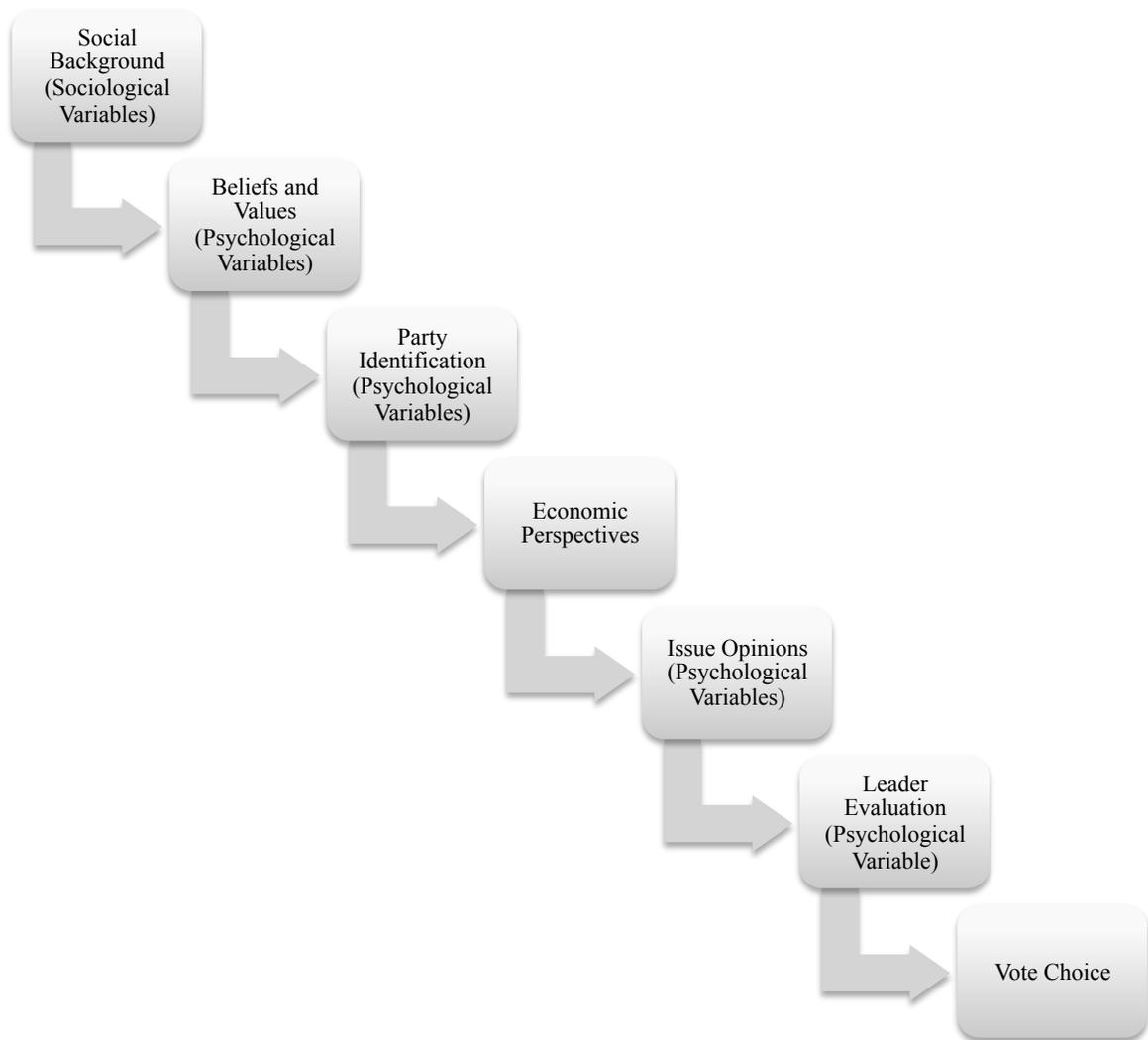
### *Classic Studies of Voting Behaviour*

Scholars from Columbia University developed one of the first modern theories explaining voter behaviour called the Sociological Model. These researchers studied the voting behaviour in the community of Erie County, Ohio in the 1940 presidential election (Lazarsfeld et al. 1944). They used repeated interviews known as a panel design to gather information from voters. Four major findings emerged from research at the Columbia School: 1) people are more likely to vote for a party that their families have supported in previous elections, 2) people are influenced by the associations they are involved in as well as the social groups they are affiliated with (they reported that Catholics in urban areas and of lower social status tended to vote Democrat while Protestants in rural areas and of higher social class tended to vote Republican), 3) a cross-pressure occurs when a person feels an obligation to vote in a particular manner based on membership in more than one group (this generates deviations from the standards mentioned above), and 4) opinion leaders tended to have greater political influence over people than the mass media (Lazarsfeld et al. 1968, 145-47). When explaining voter behaviour, the sociological model places emphasis on a voter's social background characteristics and information on their group membership in order to determine the voter's likelihood of supporting the Democrats or Republicans.

Subsequent researchers at Columbia University found more evidence to support their theory with data collected in Elmira, New York. Berelson et al. (1954) examined voting patterns of union members in the 1948 presidential election and reported that people in a union, those who had more interaction with other union members, and those who were more committed union members had a higher likelihood of voting for the

Democrats (53). Thus, union membership proved to be an important predictor for a Democratic vote, buttressing the central tenets of the Sociological Model.

The Sociological Model was later refined by researchers at the University of Michigan, whose survey data was gathered from national samples taken before and after the American presidential elections in 1952 and 1956 (Campbell et al. 1960). The Michigan School's approach differed from the Columbia School because of its emphasis on psychological variables as the central principle to explain vote choice in lieu of simply the social variables postulated by the Sociological Model. The Michigan School's proposed theory became known as the Social-Psychological Model, as it never completely removed social variables from the vote decision calculus, but proposed that these variables played a secondary role to the psychological variables. Party identification, issue, and candidate orientation were the psychological variables most influential variables to vote choice (Campbell et al. 1960, 85-86). The Social-Psychological Model proposed that partisanship was the most stable psychological variable and voter opinions on candidates and issues were more susceptible to change. The Michigan School explained the interactive dynamics of vote choice by using a funnel of causality (see Figure 1), which shows the relative importance of variables in vote choice. In this model, social background characteristics play a minor role in vote choice and are positioned at the mouth of the funnel with the psychological variables positioned at the tip of the funnel and closest to the final vote decision (Campbell et al. 1960, 24). Because a voter's candidate and issue orientation are seen subjectively through a partisan lens, the Social-Psychological Model distinguishes partisan identification as the most important variable to consider when predicting vote choice.



**Figure 1: Funnel of Causality**

More recently, an attempt was made to merge the Sociological and Social-Psychological Models of voter behaviour into a single multi-stage model. This model, developed by Miller and Shanks (1996), is called the bloc-recursive approach. This approach uses a series of blocs, each containing different factors affecting vote choice, arranged such that the blocs that are more important in vote choice are placed closer to the actual voting decision, which is not unlike the funnel of causality in the Social-

Psychological Model (Miller and Shanks 1996, 190-92). This approach differs from the others in that it takes into account the sequence in which voters come to their final voting decision. It also differs in that it takes into account both social background characteristics and the psychological variables equally as meaningful factors regarding vote choice.

A challenge to these approaches came from the Rational Choice Model, which uses the same reasoning behind economic decision making in voter decision making (Gidengil et al. 2012, 10-13). Unlike the previous models, this approach does not weigh sociological or psychological variables as most important; but focuses on the contribution of economic rationale. The model proposes that voters evaluate past performance of an incumbent party using a reward and punishment calculus to determine if they will vote for the party again (Gidengil et al. 2012, 10-13). The idea of economic voting led to the concept of strategic voting. This occurs when an individual does not vote for the party of their choice, but a different party in order to ensure defeat of their most undesired party's representative (Gidengil et al. 2012, 10-13).

The idea of valence issues also arose from the literature on the Rational Choice Model. These are topics that most people can support such as prosperity, education, and health care. Position issues, on the other hand, are topics that are not ubiquitously accepted. They present opportunities for political parties to take a position on an issue, and garner the votes from the slice of supporters of that issue. Two policies under analysis in this research, abortion and fracking, could have caused voters to vote for a party based on the party's stance aligning with the voters regarding abortion and/or fracking.

Past analyses of Canadian voting behaviour patterns, the most recent focusing on the four general elections between 2000 and 2008, have used a combination of these approaches to account for election outcomes (Gidengil et al. 2012; Blais et al. 2002; Nevitte et al. 2000). The approach used in these studies utilized the bloc-recursive approach, a fusion of the Sociological and Social-Psychological Models, brought forward by Miller and Shanks (1996) to explore the impact of a combination of social background characteristics and attitudinal predispositions on voting behaviour. In the latest of these studies, the researchers determined that vote shares can remain relatively untouched by factors such as leadership evaluations that are often considered as most affecting individual vote choice (Gidengil et al. 2012, 180). They concluded that factors often considered distant from vote choice, such as social background characteristics, values, beliefs and partisanship are, in fact, necessary components to consider if voting behaviour is to be fully understood (Gidengil et al. 2012, 180-81). The degree of influence a particular factor has in any given election is directly related to its distribution within the population (Gidengil et al. 2012, 182). For instance, if the population is evenly split on an issue, minimal change in overall vote shares would be expected.

One advantage of the Columbia School's approach (Lazarsfeld et al. 1944) is the repeated interview (panel) design, which is used in the Canadian Election Studies (Gidengil et al. 2012). A potential problem with conclusions based on the Columbia research is that their sample was drawn from one community in Ohio. There are obvious complications when these research findings from a single community are applied to the whole of American society. By stressing the importance of short-term psychological factors in addition to sociological factors, the Michigan School's approach (Campbell et

al. 1960) attempts to better explain factors that cannot be accounted for in the Columbia model, such as how vote shares can change so dramatically, but background sociological characteristics are less flexible (Gidengil et al. 2012, 5). As Gidengil and her colleagues (2012, 7) noted, a problem with the Social-Psychological Model is ‘prediction without understanding.’ Although this model underlines the importance of partisanship, it neglects to investigate the underlying reasons why an individual would identify with one party over another.

The two models are not mutually exclusive. Before a model is presented that integrates the existing theories, the Rational Choice Model needs revisiting. The overall premise of the Rational Choice Model focuses on a cost benefit analysis in vote choice and has not been as influential as the idea of strategic voting (Gidengil 2012, 10-1). Strategic voting could have potentially played a role in the 2014 New Brunswick election and, therefore, a multi-stage model, which essentially uses the funnel of causality’s variable outline (see Figure 1), can be used to integrate both theoretical explanations. This model suggests that all voters go through the same sequence or ‘blocs’ in arriving at their vote decision. Voters arrive at a decision to vote for a particular party in many different ways. Some voters put more weight on factors the multi-stage model characterises as more important while others see the principal factors influencing vote choice of this model as less important or not important at all.

One of the main critiques of the Rational Choice Model is that it does not take into account the predisposition towards parties, candidates, or group memberships (Gidengil et al. 2012, 10-13). Based on the evidence gathered by the Columbia and Michigan Schools, these factors have been shown to play a role on voter choice. One

important concept that has come from the Rational Choice Model is strategic voting. The 2014 New Brunswick election saw the New Brunswick Progressive Conservative Party build their election campaign around the support for fracking and the accompanying slogan associated of keeping people working in New Brunswick or bringing them home (CBC News Canada 2014). At the same time, the New Brunswick Liberal Party took a strong stance to making abortion more accessible for women. Due to the presence of strong personal opinions on these two issues, voters may have strategically voted for the party aligned with their personal opinion. The bloc-recursive approach used by Gidengil et al. (2012) uses long-term forces, such as background characteristics and policy preferences, in addition to short-term forces, such as issue orientation, in order to develop a more complete picture of voting behaviour.

### *Social Identities and Other Factors Affecting Voting Behaviour*

#### Religion

Of the various social identities that are considered influential for voting behaviour, religion and religiosity are among the most important. Johnston (1991) used the following four points to explain the religious cleavage in Canada:

First, religious denominations are *interest groups* which demand policy concessions in education and other areas. Second, denominations may define the boundaries of *subcultures*. The definition will be sharper the more self-contained the group is. Third, a religious group may represent a distinct *ethos*. Fourth, a religious denomination may be a *surrogate* for other, more directly politicized characteristics (100).

Viewing religion as containing distinct interest groups or subcultures accurately reflects the often homogenous nature of beliefs and values within these denominations. Interest

groups are usually created to fight for a specific purpose or right and religions have become well known for their rigid beliefs regarding matters such as same-sex marriage and abortion (Evans 2010, 45-49; Wald and Glover 2007). Johnston (1991) explained this point with the example of Catholic schools in Ontario. Catholic schools were in high demand in Ontario. Catholics wanted more schools for their children and this resulted in Catholics becoming concentrated in a particular riding that could sway voting and lead to the formation of a Catholic subculture (Johnston 1991, 100-101). The final two points highlighted by Johnston are in regards to the socialization patterns that occur in these particular groups. Despite other variables being present in a voter's decision calculus, if Catholics grow up around other Catholics, viewpoints develop that are favourable to traditional Catholic tendencies (Johnston 1991, 101). This idea is consistent with the Sociological Model brought forward by the Columbia School. Even when religious affiliation is taken into account, Johnston noted there is always variability even among Liberal Catholics and Conservative Protestants (Johnston 1991, 101). Also noted in the literature and specific to New Brunswick, is the tendency for French-speaking Catholics to vote Liberal and English-speaking Protestants to vote Progressive Conservative (Thorburn 1961, 181). Although voting based on language has been challenged in New Brunswick, religious orientation seems to be a trend rooted in the traditional political culture of New Brunswick.

From 1979, the Canadian population has been steadily moving away from religion towards a more secular society (Bibby 2008; 1979). According to the 2001 Census of the Population, Canada's two dominant religious groups, Catholic and Protestant, accounted for approximately 44 and 29 percent of the population

respectively. Approximately 17 percent of the population reported no religious affiliation (Statistics Canada 2005). In New Brunswick, a larger proportion of the population still maintains a religious affiliation; approximately 54 and 37 percent of the population identify with Catholic or Protestant, respectively. Only approximately 8 percent of New Brunswickers did not have any religious affiliation to report (Statistics Canada 2005). Religious affiliation and the strength of this relationship play an important role in Canadian attitudinal responses and voting behaviour and given the greater religious identification, religion may play an even more important role in voting behaviour in New Brunswick than in other parts of the country.

## Gender

The gender gap in vote choice was first noticed during the 1980s and has fluctuated in Canada, but remained in place as of the 2008 election (Gidengil et al. 2012, 30-31; Erickson and O'Neill 2002). Research on gender has shown that whether an individual identifies as male or female can influence where they stand on policy areas and their vote choice. Prior to the 1970s women were typically found to be more conservative than men, but since the 1980s the opposite is true with women placed on the left of the political spectrum and men to the right (Gidengil et al. 2012, 22-23). An explanation of this gender gap is that women are less likely to trust the market, less likely to desire stronger ties to the United States and are more progressive on social matters, all issues that characterize the left of the spectrum (Gidengil et al. 2012, 23).

In terms of their values and beliefs, national election study data show women differ from men in multiple ways. Not only were women less likely to trust the market,

desire stronger ties with the US, and less conservative than their male counterparts, women had higher levels of religiosity, were less likely to be politically disaffected, wanted to do more for Quebec and demonstrated more acceptance in their views towards racial minorities (Gidengil et al. 2012, 44). This research project will evaluate whether there was a gender gap on issues such as increased abortion access and fracking, or on leader evaluations and party support in the New Brunswick 2014 election. Gender is evaluated as an independent variable affecting vote choice for the Liberals and Progressive Conservatives. In terms of policy preference, given the information above there would appear to be a conflict with women's general tendency to be more progressive, yet more religious (O'Neill 2001) – a classic example of the Columbia School's concept of cross-pressure.

## Ideology

Ideology is typically considered a factor when it comes to vote choice, although it can often be a confusing subject for people in the electorate. A voter's values and beliefs can direct their orientation towards party attachments, issue positions and leader evaluations (Gidengil et al. 2012, 37). Research has shown that value orientations and beliefs can act as a road map for making complex decisions, such as voting (Gidengil et al. 2012, 38; Blais et al. 2002). Ideological orientations are not limited to one left-right scale of how free enterprise or the market and government interact, but recent work has noted the emergence of a second left-right scale, one that is focused on moral traditionalism (Gidengil 2012). This scale is explored more below, the effects of market-based ideological views is discussed here.

Research has shown that most Canadians do not tend to understand what is meant by the terms ‘left’ and ‘right’ in the context of a left-right ideological scale (Gidengil et al. 2012, 38). None the less, an individual’s disposition regarding the market and how it interacts with government can be captured in a ‘market liberalism’ index (Gidengil et al. 2012, 40). Respondents are disposed to fall into two groups. The first group possesses favourable views towards the market and desires less government intervention, while the second group is less supportive of the capitalist system and desires more government intervention (Gidengil et al. 2012, 40). People’s vote choices have been significantly influenced by ideological orientations in previous research, and this research will analyze New Brunswick residents’ view of the market and how it affects their voting decisions.

## Language

In Quebec, linguistic identity has played a major role in elections. The most accurate predictor of vote choice in federal elections from 2000 to 2008 was language (Gidengil et al. 2012, 149). Language divided the electorate at the ballot box, but it was also a question of sovereignty. The Francophone electorate were much more likely to support the Bloc Quebecois, a party whose central mission was to gain independence from Canada. As Canada’s only officially bilingual province, language may play a similar role in New Brunswick. As noted earlier, for much of its history there has been a very clear division between Francophone and Anglophone voters although there are questions as to whether these linguistic differences remain. Recent Statistics Canada data show 64.9 percent of New Brunswickers have English as a mother tongue with 31.6

percent having French, the remaining non-official and multiple languages make up 2.5 percent with the top three Mi'kmaq, German, and Korean (Statistics Canada 2011c).

## Region

Regional differences in public opinion and voting behaviour have long been noted in Canadian research (Blake 1972; Gidengil et al. 1999). These differences (particularly in terms of vote choice) are regularly seen between the Atlantic Provinces, the Western provinces, Ontario and, of course, Quebec. The biggest differences are found between the Atlantic Provinces and Western Canada with Ontario between them (Gidengil et al. 2012, 44). Atlantic Canadians are found to be the least supportive of the market and moral traditionalism and the most supportive of racial minorities. In addition, they have the highest levels of religiosity and are the most sympathetic towards Quebec (Gidengil et al. 2012, 44).

New Brunswick could present some regional differences in attitudes and vote choice as well. This is particularly the case because economic and language differences are territorially based with the province roughly split between the prosperous English South/southwest and the relatively poor Acadian and Catholic North/southeast. This analysis will determine if the parties fared differently amongst voters from these separate regions.

## Urban versus Rural

Although the common belief that people living in rural regions are more traditional in their outlooks does not appear to hold under study (Gidengil et al. 2012,

23), a difference is emerging between inner-city residents and suburbia, with those living in the city core being less traditional in their outlook (Gidengil et al. 2012, 23). It appears that inner-city residents are shifting to the left on the ideological scale while suburban residents are shifting to the ideological right (Anderson and Stephenson 2010, 17). This division would not be expected to appear in New Brunswick as there is no city large enough to create these unique inner-city residents common to large urban centres. An analysis can determine however, if there are any differences in voting behaviour between self-identified urban and rural residents.

In terms of attitudes and voting behaviour the impact of the urban-rural divide has changed over time. It was prominent in the early 2000s, but, by 2008, the two camps had converged on most issues. In the past at the national level, rural voters tended to report higher levels of moral traditionalism, had higher levels of religiosity, and regarded racial minorities more negatively than urbanites, but by 2008, these differences were eliminated (Gidengil et al. 2012, 45). As mentioned above, New Brunswick is evenly split into its urban (51 percent) and rural (49 percent) populations (Statistics Canada 2008). Due to the even split, differences in beliefs and values may not have a significant effect on the election outcome. Also, if New Brunswick's urban and rural voters are like the rest of Canada, there may not be any difference at all between them on vote choice.

## Income

According to Statistics Canada, in New Brunswick in 2013 approximately four percent of income earners earned at least \$ 100,000 or greater (Statistics Canada 2014).

Approximately 51 percent of the population earned between \$ 25,000 and \$ 100,000 per year, with 45 percent of the population earning under \$ 25,000 per year. The median total income was \$ 28,850. While the evidence for income's impact on policy questions such as abortion or fracking (Boudet et al. 2014; Davis et al. 2014; O'Neill 2001) or on vote choice (Gidengil et al. 2012) are inconclusive at the national level income is included in this analysis based on the low average incomes in the province and the regional nature of its distribution (see region above).

### Moral Traditionalism

Moral traditionalism is a concept often applied in order to better understand voting behaviour based on religious affiliation. This concept can be used along with a measure of an individual's religious affiliation and its impact on vote choice. Moral traditionalism consists of the views people hold regarding the role of women, feminism and sexual orientation (Gidengil et al. 2012, 40). There is a correlation between moral traditionalism and religion, as people strongly identifying themselves as Catholic and more evangelical branches of Protestantism (the dominant religions in Canada) are more conservative regarding these morals. For example, the main opposition to same-sex marriage legislation in 2004 came from religious groups. Evidence of moral traditionalism has suggested a significant impact on electoral behaviour, not only in Canada, but in other countries as well (Gidengil et al. 2006; Lusztig and Wilson 2005; Blais et al. 2002; Nevitte et al. 2000). Religious affiliation does play a role in moral traditionalist views, but religiosity, or how important religion is in their life, also plays a major role when it comes to their vote (Esmer and Petterson 2007).

People with more traditional views are more likely to support right of centre parties because these parties usually support socially conservative causes. This is, in fact, what occurred in Canada from 2000 to 2008 (Gidengil et al. 2012, 46-47). Based on this, coupled with the fact that the New Brunswick Liberal Party took on the abortion issue, those with more traditional views are expected to oppose increasing access to abortion and support the Progressive Conservatives. The problem with this strategy for national conservative parties has been people with these views tend to be in the minority (Gidengil et al. 2012, 46-47), leaving right of centre parties to appeal to the electorate based on issues other than socially conservative viewpoints like abortion. Given the nature of New Brunswick, this was not the situation in the 2014 election.

### Feminist Identity

Feminist identity involves the belief in furthering the rights of women in society, as equals with men, and therefore increasing opportunities for involvement in historically male dominated areas. It is closely linked to gender identity and views towards moral traditionalism. Most feminists possess a more progressive view of moral traditionalism. This may lead to greater support for access to abortion, higher approval ratings of leaders who support it and an increased likelihood of voting for parties that campaign on it.

### Environmentalism Identity

Individuals who possess an environmentalist identity feel strongly about protecting the environment. It is an identity that has grown over the last few decades as a

result of the science surrounding climate change and its effects on our planet. The Green Party at the federal and provincial level has built their platform around environmental issues. For individuals who feel strongly about protecting the natural environment and reducing the effects of industrial pollution, the Green Party can be a viable option (Gidengil et al. 2012, 134-35). However, Green Party voting will not be investigated in this analysis as the vote share is relatively small in New Brunswick. Also, its two main parties, the Progressive Conservatives and the Liberals, have dominated the province throughout its history.

Positive feelings towards the environment do not always garner votes for political parties with progressive environmental policies. For instance, the federal Liberals did not fare so well in the 2008 federal election despite their progressive environmental agenda, other issues such as health care were seen as more important by most voters (Gidengil et al. 2012, 93). Although many voters see the environment as an important policy area, voters saw other areas as more important at that time. The fracking debate in New Brunswick would have been more important for those more sympathetic to environmental causes. Those who rated environmentalists more positively would be expected to be more anti-fracking and therefore less likely to vote for the Progressive Conservatives.

In New Brunswick, voters identifying with environmentalists could have led to some effects at the voting booth. The Progressive Conservatives had taken a firm stance in support of fracking while the Liberals were calling for a moratorium and the NDP an outright ban. People who viewed the environment as more important would have been

less likely to support the Progressive Conservatives and more likely to support the other parties.

### Partisanship

Partisanship is a very influential social identity for a voter to possess. From the Michigan Model (Campbell et al. 1960), we know that partisans will see the political world through a biased lens in favour of their party affiliation. Partisan dynamics are reportedly more active in Canada than in the US (Leduc et al. 1991). In other words, Canadians are more likely to change their party identification than Americans. Early voting studies went so far as to claim that approximately 80 percent of Canadians indicated that they had a change in partisan intensity over a six year period while significant instability existed regarding identification with political parties (Leduc et al. 1991, 23). Although the accuracy of these results is debated (Anderson and Stephenson 2010, 20-1), Leduc and his colleagues point to issue and policy related decisions by the government to explain the weak party ties in Canada at both the federal and provincial level (Leduc et al. 1991, 23-24). These campaign issues which can appeal to or alienate voters, as well as government performance and leadership assessments, are usually put forward as reasons Canadians defect from their party.

Another contributing factor is the nature of the federal government in Canada and our independent federal and provincial parties. This results in the potential for voters in some provinces to hold multiple party identities at any given time (Leduc et al. 1991, 24). These multiple party identities can cause a weaker effect of partisanship on factors such as candidate and issue orientation. As a result, our political system is conducive to

party switching, unlike a federal system such as the United States where only two main parties exist, leading to one of two options for partisan identities. From the Canadian example, Leduc et al. (1991, 24) note that partisan identities are not guaranteed to be stable or long-term.

These early arguments about volatile partisan dynamics in Canada and the flexible nature of partisanship faced criticism. Although there is not a definitive conclusion, party identification continues to be accepted as a pivotal factor in understanding voter behaviour (Anderson and Stephenson 2010, 21; Gidengil et al. 2006; Blais et al. 2002; Nevitte et al. 2000). The results leading to the conclusion that Canadian partisanship was extremely flexible, were likely due to methodological problems, as when asked about partisanship participants who completed the surveys, were not provided with the option ‘none of the above’ obligating participants to select a response regarding their partisanship that likely was the same as their vote (Gidengil et al. 2012, 55). Canadian partisanship comes in line with existing research once this methodological shortcoming is corrected (Johnston 1991).

Typically between half and about two-thirds of the electorate acknowledges some form of party identification, although this level can shift from one election to another (Everitt et al. 2010. 271). While party identification can affect attitudes towards issues supported by a party, make party leaders seem more appealing and is highly correlated with vote choice (Everitt et al. 2010; Miller and Shanks 1996), these correlations are not perfect and can also vary from one election context to another (Johnston et al. 1992). One factor that affects the impact of party identification is the strength of that identification. Stronger partisans are more likely to have their views be

influenced by party policy positions, hold the party leaders in high esteem and vote consistently for that party whereas, weak partisans are significantly less influenced by their party identification (Everitt et al. 2010).

New Brunswick is unique in Canada in that it has been dominated by two main parties (the Progressive Conservatives and the Liberals) and has greater overlap between the federal and provincial wings of these parties in New Brunswick than there is in other parts of the country. Based on this we might expect that partisanship has an even greater impact in this province than elsewhere.

Partisanship is linked with age as well as other factors. In terms of age, national studies have shown that older voters (55 and over) are much more likely to be affiliated with a political party. On the other hand, French-speaking Canadians are less likely to have partisan ties (Gidengil et al. 2012, 65). This may be due to the different party options at the federal and provincial level in Quebec or to different political calculations around policy issues being used in determining vote choice at these levels. In Quebec, younger voters are also much more likely to support the NDP while older voters are much more likely to support the Conservatives (Gidengil et al. 2012, 150-51). In New Brunswick, 31.6 percent of the population is 55 or over whereas only approximately 17 percent of the New Brunswick population is between 20 and 34 years old (Statistics Canada 2011d). Again, given the age distribution in the province it is likely that partisanship plays a larger role in vote choice in this province than in other parts of the country.

## Policy Preferences

The policy preference variables (abortion and fracking) serve both as dependent variables (see Chapter 3) and independent variables (Chapters 4 and 5). While this thesis is interested in the impact of all of these previously discussed independent variables on attitudes towards abortion and fracking, it is also interested in the degree to which these policy preferences impact attitudes towards the party leaders who are championing them and on support for the parties themselves.

Regarding policy preferences pertaining to support for abortion, people with higher scores on the moral traditionalism index are much more likely to oppose abortion. Increased level of moral traditionalism could also be linked to religious identity, especially Catholic or some of the more conservative Protestant faiths. For those in New Brunswick who possess strong religious ties and value moral traditionalism, it is likely they will not be in favour of increased abortion access for New Brunswick women. On the other hand, those who are more progressive regarding moral traditionalism and members of more progressive faiths or reporting no religious affiliation would be much more likely to support abortion access. With women being more progressive than men regarding social matters (generally), it would be expected more women would support increased access to abortion in New Brunswick (Gidengil 2012) although traditionally women's higher levels of religiosity make present cross-pressures that make them less likely to support it (O'Neill 2001). In the 2014 election there was a clear line between the main political parties in New Brunswick when it comes to abortion access: the Progressive Conservatives were opposed and the Liberals and NDP were in favour.

The policy issue of fracking in New Brunswick draws on an individual's environmental identity or their feelings towards the environment more generally. Those with a more pro-business mentality, tend to be more likely to support fracking. Those who are opposed are more likely to value the environment more so than those in favour. The New Brunswick political parties were clearly divided on this issue as well. The Progressive Conservatives took a firm stance in favour of fracking while both the Liberals and NDP were more hesitant on the practice. Voters in favour of fracking would be more likely to vote for the PCs while those strongly opposed would be more likely to vote for the other parties.

#### Leader Evaluations

As was the case with policy preference, leader evaluations serve both as a dependent and independent variable. The research design used in this thesis allows for the identification of those factors that affect leader evaluations, but also allows for the assessment of the degree to which leader evaluations affect actual vote choice. "What factors lead people to like a leader?" and "Do voters who like a leaders actually vote for that leaders party?" are two important questions that this thesis allows us to address.

People's feelings about party leaders may be based on factors such as their personality traits, how they conduct the campaign, their social background, where they are from, and their gender or if they share their mother tongue (Gidengil et al. 2012, 102). In turn, leadership evaluations are typically a powerful indicator of vote choice (although in the end this may not create significant differences in vote shares) (Gidengil et al. 2012, 17; Blais et al. 2002; Johnston 2002). Leadership evaluations may be

particularly important to voting behavior if one leader stands out to voters, either positively or negatively, which could have an effect on an election outcome (Gidengil et al. 2012, 17). Research has also found that various factors such as affinity affects can increase the likelihood that someone will vote for a party based on its leader. For example, women leaders tend to attract support from more females than males (Anderson and Stephenson 2010, 43). While the 2014 New Brunswick election had no female leaders running in it, it did have a Francophone leader. This makes it possible for a language affinity effect to emerge with Francophones favouring the only Francophone candidate, Brian Gallant.

#### Vote Choice

All of the above factors contribute to a voter's electoral decisions with some having more influence on some voters than others. While the funnel of causality model suggests that those factors that are more proximate to the actual vote are more likely to be stronger (i.e. leader evaluations and issues), social identities, values and beliefs, party identification, and economic perception have all been found to be important in electoral outcomes. Typically, brokerage parties, appealing to the median voter, can lead to increased importance for the party leaders as the electorate does not have a great deal of difference between the parties based on policy options (Gidengil et al. 2012, 102). However, this was not the case in New Brunswick in 2014 where the two main contenders, the Liberals and Progressive Conservatives, did take clearly different positions on the abortion and fracking debate. If voters do not take a firm stance with either party on the issues or policies, how individuals feel about the leaders can shape

their vote choice (Gidengil et al. 2012, 102). Vote choice in New Brunswick in 2014 is particularly interesting to analyze as not only were there clear policy positions taken by the two leading parties, but there was also a Francophone and Anglophone leader in the election.

### Education

The New Brunswick electorate will be divided into those who attended but did not complete high school, with those who did complete high school, as well as those who had some or had completed college in the first group. The second group consists of those who attended but did not complete university, with those who did complete university. The analysis will determine whether educational attainment played a role in policy orientation, leader evaluations or vote choice for the Liberals or Progressive Conservatives.

All of the variables used in the analysis above - religion, ideology gender, partisanship, language, education, region, urban versus rural, income, moral traditionalism, feminist and environmentalist identity, (and eventually policy preferences and leader evaluations) - are meant to explain vote choice in the 2014 New Brunswick election. This analysis presents general trends in the New Brunswick population regarding attitude formation, leader evaluations and voter behaviour of this understudied Canadian province. Although different scholars have identified different characteristics that are important, the combination of these variables is the most effective approach to understanding influences on voting decisions (Gidengil et al. 2012, 180).

Based on the existing literature, many relationships are expected to be present in this analysis.

- Gender gaps, if they appear are likely to appear on the policy issues of fracking and abortion with women more concerned than men about fracking and men, due to women's higher levels of religiosity, more likely to support abortion access. Gender differences are also expected to appear in vote choice as women are more likely to support centre-left parties (Liberals) while men are more likely to support conservative (Progressive Conservatives) parties.
- Citizens living in urban areas have traditionally possessed less morally conservative views and as such are expected to demonstrate higher levels of support for abortion. On the other hand, rural citizens are more likely to be affected by fracking and are thus expected to be less supportive of this issue. Whether or not these differences exist in New Brunswick, which is much more rural and ethnically homogenous than other parts of the country, is an important question to answer.
- Religion has traditionally been an important predictor of the vote in New Brunswick and nationally. Roman Catholics residing in New Brunswick are expected to support the Liberals while Protestants are expected to show more support for the Progressive Conservative Party.
- Linguistic differences have been shown to be the most powerful predictor of vote choice in Quebec and it is expected to have an impact in New Brunswick. As in the past, Francophones are expected to support the Liberals while Anglophones are expected to support the Progressive Conservatives. Furthermore, it is expected that Francophones will demonstrate an affinity affect in their greater support for Brian Gallant than the other two leaders

- Geographic identity was well documented in Thorburn's work although more recent work seems to suggest these ties have weakened. If it does have an impact it is expected that northern New Brunswick be more supportive of the Liberals and southern New Brunswick will be more supportive of the Progressive Conservatives. Similarly, northern New Brunswickers may show greater support for Gallant while those in the south may show greater support for Alward.

These last three factors pose potential problems of multicollinearity as most Francophones in the province are Catholic and live in the North. However, as in Quebec, it is possible that the degree of religious adhesion of Francophones may be in decline in comparison to that of Catholics elsewhere and it is possible that it is the Southern Irish Catholic vote that may have more of an influence on policy positions, leader evaluations or vote choice. Test for multicollinearity suggest that this is not a significant issue in our data set.

New Brunswick is often considered more traditional and slower to react to progressive changes in other provinces. It is also assumed to be more partisan and influenced by local politics rather than national or provincial politics. This analysis enables us to determine the degree to which previous stereotypes and expectations about attitudes, leader evaluations and party support remain true today or have become more similar to those of Canadians elsewhere in the country.

## Chapter 2 - Methods

The data for this analysis were obtained from the post-election survey administered in New Brunswick after the 2014 provincial election on behalf of the Canadian Provincial Election Project (CPEP). Survey data can be used to study large samples of a population allowing researchers to draw generalized conclusions about a population (Scheuren 2015). As long as a representative sample is drawn, the resulting statistical analysis can lead to conclusions about the larger population's opinions, attitudes and beliefs (Scheuren 2015). In Canada, survey data have been used in projects such as the Canadian Election Studies (CES) since the 1960s (see: <http://www.queensu.ca/cora/ces.html>). CES data have been used to assess the reasons behind vote choice, to provide explanations for voter motivations, and provide insight into the opinions and attitudes of Canadians on social, economic and political issues. The CPEP survey was province specific and there were slight differences in the provincial versions (Comparative Provincial Election Project 2015). Each survey consisted of core questions that were shared among all surveys conducted to ensure comparability between provinces and questions that varied depending on the province to reflect that region's unique political environment.

The survey data to be used in this research project consists of 651 cases collected by Abacus Data using a post-election survey administered in New Brunswick. The survey received ethics approval on October 2 from the UNBSJ Research Ethics Board and was performed between September 24 and October 8, 2014. Data collected prior to October 2 (136 surveys) are considered secondary data and approval was not obtained for data collected prior to October 2. Post-election surveys are valuable in obtaining

accurate information on participants' final vote decision but, when not paired with multiple surveys taken at different times during an election campaign, they miss information regarding changes over time. This study did not investigate campaign effects, so this issue is not as significant.

The population sample was recruited using a mix-mode survey. Survey respondents were selected using a Probit<sup>1</sup> online research panel from random digit dial (RDD) live telephone recruitment or using Interactive Voice Response (IVR)-to-Web methodology based on RDD drawn from a dual land-mobile frame. An automated message was played following the recommended survey introduction standards laid out by the Market Research and Intelligence Association (MRIA). The respondents were given the survey URL and a password to access the survey so they could complete it at their convenience. It should have taken approximately 25-30 minutes to complete the survey.

As a case study for voter behaviour, New Brunswick is interesting because as noted earlier there is a lack of existing analysis and information in the literature. As a relatively small province with a large rural population, New Brunswick residents have a reputation as being traditional and relatively conservative when compared to the rest of Canada. This proposed project tests assumptions based on statistical measures. This research is essentially the first detailed quantitative analysis of voter behaviour in New Brunswick. Future researchers could build upon this work to strengthen our

---

<sup>1</sup> Probit is a Canadian company that recruits and maintains one of Canada's only probability based, mix-mode, full-coverage panel of Canadians for survey recruitment.

understanding of New Brunswickers relative to the rest of Canada as a whole or with other specific provinces.

Part of the limitations of a survey in New Brunswick is the relatively homogenous population. In order to study small groups that consist of a relatively small number of people, such as visible minorities, a larger sample size than was used in this survey would be necessary to yield enough members of each group of interest for statistical analysis. The New Brunswick survey targeted representativeness in terms of gender, age, education, community, urban/suburban/rural residence, number in household, immigration status, religion, religiosity, income, and occupation. Residents in northern regions were oversampled and findings were weighted based on gender, age, education, and region using census data.

Respondents' social identities (i.e. independent variables) were gathered from survey questions providing the participant's gender, religious affiliation, linguistic identity, partisanship, ideological orientation, geographic region, their age, education level, income, urban/rural residence, along with attitudes towards moral traditionalism, feminism, and environmentalism using survey questions (see appendix A). Questions related to the incumbent government's performance on improving health care and protecting the environment were also used in the analysis. In addition, the respondent's evaluation of the province's economic performance over the last year was used. The total number of respondents for each category is listed in Table 1. Weighting was used to make the sample representative of the New Brunswick population. Several of these variables will be represented as dichotomous variables or be included into the analysis as dummy variables.

The variables were coded as outlined below. Gender was coded such that all respondents identifying as female were coded as 1 and all others were coded as 0 (male). Religious affiliation was recoded such that for Roman Catholics, all those identifying with this denomination were coded as 1 and all others were coded as zero, thus giving the variable Roman Catholic. This was repeated for Protestants and Evangelical Christians. Linguistic identity was coded such that all those identifying their mother tongue as French were coded as 1 and all others zero (only Francophones were of interest). Partisanship was coded in a similar manner to religion, with those identifying as Progressive Conservative coded as 1 and all others zero. This was repeated for Liberal and NDP partisan identity. Geographic region was coded such that respondents who identified as residing in the northeastern or northwestern part of New Brunswick were 1 and all others were zero (south). Age was recoded into a new variable as the information from the survey provided the respondent's year of birth, so a calculation was performed to determine their age as of 2014. Education was coded such that respondents who had completed university at any level were 1 and all others were 0 (those with less than a university education). Urban versus rural was coded such that those identifying with urban or suburban were 1 and all others were 0 (rural). For the coding of the remaining variables, see survey questions in appendix A.

**Table 1: Number of Respondents in Each Group  
(from a total weighted sample of 651)**

	Total Number of Respondents
Male	324
Female	321
Roman Catholic	218
Protestant	113
Evangelical Christian	66
Francophone	221
PC	116
Liberal	217
NDP	76
North	203
South	437
Urban	340
Rural	289

The first set of dependent variables under analysis is policy preference. Two policy areas were investigated in this project. The first pertained to opinions of fracking in New Brunswick and the second to abortion access. The respondents read a statement outlining a stance on each respective issue and chose between four options ranging from strongly agree to strongly disagree (see appendix A). This analysis will help determine if individuals identifying with one or more of the independent variables is more or less likely to support these two policy areas based on those identities. A linear regression analysis will be performed using Statistical Package for the Social Sciences (SPSS) to determine if any of the social identities listed above are statistically significant (at  $p < .10$ ;  $p < .05$ ;  $p < .01$ ).

The second set of dependant variables for review focuses on leadership evaluations. Participants were asked to rate the provincial party leaders on a scale of 0 to 100 based on how much they like them with 0 being the lowest and 100 being the

highest rating available. Using the independent variables above, (including the previous dependant variables of abortion and fracking) I will be able to determine which, if any, social identities lead to increased feelings of support for one party leader over another, as well as the degree to which these evaluations are influenced by assessments of past governments and policy preferences on two key election issues. Only three of the five leaders of provincial parties were analyzed: David Alward of the Progressive Conservatives, Brian Gallant of the Liberals and Dominic Cardy of the NDP. David Coon of the Greens and Kris Austin of the People's Alliance led small parties that were unlikely to influence the voting behaviour of those choosing the Liberals or the Progressive Conservatives. Again, this was achieved by performing a linear regression analysis using SPSS (at  $p < .10$ ;  $p < .05$ ;  $p < .01$ ).

The final dependent variable that was studied is vote choice. Participants were asked which party they voted for and given the following five options: Progressive Conservatives (PCs), Liberal Party, Green Party, New Democratic Party (NDP) and the People's Alliance. As the dominant parties throughout New Brunswick's history have been the Liberals and the Progressive Conservatives only the support for these two parties was examined. As before, I investigated whether any social identities, policy issues or leader evaluations could be used to predict voting patterns. Since these independent variables (PC/others and Liberals/others) were binomial, logistic binomial regression was used with significance levels measured at  $p < .10$ ;  $p < .05$ ;  $p < .01$ .

Each independent variable can provide a small clue to how someone may vote or their opinions on key issues. Some of the independent variables may have a larger impact on the dependent variables than others. In order to better understand vote choice

at large, and vote choice by the largest population, multiple factors must be used in the predictive model.

In the multi-stage model being used, variables were added to the regression equation in successive blocks. The first analysis on policy orientation included have four blocks, the second analysis on leadership evaluations will have five, and the analysis on vote choice will have six blocks. The first block of variables are social background characteristics and identities, the second block of variables contains values, opinions and attitudes, the third block of variables contains partisanship and the fourth block consists of perceptions of incumbent performance on health care and environmental matters, as well as overall provincial economic performance over the last year. In the analysis on leadership evaluations, a fifth block is added containing policy orientation (the fracking and abortion questions). In the final analysis on vote choice, a sixth block is added containing leadership evaluations. Once the model has all the independent variables as well as the views on abortion and fracking, it will enhance the predictability of leadership evaluations. Once leadership evaluations are utilized, it will further enhance our predictability of vote choice. Adding the variables in successive blocks demonstrates if the effect of the independent variables is enhanced or diminished when interacting with other sets of variables.

The underlying assumptions of multiple regression investigating policy preferences and leader evaluations were tested. The dependent variable in the policy questions was measured using a Likert scale, violating the assumption requiring a continuous scale. Leader evaluations did meet this assumption. More than two independent variables were used in each of the five analyses, meeting this assumption.

Independence of observations and a linear relationship between each independent variable and dependent variable was violated in each regression performed. No multicollinearity was present except with the party identification variable.<sup>2</sup> Outliers were removed and each test rerun. Only the abortion analysis did not affect any statistical results, so the original output was used for abortion. Homoscedasticity and normal distribution of residuals was violated in each analysis. Multiple regression was still used despite these shortcomings as the population sampled from is relatively homogenous.

In regards to the underlying assumptions of using binomial logistic regression used to investigate Liberal and PC vote choice, most assumptions were met. The dependent variable in both analyses was dichotomous, more than one independent variable was used in each analysis, and the variables were in mutually exclusive and exhaustive categories. A linear relationship between the continuous independent variables and logit transformation of the dependent variables were violated however, this method was still used as the data are from a relatively homogenous group, the New Brunswick population.

---

<sup>2</sup> It should be noted that while there is a high correlation between partisan identity and leader evaluation and vote choice, this independent variable was left in the equations as is common in most analyses of voting behaviour.

## **Chapter 3 - Policy Orientation**

### **Introduction**

How a voter feels towards certain policy areas can, in effect, lead them to vote in a particular manner. They may vote for parties who align with their personal positions, or vote against a party whose policies they oppose. However, for this type of behavior to have any real benefit to a party it must take a different policy approach to the issue than the other parties during an election. If the electorate is divided on a policy issue and one party is more in line with public opinion than the others, the vote shares for that party may be increased. On the other hand, if opinion is split evenly amongst voters, the resulting vote percentages will differ little as a result of opinion on the policy in question.

The two policy areas chosen for review in the 2014 New Brunswick provincial election are fracking and abortion access. Fracking in New Brunswick received much media attention leading up to the election and, for economic reasons, the Progressive Conservatives took a strong stance in favour of allowing fracking. After the closure of the Morgantaler clinic in Fredericton in the summer of 2014, the abortion issue also received media attention leading up to the election with the NB Liberal Party taking a strong stance in favour of expanding access to abortion services. These differences in policy orientation between these parties could affect the election outcome. Historically, these two parties have dominated New Brunswick, with no other party ever holding office. Depending on the policy preferences of the electorate, these two policy issues have the potential to lead to distinct choices at the ballot box. This chapter will review

specific variables that played a role in voters' policy preference regarding the environment and fracking as well as abortion access.

## **Methods**

As noted in the previous chapter, a multi-stage model was used to investigate which variables played a role in voters' policy preferences. Four sets of variables were used in the analysis. The first set of variables included social identities, socio-demographic and background characteristics. The second set included survey respondents' opinions, values, and beliefs. Party identification and feelings towards environmentalists and feminists constituted the third set of variables and finally, the fourth set included the economic performance of the incumbent government and perspectives on the performance of the New Brunswick economy in the past year. The model was assessed using a hierarchical linear regression and variables were added in blocks to the regression equation.

## **Fracking Issue**

Hydraulic fracturing was a major issue in the 2014 New Brunswick election. The Canadian oil and gas industry claims to provide significant economic benefits to all Canadians. With activity in all Canadian provinces and territories except one, they claim to have invested 73 billion dollars in capital projects in 2014 while contributing 18 billion dollars to government income (Canadian Association 2015). One of the largest oil projects in the Canada and the world is the oil sands in Alberta. The project has

created a relatively prosperous province with plenty of jobs available for Albertans and Canadians at large.

The primary issue regarding the oil and gas industry is the environmental effects of the extraction and utilization of these resources. As science has caught up with the industrial revolution, it has been reported that, largely due to our reliance on fossil fuels, climate change is accelerating, which has created a movement consisting of individuals concerned about the environment and the effects of climate change. 'Green' political parties appearing in Europe and Canada have been created to champion the cause and capture the movement (Gidengil et al 2012, 134-36).

The province of New Brunswick has a long history of involvement with the oil and gas industry, although without the benefits seen in most other provinces. The Dover natural gas field was discovered in 1859 in Dover, near Moncton (Canadian Association 2015). The first natural gas well began production in 1909 and since 1990 there have been 40 oil and 40 natural gas wells drilled (Canadian Association 2015). New Brunswick produced approximately nine million cubic feet per day of natural gas in 2014, is currently producing natural gas from 32 wells, has a total of 302 natural gas and oil wells drilled in the province and has leased over 260,000 hectares to the oil and gas industry (Canadian Association 2015). The southern part of the province sits on the Frederick Brook Shale and is said to rest on approximately 78 trillion cubic feet of shale gas (Canadian Association 2015).

Hydraulic fracturing, known as 'fracking', is the process by which oil or natural gas is obtained by cracking or fracturing shale rock to enable the desired fluids to move through the rock (Alberta Energy Regulator 2015). Fluid is pumped into a well to create

enough pressure to crack the rock layer, thus permitting the natural gas or unconventional oil to move through the cracks and be extracted. The fluid used is a unique mixture usually containing water, chemical additives, and a propping agent (to prevent the cracks from closing) (Fracfocus 2015).

Fracking becomes a critical issue once its environmental impact is scrutinized. Two camps have evolved from this debate, those in favour of economic development and fracking, and those in favour of environmental protection and anti-fracking. Those in favour of fracking claim it can be done in a safe and sustainable manner, similar to other conventional extraction projects (Canadian Association 2015). They claim that it poses no significant risks to the people around it. Furthermore, proponents of fracking argue that huge economic benefits and job opportunities come with the implementation of fracking. Opponents highlight the negative impact of fracking and use different stories and evidence of fracking gone wrong. They often make the claim that the chemicals used in fracking can contaminate drinking water and have done so in numerous communities where fracking has taken place (Keep 2015).

As would be expected, both camps in New Brunswick tried to get their respective messages across. Despite earlier protests, fracking was thought to become a divisive issue in the 2014 provincial election because of the different paths the parties took. The Progressive Conservatives ran on a message of more jobs and, consequently, gave their full support to shale gas fracking in New Brunswick (CBC 2015a). The Liberals tried to appeal to both those wary of fracking, and the business community who supported it by calling for a one-year moratorium on the issue (CBC 2015a). Since entering Confederation in 1867, New Brunswick has been a poor province in Canada.

With a growing exodus of young workers to Western Canada, the fracking issue was thought to play a role in the 2014 election favouring the PC's pro-fracking position that development would bring these workers home and provide an opportunity for New Brunswick to finally improve its economic dependence on the federal government.

Also bringing attention to the shale gas fracking debate in New Brunswick was the shale gas protests. Hundreds of people in Rexton, New Brunswick, many with aboriginal ancestry, protested shale gas exploration in October 2013 (CBC 2015b). The protests ended with over 40 people being arrested and several RCMP vehicles burned. The incident received national media attention. This analysis examined which variables played a role in pro-fracking or anti-fracking views. In later chapters, the role that fracking views played on leadership evaluations and vote choice will be analyzed further.

### **Fracking Data Analysis**

The fracking regression analysis included social background characteristics and social identities to determine whether any had an effect on fracking viewpoints. Fracking was measured on a scale such that respondents who were most supportive of fracking were coded as four while those least supportive were coded as one with others falling in between. The statistical analysis performed were a series of hierarchical linear regression test. This test allows for the determination of which predictor variables in each set produce statistically significant effects on the criterion variable, policy preference (fracking or abortion). In a hierarchical regression, the effects of the set (or Block) of variables are controlled and allows for an examination of the unique

contribution of subsequent sets of variables. Significance levels were reported for  $p < .10$ ,  $p < .05$  and  $p < .01$ . The higher p-value of .10 is warranted for this particular study because of the relatively homogenous population sample in New Brunswick and because of the relatively small sample size. Outliers were identified using casewise diagnostics, and the regression was rerun with the outliers removed.

The coding format for most of the independent variables in the first block is as follows, and applies for the remainder of the analyses: (1) female (females = 1, males = 0); (2) age (in years as of the year 2014); (3) Francophone (French = 1, all others = zero); (4) Roman Catholic (yes = 1, no = 0), (5) Protestant (yes = 1, no = 0), (6) Evangelical Christian (yes = 1, no = 0); (7) religiosity (low = 1, high = 4); (8) university (successful completion of a university degree = 1, some university, finished college, some college, finished high school, some high school = 0 zero); (9) south (southern [southwest, southeast, central] = 1, Northern [northwest, northeast] = zero); (10) urban (urban or suburban region = 1, rural = 0); and, (11) income (highest = 10, lowest = 1).

The variables included in the second block were: (1) no market regulation (Likert scale from 0 [advocates regulation] to 10 [advocates deregulation]); (2) progressive moral policies (Likert scale from 0 [traditional] to 10 [progressive]); (3) environment vs. economy (Likert scale from 0 [protect the environment] to 10 [economic growth]); environment vs. job creation (Likert scale from 1 [pro-environment] to 4 [pro-jobs]); and, pro-adapting moral behavior (Likert scale from 0 [traditional] to 4 [progressive]).

The variables included in the third block were: (1) Liberal identification (yes = 1, no = 0); (2) Progressive Conservative identification (yes = 1, no = 0); (3) NDP

identification (yes = 1, no = 0); (4) attitudes towards environmentalists (negative = 0, positive = 100); and, attitudes towards feminists (negative = 0, positive = 100).

In the fourth block, variables included: (1) opinion of New Brunswick economy over the past year (worse = 1, same = 2, improved = 3); (2) incumbent performance protecting the environment (Likert scale from 1 [not good at all] to 4 [very good]); and, incumbent performance on health care (Likert scale from 1 [not good at all] to 4 [very good]). Regarding the two incumbent government performance questions, only the question on protecting the environment is asked in the fracking analysis while only the question on improving health care is asked in the abortion analysis. Both questions are used in the analyses in the following chapters on leader evaluations and vote choice. See Table 2 for a list of applicable independent variables mean values.

**Table 2: Applicable Independent Variable Mean Values<sup>3</sup>  
(from the sample of 651)**

	Mean	Standard Deviation
Age	46.3	16.8
Income	5.4	3.1
Market	5.3	2.7
Moral Policies	6.7	3.4
Moral Change	2.7	0.9
Environment vs. Economic Growth	4.1	2.7
Environment vs. Jobs	2.4	0.9
Incumbents and Health Care Improvement	2.0	0.8
Incumbents and Protection of the Environment	1.9	0.8
Provincial Economic Perspective	1.5	0.7
Fracking	2.4	1.1
Abortion	2.9	1.2

The overall model was statistically significant,  $F_{(20,338)} = 33.83$ ,  $p = 0.001$  and accounted for 66 percent of the variability in views towards fracking (see Table 3).

---

<sup>3</sup> See appendix for descriptions of the various measures and their values.

**Table 3: The Influence of Variables from Block 1, Block 2, Block 3 and Block 4 on Opinions towards the Fracking Policy in New Brunswick using 651 survey respondents (column entries are linear regression standardized Beta coefficients).<sup>4</sup>**

	$\beta$	$\beta$	$\beta$	$\beta$	F-value (df)	Adjusted R <sup>2</sup>	$\Delta R^2$
<b>Block 1</b>					<b>5.90(9,338)</b> ***	<b>.11</b>	<b>0.11</b>
Female	-.20***						
Age	.03						
Francophone	.01						
Protestant	.19***						
Evangelical Christian	.22***						
Religiosity	-.16***						
University	-.03						
South	.07						
Income	.14**						
<b>Block 2</b>					<b>36.29(13,338)</b> ***	<b>.58</b>	<b>0.47</b>
No Market Regulation	-	-.03					
Progressive Moral Policies	-	-.21***					
Economic Growth vs. Environment	-	.44***					
Jobs vs. Environment	-	.31***					
<b>Block 3</b>					<b>31.59(18,338)</b> ***	<b>.62</b>	<b>.04</b>
Liberal	-	-	.00				
PC	-	-	.12***				
NDP	-	-	-.09**				
Feminists	-	-	-.03				
Environmentalists	-	-	-.17***				
<b>Block 4</b>					<b>33.83(20,338)</b> ***	<b>.66</b>	<b>.04</b>
Incumbents & Environment	-	-	-	.28***			
Economy	-	-	-	-.03			

\*  $p < .1$       \*\*  $p < .05$       \*\*\*  $p < .01$

<sup>4</sup> Roman Catholic and Urban residence were removed from the regression analysis, as they did not have a significant effect.

The first block of variables was statistically significant,  $F(9,338) = 5.90, p = 0.001$  and accounted for 11 percent of the variability in fracking opinions. As can be seen in Table 1, respondents with a higher income, who were male, Evangelical Christians, and Protestant reported that they were more in support of fracking. Further, the less importance assigned to faith, the more likely they were to support fracking. The variable with the strongest predictive value on fracking attitudes was Evangelical Christian while the weakest was income.

The second block of variables was statistically significant,  $F(13,338) = 36.29, p = 0.001$  and accounted for 47 percent more variability in fracking opinions over and above the effects of the variables in the first block (the effects of variables from block one are controlled). Higher ratings on economic growth vs. environment and job creation vs. environment were linked with support for fracking. Further, those who rated themselves more conservatively on a scale measuring their opinions regarding moral issues such as euthanasia, homosexuality and abortion were pro-fracking while those who rated themselves as more progressive were anti-fracking. In this block, attitudes supporting economic growth had the strongest effect on fracking opinions while respondent's moral outlook contributed the least.

The third block of variables was statistically significant,  $F(18,338) = 31.59, p = 0.001$  and accounted for 4 percent more variation in fracking opinions than the first two blocks, while controlling all prior variables from the model. Three significant variables emerged in block three. As would be expected, negative ratings of environmentalists was most strongly linked with pro-fracking viewpoints as well as identification with the

Progressive Conservative Party. Also, identification with the NDP was linked to anti-fracking attitudes.

Finally, the fourth block of variables was statistically significant,  $F(20,338) = 33.83, p = 0.001$  and accounted for an additional 4 percent of the variation in fracking attitudes, while controlling all prior variables. In this block respondents who reported that the government had done a good job protecting the environment also possessed pro-fracking viewpoints. It is likely that respondents who were in favour of fracking were prone to give the incumbent government a positive evaluation on protecting the environment.

Although all four blocks of variables provided statistically significant effects, contribution of the first and second blocks accounted for 58 percent of the variability in fracking opinions, with the second block of values, opinions and beliefs accounting for 45 percent of variability. This speaks to the impact of values and beliefs on attitudes towards this issue. The independent variables that most identify respondents who support fracking from each respective block were being Evangelical Christian, favouring economic growth over the environment, negative attitudes towards environmentalists and positive ratings of the provincial government's job protecting the environment.

### **Abortion Issue**

Abortion is the medical procedure of terminating a pregnancy within a certain timeline. The great debate centres on when life begins. For those who believe life begins at conception, they truly believe that murder is being committed when an abortion occurs. The other side of the camp does not believe life has begun until later in the

pregnancy and therefore abortion is not murder as the ‘fetus’ is not yet alive. The abortion debate is long-standing and often quite divisive. Over time, abortion has become a more accepted social practice, especially since the late 20<sup>th</sup> century (Arthur 1999). Some groups of people however have remained staunch in their opposition to abortion.

This debate has been very public and heated throughout its history. Lawmakers are often called upon by religious groups to make abortions illegal. Religious groups have been the most vocal opponents to abortion (Evans 2010, 45-49; Wald and Glover 2007). The feminist movement moved to advance women’s rights including a voice in the abortion debate. They argue that it is a woman’s body and she should have the right to choose what she does with it. These pro-life and pro-choice camps often mobilize to get their point out to the public.

In Canada, the religious groups opposed to abortion have given their support to more conservative parties (Gidengil et al. 2012, 46-47), which include the federal Conservative Party and the provincial Progressive Conservatives. Both parties were in power in 2014. The federal Conservative Party supported several initiatives overseas to help maternal health in developing nations, but would not provide any funds for abortion.

For a wide range of reasons, abortion policy has been more restrictive in New Brunswick than in many other parts of Canada. For example, women required the approval of two doctors in order to get an abortion in a hospital. Abortions in private clinics such as the Morgentaler Clinic in Fredericton were not covered by the provincial health care insurance. When the Morgentaler Clinic closed in the summer of 2014,

protesters turned out to call on the province to provide funding to keep it open and to repeal the legislation that restricts public funding of abortion.

By the time of the 2014 provincial election, the New Brunswick Liberal party had taken a stance in support of increased abortion access. This essentially split the electorate; the religious groups opposed to abortion tended to support the Progressive Conservatives and those who felt abortion access was an important issue, the Liberal Party or the NDP. However, the Liberal position went against the position of its traditionally Catholic support base, leaving many long-time Liberals uncertain of how to vote.

### **Abortion data analysis**

The analysis presented below, repeats the process to examine the fracking issue. Outliers were identified using casewise diagnostics, and the regression was rerun with the outliers removed. There was no effect on the significance of any variables, so the original dataset was used. The abortion variable was coded such that those in favour of increased abortion access were scored as four while those opposed were scored as one. The overall model was statistically significant,  $F_{(17,409)} = 21.89$ ,  $p = 0.001$  and accounted for 46 percent of the variability in views towards abortion access (see Table 4).

**Table 4: The Influence of Variables from Block 1, Block 2, Block 3 and Block 4 on Opinions towards Increased Abortion Access in New Brunswick using 651 survey respondents (column entries are linear regression standardized Beta coefficients).<sup>5</sup>**

	$\beta$	$\beta$	$\beta$	$\beta$	F-value (df)	Adjusted $R^2$	$\Delta R^2$
<b>Block 1</b>					<b>15.18 (7,409) ***</b>	<b>.19</b>	<b>.19</b>
Female	-.00						
Age	.11 **						
Francophone	.01						
Protestant	-.00						
Evangelical Christian	-.23 ***						
Religiosity	-.30 ***						
University	.16 ***						
<b>Block 2</b>					<b>31.85 (10,409) ***</b>	<b>.43</b>	<b>0.24</b>
No Market Regulation	-	-.09 **					
Progressive Moral Policies	-	.35 ***					
Pro Adapting Moral Behaviours	-	.32 ***					
<b>Block 3</b>					<b>24.83 (15,409) ***</b>	<b>.47</b>	<b>.04</b>
Liberal	-	-	-.03				
PC	-	-	-.08 *				
NDP	-	-	-.03				
Feminists	-	-	.16 ***				
Environmentalist	-	-	.06				
<b>Block 4</b>					<b>21.89 (17,409) ***</b>	<b>.47</b>	<b>.00</b>
Incumbents & Health Care	-	-	-	-.04			
Economy	-	-	-	-.01			

\*  $p < .1$       \*\*  $p < .05$       \*\*\*  $p < .01$

The first block of variables was statistically significant,  $F(7,409) = 15.18$ ,  $p = 0.001$  and accounted for 19 percent of the variability in opinions on increased abortion access in New Brunswick. Respondents who were in favour of increased abortion access for New Brunswick women were more likely to rate religion as less important in their lives, be

---

<sup>5</sup> Roman Catholic, Urban, South, Income, were all removed from the regression equation, as they did not have a significant effect.

university educated, and surprisingly older. Evangelical Christians more strongly opposed increased abortion access. Low levels of religiosity was the strongest predictor of favouring increased abortion access, while age contributed the least amount of variability to the model.

In the next block of the model, voters' opinions, values and beliefs are added to the regression equation. The second block was statistically significant,  $F_{(10,409)} = 31.85$ ,  $p = 0.001$  and accounted for an additional 24 percent of the variation in opinions on increased abortion access for New Brunswick women, over and above variables from the first block. All three variables from block two were statistically significant. Respondents who favoured regulation of the market, rated themselves as more progressive regarding issues dealing with euthanasia, abortion and homosexuality and thought moral outlooks should change with a changing world agreed that increased abortion access should be granted to New Brunswick women. Respondent's self-rated moral outlook had a slightly larger impact than views on changing moral outlooks to align with different worldviews, while views on market regulation was the weakest link.

The third block of variables was statistically significant,  $F_{(15,409)} = 24.83$ ,  $p = 0.001$  and accounted for 4 percent more variation than the first two blocks, while controlling all prior variables. Those who gave higher ratings to feminists favoured increased abortion access for New Brunswick women. As would be expected, respondents who identified with the Progressive Conservatives opposed abortion access. Liberal Party identification had no impact on attitudes despite the fact that the Liberals had taken a positive position during the campaign. In the end, attitudes towards feminists

had twice the impact on views towards increasing abortion access than did identification with the Progressive Conservative Party.

In the fourth block of variables, no additional variation was accounted for by the independent variables. Neither views towards the incumbent government's performance on improving health care or the province's economic record over the previous year had any link to views on increasing abortion access for New Brunswick women.

All four blocks of variables were significant however; the first and second block alone accounted for 43 percent of the variability in fracking opinions. The independent variables with the most impact on opinions regarding increased abortion access for New Brunswick women from each respective block were having low levels of religiosity, being more progressive morally, and having positive attitudes towards feminists. There were no statistically significant variables in the last block analysis.

### **Overall Comments**

In review of the findings on fracking policy, all four blocks of variables were significant contributors to viewpoints on this policy in New Brunswick. From the fracking data analysis, a picture of a typical pro-fracking New Brunswicker begins to emerge. In terms of social identities and background characteristics, higher income males who are either Evangelical Christian or Protestant, and rate religion as not that important to them, are likely to possess pro-fracking viewpoints. Further, someone who favours economic growth and jobs over the environment as well as rates themselves more conservative on moral issues is likely to be pro-fracking. Identifying with the Progressive Conservative Party and negative attitudes towards environmentalists are

linked to pro-fracking attitudes and finally, respondents who gave the PC government positive ratings on protecting the environment were likely to be pro-fracking. The block with the largest impact on explaining the variation in views on fracking was block two, consisting of respondent's views on economic growth and jobs relative to protection of the environment, in addition to their moral outlook.

In review of the findings on increased abortion access for New Brunswick women, all four blocks of variables were statistically significant. A typical supporter of increased abortion access, from the analysis, is an older university educated New Brunswicker with a low level of religiosity. This supporter rates themselves as progressive on moral issues, believes moral behaviour should change with a changing world and believes in higher regulation of the market. Finally, supporters of increased abortion access possess more positive attitudes towards feminists. Only two factors stand out significantly in opposition to increased abortion access, and they are being an Evangelical Christian and identifying with the Progressive Conservative Party. The block with the largest impact on explaining the variation in views on increased abortion access was again block two, just as in the fracking analysis, which consisted of respondent's attitudes, views and beliefs.

## Chapter 4 - Leadership Evaluations

### Introduction

Many factors come into effect when people evaluate political leaders, but one of the most influential factors is partisanship. If an individual identifies strongly with a party, they are much more likely to give positive reviews of their party leader (Blais et al. 2002). Other factors that may play a role are social background characteristics. If a voter feels they have something in common with a political leader, they may be more inclined to vote for them. For instance, common religions, native regions, etc. may make people feel more inclined to support this particular leader.

The leaders under analysis in this chapter are David Alward of the Progressive Conservatives, Brian Gallant of the New Brunswick Liberal Party, and Dominic Cardy of the New Democratic Party. The analysis of David Alward will be unique because he was the Premier for the four years prior to the election. Another interesting dynamic is that David Alward is an Anglophone while the leader of the Liberal Party, Brian Gallant, is a Francophone. It has been established that a gender affinity effect exists such that females are more likely to vote for female candidates (Anderson and Stephenson 2010, 43-44) and this election presents the opportunity to explore if there is a language affinity effect, in that Francophones may be more likely to see Gallant favourably compared to the other Anglophone leaders. Although Dominic Cardy's NDP party has never formed the government in New Brunswick, they do usually capture approximately 10 percent of the vote, which is a significant slice of voters. Links will be explored between voters' background characteristics, social identities, values, opinions, beliefs, partisan identity, outlooks on the incumbent government, New Brunswick economic perspectives, and

policy preferences to determine which factors played a role in leadership evaluations from the 2014 New Brunswick provincial election.

## **Methods**

The question used to evaluate New Brunswick’s leaders was the thermometer question. Voters were asked how they feel about each party leader. Five blocks of variables were added to the regression equation. The first four blocks were similar to those used in the previous analysis, while a fifth block contained the policy orientation questions, previously used as dependent variables. The fracking question asked if the environmental costs of shale gas fracking outweighed any economic benefits (Likert scale from 1 [anti-fracking] to 4 [pro-fracking]). The abortion question asked if the government should make abortion services more accessible to women in New Brunswick (Likert scale from 1 [opposes increased access] to 4 [favours increased access]). See Table 5 for mean values of leader evaluations. Outliers were identified using casewise diagnostics, and the regression was rerun with the outliers removed for each analysis.

**Table 5: Mean Values of Leader Evaluations**

	Mean	Standard Deviation
David Alward	44.0	32.0
Brian Gallant	54.6	31.6
Dominic Cardy	47.0	31.6

## **Data Analysis – Alward**

In the first block of the analysis of evaluations of David Alward, gender, age, Francophone, Protestant, Evangelical Christian, education, urban versus rural residence

region and income were added. In the second block, views towards market regulation, moral policies, economic growth versus the environment, jobs versus the environment and views on adapting morals were added. In the third block, identification with the Liberal Party, the Progressive Conservative Party and the NDP party were added as well as feelings towards feminists and environmentalists. In the fourth block, views on the incumbent government's performance protecting the environment and improving health care were added in addition to the survey respondent's outlook on the New Brunswick economy over the past year. The final block included views towards fracking and increased abortion access. The dependent variable, evaluations of Alward, was a thermometer question given to survey respondents asking to rate their feelings towards Alward from a low of zero to a high of 100.

The overall model was statistically significant,  $F_{(24,345)} = 20.55$ ,  $p = 0.001$  and accounted for 58 percent of the variability in evaluations of Alward (see Table 6).

**Table 6: The Influence of Variables from Block 1, Block 2, Block 3 Block 4, and Block 5 on Leader Evaluations of David Alward using 651 survey respondents (column entries are linear regression standardized Beta coefficients).<sup>6</sup>**

	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	F-value (df)	Adjusted R <sup>2</sup>	$\Delta R^2$
<b>Block 1</b>						<b>4.62<sup>***</sup></b> (9,345)	<b>.09</b>	<b>.09</b>
Female	.03							
Age	.10 <sup>**</sup>							
Francophone	.16 <sup>***</sup>							
Protestant	.11 <sup>*</sup>							
Evangelical Christian	.22 <sup>***</sup>							
University	.07							
Urban	.07							
South	.03							
Income	.11 <sup>*</sup>							
<b>Block 2</b>						<b>7.51<sup>***</sup></b> (14,345)	<b>.21</b>	<b>0.12</b>
No Market regulation	-	.01						
Progressive Moral Policies	-	-.04						
Economic Growth vs. Environment	-	.25 <sup>***</sup>						
Jobs vs. Environment	-	.09						
Pro Adapting Moral Behaviours	-	-.19 <sup>***</sup>						
<b>Block 3</b>						<b>9.50<sup>***</sup></b> (19,345)	<b>.32</b>	<b>.11</b>
Liberal	-	-	.04					
PC	-	-	.40 <sup>***</sup>					
NDP	-	-	.03					
Feminists	-	-	.07					
Environmentalist	-	-	.07					
<b>Block 4</b>						<b>22.19<sup>***</sup></b> (22,345)	<b>.57</b>	<b>.25</b>
Incumbents & Environment	-	-	-	.35 <sup>***</sup>				
Incumbents & health care	-	-	-	.31 <sup>***</sup>				
Economy				.16 <sup>***</sup>				
<b>Block 5</b>						<b>20.55<sup>***</sup></b> (24,345)	<b>.58</b>	<b>.01</b>
Fracking	-	-	-	-	-.07			
Abortion	-	-	-	-	.06			

\*  $p < .1$       \*\*  $p < .05$       \*\*\*  $p < .01$

<sup>6</sup> Roman Catholic and Religiosity were both removed from the regression equation, as they did not have a significant effect.

The first block of variables was statistically significant,  $F(9,345) = 4.62, p = 0.001$  and accounted for 9 percent of the variability in evaluations of David Alward. From the first block analysis, it was determined that those who were older, wealthier, Francophone and affiliated with either the Protestant or Evangelical Christian faith gave higher ratings to David Alward. The strongest predictor from block one was affiliation with the Evangelical denomination while the weakest was income level.

The second block of variables was statistically significant,  $F(14,345) = 7.51, p = 0.001$  and accounted for 12 percent more variation than the first block, while controlling variables from block one. The strongest predictor from block two was favouring economic growth over the environment followed by having more rigid moral attitudes.

The third block of variables was statistically significant,  $F(19,345) = 9.50, p = 0.001$  and accounted for an additional 11 percent of the variation in Alward support. Only one variable from block three was significantly associated with positive evaluations of David Alward: identification with the Progressive Conservative Party.

The fourth block of variables was statistically significant,  $F(22,345) = 22.19, p = 0.001$  and accounted for 25 percent more variation than the previous blocks. All three variables in block four were significant. Respondents who rated Alward's government performance positively in terms of protecting the environment, improving health care, and gave positive economic evaluations of the province in the past year were more likely to give Alward better evaluations. The most influential predictor was ratings on environmental protection, followed by health care improvements and finally, the province's economic performance.

The fifth block of variables was statistically significant,  $F_{(24,345)} = 20.53$ ,  $p = 0.001$  but accounted for only one percent more variation than the previous blocks while controlling all prior variables. The final block of variables consisted of policy preferences. The two dependent variables from the last chapter were added as independent variables in this equation and added to the regression equation and neither was significantly associated with evaluations of Alward.

### **Data Analysis – Gallant**

The overall model was statistically significant,  $F_{(23,335)} = 21.97$ ,  $p = 0.001$  and accounted for 59 percent of the variability in evaluations of Gallant (see Table 7).

**Table 7: The Influence of Variables from Block 1, Block 2, Block 3 Block 4, and Block 5 on Leader Evaluations of Brian Gallant using 651 survey respondents (column entries are linear regression standardized Beta coefficients).<sup>7</sup>**

	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	F-value (df)	Adjusted R <sup>2</sup>	$\Delta R^2$
<b>Block 1</b>						<b>4.19<sup>***</sup></b> (8,335)	<b>.07</b>	<b>.07</b>
Age	.04							
Francophone	.12 <sup>*</sup>							
Roman Catholic	.08							
Protestant	-.05							
Evangelical Christian	-.09							
Religiosity	.13 <sup>**</sup>							
South	-.09							
Income	.09 <sup>*</sup>							
<b>Block 2</b>						<b>11.82<sup>***</sup></b> (13,335)	<b>.29</b>	<b>0.22</b>
Market regulation	-	-.03						
Progressive Moral Policies	-	.37 <sup>***</sup>						
Economic Growth vs. Environment	-	-.15 <sup>**</sup>						
Jobs vs. Environment	-	.00						
Pro Adapting Moral Behaviours	-	.24 <sup>***</sup>						
<b>Block 3</b>						<b>25.95<sup>***</sup></b> (18,335)	<b>.57</b>	<b>.28</b>
Liberal	-	-	.34 <sup>***</sup>					
PC	-	-	-.08 <sup>*</sup>					
NDP	-	-	.00					
Feminists	-	-	.07					
Environmentalists	-	-	.37 <sup>***</sup>					
<b>Block 4</b>						<b>22.23<sup>***</sup></b> (21,335)	<b>.57</b>	<b>.00</b>
Incumbents & Environment	-	-	-	-.06				
Incumbents & health care	-	-	-	.02				
Economy				-.02				
<b>Block 5</b>						<b>21.97<sup>***</sup></b> (23,335)	<b>.59</b>	<b>.02</b>
Fracking	-	-	-	-	-.14 <sup>**</sup>			
Abortion	-	-	-	-	.17 <sup>***</sup>			

\*  $p < .1$       \*\*  $p < .05$       \*\*\*  $p < .01$

<sup>7</sup> Gender, education, and urban residency were all removed from the regression equation, as they did not have a significant effect.

The first block of variables was statistically significant,  $F(8,335) = 4.19, p = 0.001$  and accounted for 7 percent of the variability in evaluations of Brian Gallant. Wealthy French-speaking respondents who indicated religion was more important to them were likely to give Gallant positive evaluations.

The second block of variables was statistically significant,  $F(13,335) = 11.82, p = 0.001$  and accounted for 22 percent more variation than the first block, with the variables from the first block controlled. Respondents that rated themselves as more progressive were more likely to provide better evaluations to Gallant. Those in favour of adapting morals to changing world norms also gave better ratings to Gallant. Finally, those who favoured environmental protection over economic growth gave Gallant better evaluations.

The third block of variables was statistically significant,  $F(18,335) = 25.95, p = 0.001$  and accounted for 28 percent more variation than the first two blocks with the block one and two variables controlled. Respondents who identified with the Liberal Party were much more likely to give Gallant higher ratings. Respondents who gave high ratings to environmental groups also gave better evaluations to Gallant. Those who identified with the Progressive Conservative Party were significant for negative evaluations to Gallant.

The fourth block of variables was statistically significant,  $F(21,335) = 22.23, p = 0.001$  but did not account for any more variation than the previous blocks. Finally, the fifth block of variables was statistically significant,  $F(23,347) = 21.97, p = 0.001$  and could only account for an additional two percent variation than the previous blocks, controlling all prior variables. The policy preferences of increased abortion access and

fracking were analyzed in this block. Viewpoints on increased abortion access was statistically significant, with respondents in favour of increased abortion access giving better evaluations of Gallant. Also, respondents who were anti-fracking gave Gallant better evaluations.

### **Data Analysis – Dominic Cardy**

The overall model was statistically significant,  $F(22,332) = 7.29$ ,  $p = 0.001$  and accounted for 29 percent of the variability in evaluations of Cardy (see Table 8).

**Table 8: The Influence of Variables from Block 1, Block 2, Block 3 Block 4, and Block 5 on Leader Evaluations of Dominic Cardy using 651 survey respondents (column entries are linear regression standardized Beta coefficients).<sup>8</sup>**

	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	F-value (df)	Adjusted R <sup>2</sup>	$\Delta R^2$
<b>Block 1</b>						<b>4.71<sup>***</sup></b> (7,332)	<b>.07</b>	<b>.07</b>
Female	.16 <sup>***</sup>							
Age	-.10 <sup>*</sup>							
Francophone	.06							
Evangelical Christian	.05							
Religiosity	.02							
Education	.22 <sup>***</sup>							
Income	-.09 <sup>*</sup>							
<b>Block 2</b>						<b>6.05<sup>***</sup></b> (12,332)	<b>.15</b>	<b>.08</b>
Market regulation	-	.01						
Progressive Moral Policies	-	.12 <sup>*</sup>						
Econ. Growth vs. Environment	-	-.20 <sup>***</sup>						
Jobs vs. Environment	-	.02						
Pro Adapting Moral Behaviour	-	.20 <sup>***</sup>						
<b>Block 3</b>						<b>6.94<sup>***</sup></b> (17,332)	<b>.23</b>	<b>.08</b>
Liberal	-	-	.03					
PC	-	-	.06					
NDP	-	-	.26 <sup>***</sup>					
Feminists	-	-	.16 <sup>**</sup>					
Environmentalists	-	-	.09					
<b>Block 4</b>						<b>7.96<sup>***</sup></b> (20,332)	<b>.29</b>	<b>.06</b>
Incumbents & Environment	-	-	-	.06				
Incumbents & health care	-	-	-	.27 <sup>***</sup>				
Economy				.02				
<b>Block 5</b>						<b>7.29<sup>***</sup></b> (22,332)	<b>.29</b>	<b>.00</b>
Fracking	-	-	-	-	-.01			
Abortion	-	-	-	-	.08			

\*  $p < .1$       \*\*  $p < .05$       \*\*\*  $p < .01$

<sup>8</sup> Roman Catholic and Protestant affiliation was removed, as well as urban residency and region in the province, were all removed from the regression equation, as they did not have a significant effect.

The first block of variables was statistically significant,  $F (7,332) = 4.71, p = 0.001$  and accounted for 7 percent of the variability in evaluations of Dominic Cardy. From the analysis in block one, typical supporters of Cardy had lower incomes and were younger, university-educated and female. Education had the most predictive capacity while income had the least.

The second block of variables was statistically significant,  $F (12,332) = 6.05, p = 0.001$  and accounted for 8 percent more variation than the first block, with the variables from the first block controlled. According to the analysis in block two, Cardy's supporters preferred protection of the environment over economic growth, felt moral behaviour should change with a changing world, and rated themselves as more progressive on moral issues such as euthanasia, abortion and homosexuality.

The third block of variables was statistically significant,  $F (17,332) = 6.94, p = 0.001$  and accounted for 8 percent more variation than the first two blocks with the block one and two variables controlled. Identification with the New Democratic Party was a significant factor followed by positive attitudes towards feminists. Identifying with the NDP only had about a third more predictive capacity than positive attitudes towards feminists.

The fourth block of variables was statistically significant,  $F (20,332) = 7.96, p = 0.001$  and could account for 6 percent more variation than the previous blocks while controlling all previous variables. Only ratings of the provincial government's performance improving health care were significantly associated with positive evaluations of Cardy. Respondents who gave the provincial government positive ratings on improving health care were more likely to give Cardy positive evaluations.

The final block of variables could not account for any more variation than the previous blocks while controlling all previous variables. Neither responses to the policy question on fracking or abortion were significantly associated with evaluations of Cardy.

### **Overall Comments**

In terms of the factors that predicted the performance of candidates, different factors were important for different candidates. For Alward, block four variables that focused on the incumbent government record and provincial economic record was most strongly linked to positive evaluations. In terms of the evaluation of Gallant, block three variables that focused on partisan identification provided the strongest predictive ability and for Cardy, the block with the most predictive capacity was block two that included variables that measured values, opinions, and beliefs.

Wealthy individuals and Francophones positively evaluated both Alward and Gallant (see Table 9). It is interesting to note that Cardy's support was unique as those who were younger, female, with lower-income women and university educations positively evaluated him. In block two, Gallant and Cardy overlap in their support on every variable. In block three, party identification was a significant variable for each leader from their respective party. Respondents with positive attitudes for environmentalists positively evaluated Gallant and respondents with positive attitudes towards feminists positively evaluated Cardy. Block four variables contributed to the positive evaluation of Alward. The final block indicated that respondents who supported increased abortion access and were anti-fracking positively evaluated Gallant.

**Table 9: Significant Variables Affecting Leader Evaluations**

<b>David Alward</b>	<b>Brian Gallant</b>	<b>Dominic Cardy</b>
<i>Block 1</i>	<i>Block 1</i>	<i>Block 1</i>
-	-	Female
Older	-	Younger
Francophone	Francophone	-
Protestant	-	-
Evangelical Christian	-	-
-	Religiosity	-
-	-	University
Higher Income	Higher Income	Lower Income
<i>Block 2</i>	<i>Block 2</i>	<i>Block 2</i>
-	Progressive Morals	Progressive Morals
Economic Growth	Environment	Environment
<b>Rigid</b> morals	Adapting morals	Adapting morals
<i>Block 3</i>	<i>Block 3</i>	<i>Block 3</i>
-	Liberal	-
PC	-	-
-	-	NDP
-	-	Feminists
-	Environmentalists	-
<i>Block 4</i>	<i>Block 4</i>	<i>Block 4</i>
Incumbents & Environment	-	-
Incumbents & health care	-	Incumbents & health care
Economy	-	-
<i>Block 5</i>	<i>Block 5</i>	<i>Block 5</i>
-	<b>ANTI</b> fracking	-
-	<b>PRO</b> Abortion	-

## Chapter 5 - Vote Choice

### Introduction

Deciding to vote for a specific party or person is a very personal process. In fact, the arrival at any decision is often very unique to each individual. Through the study of voting behaviour, some of the most important factors involved in this decision have been identified and analyzed. For instance, social background characteristics and social identities, issue and candidate orientation as well as party identity have all been found to contribute to a voters decision of who to vote for.

For the purpose of this analysis vote choice in the 2014 provincial election will only be investigated for the two dominant New Brunswick parties: the Liberals and the Progressive Conservatives. With almost 13 percent of the popular vote, the New Democratic Party performed well in placing third in the province; however, this did not translate into any seats in the New Brunswick legislature. With the NDP's history of defeat in New Brunswick, this thesis is more interested in focusing on what factors have kept, and are keeping, the two dominant parties in power since the very first election held in New Brunswick.

This analysis of vote choice enables the answering of the following questions: Did the incumbent government's record on improving health care or protecting the environment play any role in decisions to vote or not to vote for them? How did the clearly different stances taken by the two main parties on the policy areas of fracking and abortion affect people's decision on how to vote? Could the Roman Catholic support, historically tied to the Liberal Party, decrease as a result of the Liberal Party's support of increased abortion access? If so, does this mean the PCs would see more

support from Roman Catholics? Did leader evaluations play any role in vote choice? This chapter aims to address each of these questions and others to further our understanding of New Brunswick voter behaviour.

## **Methods**

This chapter uses a similar approach to the analysis used in the previous two chapters. Based on the bloc-recursive approach, variables were added to the explanatory model in sequential blocks. To determine vote choice, six blocks of variables were used. The first five blocks were the same as those used in the chapter on leader evaluations. In addition, leader evaluations were added as independent variables in block six in the analysis on vote choice. As each new block is added, the previous variables are controlled.

The dependent variable is either Liberal vote choice or Progressive Conservative vote choice, depending on which party is under analysis. The desired dependent variable is coded as one with all others coded as zero. For instance, if Liberal vote choice is the desired dependent variable, then all votes for the Liberal Party are coded as one and all others are coded as zero. With a binary dependent variable (in each case), binary logistic regression is used to model the relationship. If the independent variable is significant, then it is reported as having an effect on voting for that particular party. The coefficient for the constant (B-value) is reported for each independent variable, chi squared values are used to determine if the block is significant and Cox and Snell R squared values are used to evaluate how much variation is accounted for by the variables. Outliers were

identified using casewise diagnostics, and the regression was rerun with the outliers removed for each analysis.

Numerous social background characteristics and social identities were used in the analysis. The regression equation was run with each sequential block and at the end all the social background characteristics were analyzed for significance. Each independent variable in block one that had no impact on the dependent variable was removed.

### **NB Liberal Vote Choice**

Historically, voting for the New Brunswick Liberal Party has been tied deeply to religion (Roman Catholic) and language (Francophone) (Beck 1970; Fitzpatrick 1972; Thorburn 1961). In Jenson's (1976) analysis of 1974 looking at what factors played a role in New Brunswick voter behaviour federally, these were the only two variables that were significant. This relationship has reportedly dwindled in the following decades, however (see Cross and Stewart 2002). This analysis will review if language and/or religion played any role in Liberal votes during the 2014 provincial election.

The modern context also differs on some key points. First of all, the leaders of the two main parties were Brian Gallant, a Francophone, for the Liberals and David Alward, an Anglophone, for the Progressive Conservatives. Feelings about the leaders may have an impact on vote choice, and Chapter 5 demonstrated language clearly play a role in regards to feelings about leaders, if not directly on vote choice itself. Two key policy issues were also relevant in this election. The Liberal Party took a firm stance in favour of increased abortion access as well as promising to put a moratorium on shale

gas fracking in the province. If these issues were important enough to voters, and the Liberal Party was on the right side of the issue, an influence on ultimate vote choice could be seen. This analysis sets out to investigate what the driving motivations were behind a Liberal vote in the 2014 New Brunswick provincial election.

### **Liberal Data Analysis**

After the regression equation was run with all the independent variables from the first block, it was found that many variables including gender, age, affiliation with the Roman Catholic and Protestant denominations, religiosity and education had any impact on the Liberal vote choice. Therefore the analysis was rerun without these variables. The number of cases included in the analysis was 376 with 273 missing cases for a total of 649.

**Table 10: Variables Influencing Liberal Vote Choice<sup>9</sup> using 651 survey respondents (column entries are B values obtained using binomial logistic regression).**

	B	B	B	B	B	B	X <sup>2</sup> (df)	Cox and Snell R <sup>2</sup>	ΔR <sup>2</sup>
<b>Block 1</b>							27.7 <sup>***</sup> (5)	.08	.08
Francophone	.51 <sup>*</sup>								
Evangelical Christian	-1.7 <sup>**</sup>								
Urban	.38								
South	-.68 <sup>**</sup>								
Income	.11 <sup>***</sup>								
<b>Block 2</b>							15.9 <sup>***</sup> (5,10)	.13	.05
No Market Regulation	-	.01							
Progressive Moral Policies	-	.08 <sup>*</sup>							
Economic Growth vs. Environment	-	-.14 <sup>**</sup>							
Jobs vs. Environment	-	.04							
Pro Adapting Moral Behaviours	-	.20							
<b>Block 3</b>							153 <sup>***</sup> (5,15)	.46	.33
Liberal	-	-	3.4 <sup>***</sup>						
PC	-	-	-3.7 <sup>**</sup>						
NDP	-	-	-.81						
Feminists	-	-	-.01						
Environmentalist	-	-	.01						
<b>Block 4</b>							5.79(3,18)	.47	.01
Incumbents & Environment	-	-	-	-.16					
Incumbents & health care	-	-	-	-.27					
Economy	-	-	-	-.65 <sup>*</sup>					
<b>Block 5</b>							4.22(2,20)	.48	.01
Fracking	-	-	-	-	-.29				
Abortion	-	-	-	-	.43 <sup>*</sup>				
<b>Block 6</b>							55.4 <sup>***</sup> (3,23)	.56	.08
David Alward	-	-	-	-	-	-.01			
Brian Gallant	-	-	-	-	-	.09 <sup>***</sup>			
Dominic Cardy	-	-	-	-	-	-.04 <sup>***</sup>			

\*  $p < .1$       \*\*  $p < .05$       \*\*\*  $p < .01$

<sup>9</sup> Gender, age, Roman Catholic, Protestant, religiosity and education were removed from the regression equation, as they did not have a significant effect.

The overall model was statistically significant,  $X^2_{(3,23)} = 55.4$ ,  $p = 0.001$  and accounted for 56 percent of the variability in views towards fracking (see Table 10). The first block of variables was statistically significant,  $X^2_{(5)} = 27.7$ ,  $p = 0.001$  and accounted for 8 percent of the variability in fracking opinions. As can be seen, respondents with a higher income, who were from northern New Brunswick and identified French as their mother tongue were more likely to vote Liberal. Evangelical Christians were significantly associated with not voting Liberal.

The second block of variables was statistically significant,  $X^2_{(5,10)} = 15.9$ ,  $p = 0.007$  and accounted for an additional 5 percent variability in voting Liberal (the effects of variables from block one are controlled). Those who rated themselves as more progressive morally and indicated a stronger inclination towards protecting the environment over economic growth were more likely to vote for the Liberal Party.

The third block of variables was statistically significant,  $X^2_{(5,15)} = 153$ ,  $p = 0.001$  and accounted for 33 percent of variation in Liberal voting, while controlling all prior variables from the model. Two significant variables emerged in block three. As expected, identifying with the Liberal Party was significantly linked to voting Liberal. Identifying with the Progressive Conservatives, on the other hand, was significantly linked with not voting Liberal.

The fourth block of variables was not statistically significant,  $X^2_{(3,18)} = 5.79$ ,  $p = 0.122$ . The fifth block of variables was not statistically significant either,  $X^2_{(2,20)} = 4.22$ ,  $p = 0.121$ . Therefore virtually no additional variation is explained by the addition of variables related to incumbent government performance or policy orientation viewpoints.

The final block of variables was statistically significant,  $X^2_{(3,23)} = 55.4, p = 0.001$  and accounted for an additional 8 percent of the variation in Liberal voting, while controlling all prior variables. Two significant variables emerge in this block. As might be expected positive leader evaluation provided to Brian Gallant is associated with Liberal voting while negative leader evaluations given to Dominic Cardy were also associated with Liberal voting.

All blocks of variables were significant for Liberal voting, except for blocks four and five, representing incumbent government record and policy orientation respectively. The block with the most impact in explaining the variation in Liberal voting is block three, which takes into account voter's partisan identity.

### **NB PC Vote Choice**

Another question that arises through religious ties is that of abortion. The Roman Catholic Church has taken a strong stance against abortion. The PCs took a more traditional approach while the Liberals were more progressive. This analysis will reveal whether the PCs saw more support from Roman Catholics as a result of the Liberal stance on increased abortion access. These questions, and others, will be investigated to gain insight to the driving forces behind PC support in the 2014 New Brunswick provincial election.

### **PC vote choice data analysis**

As with the analysis for the Liberals, the first step in the logistic regression analysis was to run it with all social background characteristics and identities to

determine if any had no impact on the dependent variable. The results as presented in Table 11 indicate that Progressive Conservative vote choice was not affected by affiliation with the Roman Catholic denomination, education, urban vs. rural residency and region of the province. Therefore the analysis was rerun without these variables to increase power of the regression equation. The number of cases included in the analysis was 372 with 277 missing cases for a total of 649.

**Table 11: Variables Influencing PC Vote Choice<sup>10</sup> using 651 survey respondents (column entries are B values obtained using logistic regression).**

	B	B	B	B	B	B	X <sup>2</sup> (df)	Cox and Snell R <sup>2</sup>	ΔR <sup>2</sup>
<b>Block 1</b>							<b>34.3<sup>***</sup></b> (7)	<b>.10</b>	<b>.10</b>
Female	-.80 <sup>***</sup>								
Age	.02 <sup>*</sup>								
Francophone	.22								
Protestant	1.1 <sup>***</sup>								
Evangelical Christian	1.8 <sup>***</sup>								
Religiosity	-.02								
Income	.04								
<b>Block 2</b>							<b>82.2<sup>***</sup></b> (5,12)	<b>.43</b>	<b>.33</b>
Market Regulation	-	.09							
Moral Policies	-	-.18 <sup>***</sup>							
Economic Growth vs. Environment	-	.27 <sup>***</sup>							
Jobs vs. Environment	-	.48 <sup>**</sup>							
Adapting Morals	-	-.58 <sup>***</sup>							
<b>Block 3</b>							<b>86.7<sup>***</sup></b> (5,17)	<b>.48</b>	<b>.05</b>
Liberal	-	-	-1.2 <sup>**</sup>						
PC	-	-	2.7 <sup>***</sup>						
NDP	-	-	-19						
Feminists	-	-	.00						
Environmentalist	-	-	-0.01						
<b>Block 4</b>							<b>59.2<sup>***</sup></b> (3,20)	<b>.57</b>	<b>.08</b>
Incumbents & Environment	-	-	-	1.4 <sup>***</sup>					
Incumbents & health care	-	-	-	1.6 <sup>***</sup>					
Economy	-	-	-	1.2 <sup>**</sup>					
<b>Block 5</b>							<b>3.7</b> (2,22)	<b>.57</b>	<b>.00</b>
Fracking	-	-	-	-	.53 <sup>*</sup>				
Abortion	-	-	-	-	-.32				
<b>Block 6</b>							<b>20.3<sup>***</sup></b> (3,25)	<b>.60</b>	<b>.03</b>
David Alward	-	-	-	-	-	.06 <sup>***</sup>			
Brian Gallant	-	-	-	-	-	-.03 <sup>**</sup>			
Dominic Cardy	-	-	-	-	-	.00			

\*  $p < .1$       \*\*  $p < .05$       \*\*\*  $p < .01$

<sup>10</sup> Roman Catholic, education, urban and south were removed from the regression equation, as they did not have a significant effect.

The overall model was statistically significant,  $X^2_{(3,25)} = 20.3$ ,  $p = 0.001$  and accounted for 60 percent of the variability in Progressive Conservative vote choice (see Table 11). The first block of variables was statistically significant,  $X^2_{(7)} = 34.3$ ,  $p = 0.001$  and accounted for 10 percent of the variability in PC vote choice. As can be seen from these results, older Protestant and Evangelical Christian males were most likely to vote for the PC party.

The second block of variables was statistically significant,  $X^2_{(5,12)} = 82.2$ ,  $p = 0.001$  and accounted for 33 percent variability in voting Progressive Conservative while controlling block one variables. Four variables were significant in block two. A Progressive Conservative vote was significantly associated with valuing economic growth and the creation of jobs over the protection of the environment. In addition, those who rated themselves as more traditional regarding moral policies and felt moral behaviour should not change with changing world norms were more likely to vote for the PC Party.

The third block of variables was statistically significant,  $X^2_{(5,17)} = 86.7$ ,  $p = 0.001$  and accounted for 5 percent of variation in PC voting, while controlling all prior variables from the model. Two significant variables emerged in block three. As expected, identifying with the Progressive Conservative Party was significantly linked to voting for the PCs while identifying with the Liberal Party was significantly linked with not voting for the PCs.

The fourth block of variables was statistically significant,  $X^2_{(3,20)} = 59.2$ ,  $p = 0.001$  and accounted for 8 percent of the variation in PC voting, while controlling all prior variables. All three variables in this block were significant. A vote for the

Progressive Conservatives was significantly linked to positive evaluations of their performance protecting the environment, improving health care, and positive evaluations of the provincial economy over the past year.

The fifth block of variables was not statistically significant,  $X^2_{(2,22)} = 3.7$ ,  $p = 0.161$ . Therefore no additional variation in Progressive Conservative voting is explained by the addition of policy orientation into the model in regards to fracking and increased abortion access viewpoints.

The final block of variables was statistically significant,  $X^2_{(3,25)} = 20.3$ ,  $p = 0.001$  and accounted for a small 3 percent of the variation in PC voting, while controlling all prior variables. Two significant variables emerge in this block. A positive leader evaluation provided to David Alward is associated with PC voting while negative leader evaluations given to Brian Gallant were also associated with PC voting.

All blocks of variables were significant for Progressive Conservative voting, except for the one containing policy orientation, just as in the analysis on Liberal voting. The block with the most impact in explaining the variation in Progressive Conservative voting is block two, which takes into account voter's values, opinions and beliefs.

### **Overall Comments**

In reviewing the findings on Liberal vote choice, only five out of six blocks of variables were significant contributors to Liberal voting in New Brunswick. From the data analysis, a picture of a typical Liberal voting New Brunswicker begins to emerge (see table 9). In terms of social identities and background characteristics, those who are wealthier, French-speaking or from the north were significantly linked to Liberal voting.

Further, someone who favours the environment over economic growth, as well as those who rate themselves more progressively on moral issues is likely to vote for the Liberal Party. Identifying with the Liberal Party and negative evaluations of the province's economic performance over the past year are linked to Liberal voting and finally, respondents who gave Brian Gallant a positive evaluation were likely to vote for the Liberals. Three variables were significantly linked to not voting for the Liberal Party. Those who are Evangelical Christians, identify with the Progressive Conservative Party or give a positive evaluation to Dominic Cardy, are likely not to vote for the Liberal Party.

In review of the findings on Progressive Conservative voting in the 2014 provincial election, the same five out of six blocks are significant as in the Liberal analysis. Typical Progressive Conservative voters are older, male and those with ties to either the Protestant or Evangelical Christian denomination (see Table 11). The party's supporters rate themselves as traditional on moral issues and as holding more rigid views regarding moral behaviour and changing world norms. They also favour economic growth and the creation of jobs over the protection of the environment. New Brunswickers who identified with the Progressive Conservative Party and had a positive evaluation of David Alward were, not unexpectedly, more likely to support the PCs. Finally, Progressive Conservative voters were likely to give the incumbent government positive ratings on protecting the environment, improving health care and give the province's economic record over the past year a positive rating. Only identifying with the Liberal Party and giving positive evaluations to Brian Gallant were significantly associated with not voting for the PCs.

**Table 12: Comparing Significant Variables Influencing Vote Choice**

<b>Liberal Vote</b>	<b>Progressive Conservative Vote</b>
<i>Block 1</i>	<i>Block 1</i>
Wealthy	Males
Francophone	Older
Northern region	Protestant
	Evangelical Christian
<i>Block 2</i>	<i>Block 2</i>
Progressive Morals	Traditional Morals
Environment	Economic Growth
	Job creation
	Rigid Morals
<i>Block 3</i>	<i>Block 3</i>
Liberal ID	PC ID
<i>Block 4</i>	<i>Block 4</i>
	Positive Economic Evaluation
	Record protecting environment
	Record improving health care
<i>Block 6</i>	<i>Block 6</i>
Positive Evaluation of Gallant	Positive Evaluation of Alward

## Chapter 6 - Discussion

The purpose of these analyses was to investigate the role that social background characteristics, values, opinions and attitudes, partisan identification, and incumbent government performance had on issue orientation and leadership evaluations and ultimately on vote choice.

### Critical Factors in New Brunswick

Historically, the academic literature on New Brunswick voting behaviour focused primarily on two variables, religion and language (Fitzpatrick 1972). Traditionally, Roman Catholics supported the Liberals and Protestants supported the Progressive Conservatives. In terms of language, Francophones supported the Liberals while Anglophones supported the Progressive Conservatives. The current analyses focusing on the 2014 election counter these claims in two ways. First they indicate that the only significant religious factor affecting vote choice was the fact that Protestant and Evangelical Christian continued to support for the Progressive Conservatives. These results suggest that the Liberal Party can no longer count on Roman Catholics as a large support base. Second, it becomes clear that language does significantly affect Liberal vote choice, challenging Cross and Stewart's argument (2002) that the influence of language has disappeared in New Brunswick politics. Whether this language effect is a pervasive phenomenon in New Brunswick political culture, or simply a language affinity affect for the Francophone leader Gallant, is debatable.

A common stereotype of New Brunswickers is that they are more traditional than other jurisdictions. This may be due to the fact that it is a large area that is sparsely

populated, giving a rural impression of its residents. Reviewing the policy area of abortion shows that New Brunswickers are not as traditional as may be commonly thought. Opposition to increased abortion access did not play a role in vote choice; however, support for it did. Those in favour of increased abortion access were more likely to vote for the Liberal Party, who supported this policy. Viewpoints on abortion access do shape vote choice in New Brunswick, but not as one might expect. Also the mean score on the abortion question was 2.9 (4 = strongly agree) indicating that the average New Brunswicker is in favour of increased abortion access for women.

It is well documented that partisan identification has a strong influence on factors such as issue orientation, leadership evaluations, and vote choice. This analysis provides additional evidence to this finding. Those who identified with the Progressive Conservatives supported fracking, gave positive reviews to Alward and were more likely to vote for the PCs. The same was also true for the Liberals except for issue orientation. The Liberals took a strong stance in favour of increased abortion access, but this position was not strongly adopted by Liberal partisans. They did not significantly support the abortion policy views, but they did give positive evaluations to Gallant and were more likely to vote Liberal. Also, those identifying with the PCs were negatively linked to Liberal voting patterns while those identifying with the Liberals were negatively linked to PC voting patterns.

Ultimately, many significant variables overlap in Liberal and PC voting in the 2014 provincial election, while a few are unique. Several regression analyses were performed to determine which factors ultimately explained vote choice. From the first block, the Progressive Conservatives could count on those who were older, religious,

and male for support. The Liberals could count on the support of those who were wealthy, French-speaking, and residents from northern New Brunswick. In the block two analysis, the Liberals could count on more progressive New Brunswickers who were in favour of protecting the environment over economic growth whereas the Progressive Conservatives could count on more traditional, morally rigid New Brunswickers who favoured economic growth and job creation over protection of the environment. As would be expected, block three showed that respondents who identified with the Liberal party tended to vote Liberal, while PC identifiers voted for the PC. In block four, positive evaluations of the incumbent government's job on environmental and health care issues were linked with PC voting. Also, positive evaluations of the provincial economic record over the past year were linked with a PC vote while negative economic evaluations were linked with a Liberal vote. As expected in block five, pro-fracking respondents were linked with PC voting and those in favour of increased abortion access were linked to Liberal voting. In the final block analysis, positive leader evaluations of Alward were linked with a PC vote and positive evaluations of Gallant were linked with a Liberal vote.

### Vote Choice Models

Researchers at Columbia University developed the Sociological Model of vote choice over 60 years ago. This model emphasized the importance of social background characteristics and group membership in vote choice in the American context (Lazarsfeld et al. 1944). In the present analysis, block one variables are largely composed of the components advocated by this model. In this investigation, variables

related to social background characteristics, social identities and group memberships were found to be a significant contributor to all three dependent variables analyzed (policy orientation, leader evaluations, and vote choice) in that block one was significant in each of the seven analyses.

Researchers at the University of Michigan took the study of vote choice a step further, adding psychological variables as a determinant of vote choice in what is called the Social-Psychological Model (Campbell et al. 1960). The social background characteristics and group membership factors became secondary to the psychological variables advocated by the Michigan Model, which were party identification, issue and candidate orientation. They proposed party identification as the strongest variable, with the other two being more flexible.

The present analysis investigated the effects of party identification on policy orientation, leader evaluations and vote choice by adding it in block three of each analysis. Issue orientation was investigated for its effects on leader evaluations and vote choice while candidate orientation (leader evaluations) was investigated for its effect on vote choice. Issue orientation was added in block five while candidate orientation was added in block six.

Party identification, added in block three of each analysis, was a significant contributor in each of the seven regression equations performed. Identifying with one party over another had a substantial and significant effect on policy orientation, leader evaluations and vote choice. Issue orientation was investigated for two policy areas, fracking and increased abortion access, as the two main parties in New Brunswick took firm, and different, stances in regards to each. Issue orientation, investigated in block

five, did play a significant role in each of the three leaders evaluations, but was not a significant contributor to either Liberal or Progressive Conservative voting.

In light of this finding above, issue orientation must also be considered in the context of block two variables. This block took into account survey respondents values, opinions and attitudes. Questions garnered information on more general policy areas than those above, such as views on economic growth or job creation at the expense of the environment, and progressive and flexible moral views as opposed to a more traditional and rigid outlook. In this case, block two variables were found to be significant in all seven analyses performed, and was the block responsible for the highest increase in causality of the dependent variable of all blocks studied in four of seven regressions run. Candidate orientation was investigated for its effects on vote choice and it was found to be a significant contributor to both Liberal and Progressive Conservative voting.

The Rational Choice Model was also proposed as an explanatory model of vote choice, putting emphasis on economic voting, specifically the evaluation of an incumbent government's economic performance, in explaining vote choice (Gidengil et al. 2012). In the present analysis, block four variables consisted of the incumbent government's performance on two policy areas, protecting the environment and improving health care, as well as subjective evaluations of the province's economy over the past year. Although this block was significant in the investigations of policy orientation, leader evaluations, and voting for the incumbent government, it did not play a role in choosing to vote for the Liberals.

From the present analysis, each model contributes to our understanding of vote choice. The Sociological Model is important in that social background characteristics and group memberships were significant in understanding vote choice in the New Brunswick 2014 election. The Social-Psychological Model plays an important role as party identification, issue and candidate orientation all played a role in the election outcome as well. Even the Rational Choice Model appeared to play a role in vote choice, albeit only in a vote for the incumbent government, but mattered to them nonetheless. The Miller and Shanks Model (1996), captures the influence of each of these models in explaining vote choice, for they all do play a role in some capacity, and this is what the Miller and Shanks Model attempts to do, in unifying each as a more complete explanation of voter behaviour.

## Gender

The first of the social background characteristics and social identities for review is gender. Whether participants were male or female played a role in policy preferences, leader evaluations, and vote choice. In regards to policy preference, men were more pro-fracking than women. Research has found that females are less trusting of the market and more left-leaning than men, perhaps the fact that fracking was largely a Progressive Conservative policy played a role in women's lack of support for it. Not surprisingly, given the inconsistent results impact of this variable found in the literature, gender did not play a role in views on increased abortion access. Males and females were not significantly different in their views towards increased abortion access, as in previous research (Everitt 1998).

Leader evaluations were also affected by gender, but only for Dominic Cardy's evaluation. Respondent gender did not affect the evaluations of Brian Gallant with the Liberal Party. Prior to the 1970s, women were more supportive of right-wing parties (the Progressive Conservatives) but by the 1980s they had shifted their support to middle of the road (Liberal) or left-wing parties (New Democratic Party) (Gidengil et al. 2012, 22-23). Gender had the highest effect on evaluations of the NDP leader, with more females supporting this party.

When it comes to gender and vote choice, there was no link with Liberal voting, but men were more likely to vote for the Progressive Conservatives. The Liberal Party is known as a party of the centre, and so no clear difference between men and women regarding Liberal support could be a result of the party's approach. It is possible that if an analysis of the basis of support for the NDP had been conducted gender gaps, with women showing more support for the NDP, might have been revealed. Overall, men were more supportive of fracking and the Progressive Conservative Party while women were more supportive of Dominic Cardy.

## Age

The independent variable age had a significant effect on attitudes towards abortion, two of the three leader evaluations, and on PC voting. Age did not play a role on views towards fracking. Against common belief, age had a larger impact in favour of increasing abortion access for New Brunswick women. As age went up, the more likely survey respondents were to think the New Brunswick government should make abortion services more accessible. A common stereotype about older populations is that they are

more traditional, therefore it would be expected that they would oppose increased abortion access. As is found in these data, older populations are actually more supportive of increased abortion access.

Age played a role in leadership evaluations, with older New Brunswickers providing more positive reviews to PC leader Alward and younger New Brunswickers provided better ratings to NDP leader Cardy. This finding fits the stereotype that older people are more traditional in their outlook, which leads to the expectation they would support the more conservative PCs. Younger voters have historically been a bigger part of the NDP's support system, so it is not surprising that Cardy would have received positive ratings from younger New Brunswickers. Cardy did receive significant positive evaluations as a result of age; in this analysis younger voters were significantly associated with positive reviews of the NDP leader. Age also played a role voting patterns. Older New Brunswickers were found to be significantly associated with voting for the Progressive Conservatives. Interestingly, Brian Gallant, the young Liberal leader did not benefit from the support of younger voters.

### Linguistic Identity

New Brunswick is Canada's only constitutionally bilingual province and historically, mother tongue was seen as being an important factor in the province's voting behavior. A significant impact based upon language was present in Brian Gallant and David Alward's leader evaluations and vote choice for the Liberal Party. With Alward, an Anglophone, and Gallant, a Francophone, it could reasonably be expected that the Francophone population would provide better ratings to Gallant who shares part

of their identity that Alward does not. While this was not the case for leader evaluations, it did matter in vote choice.

Language had a significant effect on vote choice for the Liberals. French as a mother tongue was a significant factor in predicting a Liberal vote, contradicting more recent evidence that the language divide is no longer significant in New Brunswick (Cross and Stewart 2002). Interestingly though, Francophone identity also played a positive role in the Progressive Conservative leader evaluation. However, despite the positive ratings of Alward, language was still only significant with a vote for the Liberals (Beck 1970; Fitzpatrick 1972; Thorburn 1961). Perhaps this is the result of a so-called ‘language-affinity’ affect with the Francophone leader, Gallant.

### Religious Identity

Historically, Roman Catholics have supported the New Brunswick Liberal Party in large numbers (Thorburn 1961). In 2014 however, this denomination was not linked to policy preference, leader evaluations, or vote choice. Clearly, the political preferences of Roman Catholics in New Brunswick have changed from their historical pattern of Liberal support. Perhaps this can be explained by the Liberal Party’s strong stance in favour of increased abortion access for New Brunswick women in the 2014 election. Increased abortion access is an issue that Catholics tend to oppose, (and were encouraged to oppose in the 2014 election) and their religious background may have been enough to turn them away from their preferred party and its stance in favour of increased abortion access.

Affiliation with the Protestant denomination was significant in policy preferences, leader evaluations, and vote choice. Protestants were found to be significantly in favour of fracking. There was no effect on evaluations of Cardy or Gallant, but Alward received positive reviews from Protestants. In terms of vote choice, Protestants were linked to PC voting, in line with historical patterns of Protestant support directed at the PCs (Beck 1970; Fitzpatrick 1972; Thorburn 1961). The Progressive Conservatives can still count on Protestant support, just as in the past, as they significantly supported the party, its leader, and its fracking policy.

The final denomination studied was Evangelical Christians. Evangelical Christians were one of the strongest independent variables associated with pro-fracking views, and also one of the strongest variables opposed to increased abortion access for that dependent variable. They gave Alward positive evaluations and were linked with PC voting. In fact, Evangelical Christians had the same results as Protestants on fracking, Alward evaluations, and PC voting. Two differences separate the two denominations. The first is Evangelical Christian's strong opposition to increased abortion access and the second is their propensity to not vote Liberal. It is likely that their views on the increased abortion access policy and the Liberal view in favour played a role in their decision not to vote Liberal.

Religiosity was a significant factor in evaluating policy orientations and leader evaluations of Brian Gallant. The more important a respondent said religion was to them, the less supportive of fracking and increased abortion access they became. Interestingly though, as respondents reported higher levels of religiosity, they were associated with more positive evaluations of Gallant.

Historically, religion has played an important role in vote choice for New Brunswickers. A clear division was evident historically between Roman Catholics voting for the Liberals and Protestants voting for the Progressive Conservatives (Beck 1970; Fitzpatrick 1972; Thorburn 1961). As can be seen from this analysis, the religious tie between Roman Catholics and the Liberal Party has eroded while the tie between the Progressive Conservatives and Protestants is still in place. Protestants and Evangelical Christians were linked with PC voting, while Evangelical Christians were also linked with not voting Liberal. This is probably due to the Liberal policy stance on increased abortion access and Evangelical Christian's strong opposition for this policy. The Liberal Party did not garner support from any of the religious groups studied.

#### Education

The population was separated into the university educated (Bachelor, Masters or Professional degrees) and those with anything less than a university education. A university education was found to have an effect on two of the three dependent variables. The university-educated group was more likely to support increased abortion access. They were also more likely to support Cardy of the NDP. When it came to vote choice however, no significant relationship emerged between either Liberal or PC votes and education level. Higher levels of education have been linked to NDP voting elsewhere and perhaps this is why no link is seen here, as the variables affecting NDP votes were not investigated.

## Urban vs. Rural

The urban versus rural divide did not produce any significant effect on policy preferences, leader evaluations, or vote choice in the 2014 New Brunswick provincial election. The variable was removed from the analysis of both policy orientations, leadership evaluations of Brian Gallant and Dominic Cardy in addition to PC vote choice because it did not have any significant effect on these variables. The literature suggests vote choice between urban and rural residents is typically not very different (Gidengil et al. 2012), and the findings from this election support this claim.

## Region

Where residents lived, in terms of the northern and southern portions of the province, had an effect on vote choice for the Liberal Party. No differences were seen regarding policy orientations analyzed, increased abortion access and fracking, the leader evaluations or PC vote choice. A vote for the Liberals was much more likely to come from northern residents. This was expected as the northern region of the province is largely Francophone, a shared characteristic with the Liberal leader.

## Income

The last social demographic/social identity independent variable for analysis is income. Income was significant in policy orientation, leader evaluations and vote choice. Wealthier respondents were more likely to support fracking, give positive evaluations to both Alward and Gallant, and vote for the Liberal Party. Lower income respondents were more likely to give the NDP leader, Dominic Cardy, better evaluations.

## Values, Opinions and Beliefs

This block of variables investigated respondents' ideological perspective, moral outlook and views on the environment compared to the economy. The first factor under analysis was ideological perspective, gathered by asking if respondents felt the market should be highly regulated or highly deregulated. It was found that this factor played a role in policy orientation regarding increased abortion access. People who were in favour of increased regulation of the market, also known as increased government intervention, were also in favour of increased abortion access for New Brunswick women. From previous research, it was reported that women were in favour of increased government intervention in the market, through their support for left-wing parties and distrust of the market (Gidengil et al. 2012), and it is in line that respondents supportive of left wing causes (increased market regulation) would also be more progressive on social issues such as abortion.

Two questions were used to gauge a respondent's moral outlook. The first asked them to rate themselves on how progressive they were regarding matters such as abortion, euthanasia, and homosexuality. The second investigated whether respondents agreed that moral behavior should be adjusted according to a changing world. Both factors produced significant results. When it came to fracking, those who rated themselves as more traditional were more supportive of fracking. The abortion question was linked with more progressive views on traditional matters and views favouring changing moral behavior alongside a changing world.

Those with a more rigid view of moral behaviour, that is thought moral behaviour should not change with a changing world, gave Alward better leader evaluations. For Gallant and Cardy, respondents who rated themselves as more progressive morally and those who were more flexible on changing moral behaviour were likely to give both leaders positive evaluations. When it came to voting, the Liberal Party could expect a vote from more progressive respondents while the Progressive Conservatives could count on more traditional New Brunswickers with more rigid views on changing moral behaviour.

As expected, views in favour of jobs and economic growth were associated with increased support for fracking and a vote for the Progressive Conservative Party. Respondents in favour of economic growth at the expense of the environment were also associated with better evaluations of David Alward. On the other hand, views in favour of the environment over economic growth produced favourable ratings for Gallant and Cardy, and a greater likelihood of a vote for the Liberals.

#### Party Identification

Party identification played a role in policy orientation for the PCs and the NDP. Those who identified with the Progressive Conservatives were more likely to support fracking and oppose increased abortion access, in line with the party's policy stance on both issues. NDP identifiers were significantly associated with anti-fracking sentiments. Alward was likely to receive positive evaluations from PC identifiers, Cardy from NDP identifiers, and Gallant from Liberal identifiers. The Liberal leader was also likely to get negative evaluations from Progressive Conservative identifiers.

Regarding vote choice, Liberal identifiers were significantly associated with a Liberal vote and not voting for the PCs. The opposite was true for the Progressive Conservatives as those identifying with the party were likely to vote for the PCs and not likely to vote for the Liberals. Identification with the PC Party had a large effect in favour of fracking, evaluations of Alward and PC vote choice. These findings of the Progressive Conservative identifiers are in line with research on party identification and how it is linked with issue orientation, candidate evaluations and vote choice (Anderson and Stephenson 2010, 21; Gidengil et al. 2006; Blais et al. 2002; Nevitte et al. 2000). The Liberal case is similar, differing only in that it would have been expected Liberal identifiers would have been significantly associated with the party's policy on increased abortion access, but they were not. Perhaps this is an issue for Liberal identifiers with stronger religious ties.

#### Feminists

Respondents who reported higher ratings for feelings towards feminists were in favour of increased abortion access and gave Cardy better evaluations. It had little effect on the issue of fracking or on evaluations of the other party leaders. Ratings of feminists did not play a significant role in regards to vote choice for either the Liberal or PC Party, but might have if the analysis had considered vote choice for the NDP.

#### Environmentalists

Respondents who gave higher ratings to environmentalists were anti-fracking and gave positive evaluations to Gallant. It was expected people sympathizing with

environmentalists may be anti-fracking, but better evaluations to Gallant and no link with Cardy shows that those in this group seemed to choose Gallant as a better defender of the environment. It should be noted however, that this variable was not linked to vote choice for the Liberals.

#### Incumbent/Economic Performance

Respondents who rated the incumbent government positively on protecting the environment, improving health care and gave positive ratings to the provinces economic performance over the past year were significantly associated with positive evaluations of Alward and voting for the Progressive Conservatives. Survey respondents who felt the incumbent government had done well protecting the environment were also more likely to support fracking. Those who felt health care had improved were linked with positive evaluations of Cardy and finally, respondents that gave the province's economic performance over the past year negative ratings were linked with a Liberal vote.

#### Policy Preferences

Policy Preferences had an effect on leadership evaluations and vote choice. Gallant was likely to receive positive evaluations from respondents in favour of increased abortion access and anti-fracking viewpoints. Also, those in favour of increased abortion access were likely to support the Liberals while those in favour of fracking were likely to support the Progressive Conservatives. Therefore, the fracking and abortion issue did play a role in vote choice in the 2014 provincial election, although the low associated R square values suggest that it was a minor one.

## Leader Evaluations

Finally, leader evaluations did play a role in that positive evaluations of Gallant were linked with Liberal vote choice and positive evaluations of Alward were linked with PC vote choice, just as expected from previous research (Gidengil et al. 2012, 17; Blais et al. 2002; Johnston 2002). Negative evaluations of Cardy were associated with a Liberal vote, while negative evaluations of Gallant were associated with a vote for the PCs.

## Limitations of the Current Study and Future Directions

The present analysis was based upon secondary data. This presents a limitation in that only what was asked in the original survey can be used for investigation. Also limiting the present study was the survey method, a post-election survey, which is very effective at investigations of vote choice and understanding the background of vote choice, but does not allow the investigation of how or if voters change their mind throughout a campaign. Multiple surveys completed over the course of a campaign are well suited to this task. Finally, the statistical analyses performed in this investigation violated multiple assumptions of the regression test. Although the sample is from a relatively homogenous population, the violation of these assumptions is not ideal.

## Conclusions and Directions for Future Research

Gender was found to play a role in differences in policy preference, leader evaluations and vote choice. Urban versus rural residency did not have a significant effect on any dependent variable, in line with recent research from Canadian Election

Studies. Vote choice was affected based on religion, but only Protestants for the PCs, and language, with Francophones more likely to support the Liberals. Region only played a role in terms of northern New Brunswickers (a largely Francophone region) significantly more likely to vote for the Liberals. Policy preference was only significant in regards to leader evaluations of Gallant and Cardy while leader evaluations were found to play a role, albeit minor in both Liberal and Progressive Conservative vote choice. Future studies should investigate whether the findings in this investigation are pervasive across elections, or specific to this election related to isolated campaign debates or candidates. For instance, is language a determining factor of Liberal vote choice? Or is a Francophone leader (Gallant) positioned against an Anglophone leader (Alward) the cause of language being a significant factor in Liberal vote choice?

## Bibliography

- Alberta Energy Regulator. 2015. Hot Topic – Hydraulic Fracturing. Accessed June 17, 2015. <https://www.aer.ca/about-aer/spotlight-on/unconventional-regulatory-framework/what-is-hydraulic-fracturing>
- Anderson, C.D., and L.B. Stephenson. 2010. *Voting behaviour in Canada*. Vancouver: UBC Press.
- Arthur, J. (1999). Abortion in Canada: History, law, and access. Pro-choice Action Network Website. <http://www.prochoiceactionnetwork-canada.org/articles/canada.shtml>. Accessed August 8, 2015.
- Aunger, E. 1981. *In Search of Political Stability: A Comparative Study of New Brunswick and Northern Ireland*. Montreal: McGill-Queen's University Press.
- Beck, J.M. 1970. "Elections in the Maritimes: The votes against have it," *Commentator*, 14, 7-9.
- Beck, J.M. 1976. "Elections" in David Bellamy, Jon Pammett and Donald Rowat (eds.) *The Provincial Political Systems: Comparative Essays*. Toronto: Metheun Pub. 177-196.
- Berdahl, L. and T. Raney. 2013. "Am I Albertan or Canadian? Assessing Citizens' Provincial Identifications in Canada." Paper presented at the annual meeting for the Canadian Political Science Association, Victoria, British Columbia, June 4-6.
- Berelson, B. R., Lazarsfeld, P. F., and McPhee, W. N. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.
- Bibby, R.W. 1979. "The State of Collective Religiosity in Canada: An Empirical Analysis." *Canadian Review of Sociology* 16 (1): 105-16. doi: 10.1111/j.1755-618X.1979.tb01013.x.
- Bibby, R.W. 2008. "The Perils of Pioneering and Prophecy: A Response to Thiesson and Dawson." *Studies in Religion* 37 (3-4): 417-25. doi: 10.1177/000842980803700302.
- Blais, A., E. Gidengil, P. Fournier, N. Nevitte, J. Everitt, and J. Kim. 2010. "Political judgments, perceptions of facts, and partisan effects". *Electoral Studies*. 29 (1): 1-12.
- Blais, A, E. Gidengil, R. Nadeau, and N. Nevitte. 2002. *Anatomy of a Liberal Victory: Making Sense of the 2000 Canadian Election*. Peterborough: Broadview Press.

- Blake, D.E. 1972. "The Measurement of Regionalism in Canadian Voting Patterns". *Canadian Journal of Political Science / Revue Canadienne De Science Politique*. 5 (1): 55-81.
- Boudet, H., Clarke, C., Bugden, D., Maibach, E., Roser-Renouf, C., & Leiserowitz, A. 2014. "Fracking" Controversy and Communication: Using National Survey Data to Understand Public Perceptions of Hydraulic Fracturing. *Energy Policy*, 65: 57-67.
- Campbell, A., P.E. Converse, W.E. Miller and D.E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Canadian Association of Petroleum Producers. 2015. Canadian Oil and Natural Gas – Canadian Economic Contribution. Accessed June 16, 2015. <http://www.capp.ca/canadian-oil-and-natural-gas/canadian-economic-contribution>
- Canadian Election Study. 2015. "Surveys." Accessed May 20. <http://ces-ec.arts.ubc.ca/english-section/surveys/>
- CBC News Canada. 2014. 4 parties launch election campaign. Accessed June 24, 2015. <http://www.cbc.ca/news/canada/new-brunswick/new-brunswick-votes-2014/4-parties-launch-election-campaigns-1.2742929>
- CBC New Brunswick. 2015a. "New Brunswick Election: Party leaders focus on jobs, shale gas in debate." Last accessed July 30. <http://www.cbc.ca/news/canada/new-brunswick/new-brunswick-election-party-leaders-focus-on-jobs-shale-gas-in-debate-1.2761028>
- CBC New Brunswick. 2015b. "N.B. fracking protests and the fight for aboriginal rights." <http://www.cbc.ca/news/canada/n-b-fracking-protests-and-the-fight-for-aboriginal-rights-1.2126515>
- Comparative Provincial Election Project. 2015. Accessed May 9. <http://cpep.ualberta.ca/en/AboutCPEP.aspx>
- Cosgrove, P. 1973. "Political Styles in Recent Elections" in Donald Rowat (ed.) *Provincial Government and Politics: Comparative Essays*. Ottawa: Dept. of Political Science Carleton University, 387-406.
- Cross, W., and I. Stewart. 2002. "Ethnicity and Accommodation in the New Brunswick Party System". *Journal of Canadian Studies*. 36 (4). 32-58.

- Davis, Charles, and Jonathan M. Fisk. 2014. "Energy Abundance or Environmental Worries? Analyzing Public Support for Fracking in the United States." *Review of Policy Research* 31 (1) 1-16.
- Erickson, L., and B. O'Neill. 2002. "The Gender Gap and the Changing Woman Voter in Canada". *International Political Science Review / Revue Internationale De Science Politique*. 23 (4): 373-392.
- Esmer, Y. and T. Petterson. 2007. "The Effects of Religion and Religiosity on Voting Behaviour." In the *Oxford Handbook of Political Behaviour*, ed. Russell J. Dalton and Hans-Dieter Klingemann. Oxford: Oxford University Press, 481-503. doi: 10.1093/oxfordhb/9780199270125.003.0025.
- Evans, J.H.. 2010. *Contested reproduction genetic technologies, religion, and public debate*. 45-49. Chicago: University of Chicago Press.
- Everitt, J. 1998. "The Gender Gap in Canada: Now You See It, Now You don't". *Canadian Review of Sociology & Anthropology*. 35 (2)
- Fitzpatrick, P. J. 1972. "The Politics of Pragmatism" Martin Robin (ed.) *Canadian Provincial Politics: The Party Systems of the Ten Provinces*. Scarborough: Prentice-Hall Ltd., 116-133.
- Fracfocus 2015. *Chemical Use in Hydraulic Fracturing*. Accessed June 17, 2015. <https://fracfocus.org/water-protection/drilling-usage>
- Gidengil, E., A. Blais, R. Nadeau, and N. Nevitte. 1999. "Making sense of regional voting in the 1997 Canadian federal election: Liberal and reform support outside Quebec". *Canadian Journal of Political Science*. 32 (2): 247-272.
- Gidengil, E., A. Blais, J. Everitt, P. Fournier and N. Nevitte. 2006. "Back to the Future? Making Sense of the 2004 Canadian Election Outside Quebec." *Canadian Journal of Political Science* 39 (01): 1-25. doi: 10.17/S0008423906060069.
- Gidengil, E., A. Blais, R. Nadeau and N. Nevitte. 2003. "Women to the Left? Gender Differences in Political Beliefs and Policy Preferences." In *Gender and Electoral Representation in Canada*, eds. Manon Tremblay and Linda Trimble. 140-59. Oxford: Oxford University Press.
- Gidengil, E., N. Nevitte, A. Blais, J. Everitt, and P. Fournier. 2012. *Dominance and Decline: Making Sense of Recent Canadian Elections*. Toronto: University of Toronto Press.

- Hyson, S. 1973. "An Analysis of Party Systems" in Donald Rowat (ed.) *Provincial Government and Politics: Comparative Essays*. Ottawa: Dept. of Political Science Carleton University, 475-507.
- Jenson, J. 1976. "Party Systems" in David Bellamy, Jon Pammett and Donald Rowat (eds.) *The Provincial Political Systems: Comparative Essays*. Toronto: Methuen Pub. 118-131.
- Johnston, R. 2002. "Prime Ministerial contenders in Canada." In *Leaders' Personalities and the Outcome of Democratic Elections*, ed. Anthony Stephen King. New York: Oxford University Press, 158-84.
- Johnston, R. 1991. "The Reproduction of the Religious Cleavage in Canadian Elections." In *The Ballot and its Message: Voting in Canada*, ed. Joseph Wearing. 92-104. Toronto: Copp Clark Pitman Ltd.
- Keep our Tap Water Safe. 2015. "Fracking explained 'briefly.'" Last accessed July 30. <http://keeptapwatersafe.org/fracking-explained-briefly/>
- Lazarsfeld, P.F., B. Berelson, and H. Gaudet. 1944. *The People's Choice: How the Voter Makes up his Mind in a Presidential Campaign*. New York: Duell, Sloan and Pearce.
- Lazarsfeld, P.F., B. Berelson, and H. Gaudet. 1968. *The People's Choice: How the Voter Makes up his Mind in a Presidential Campaign*. New York: Columbia University Press.
- Leduc, L., H.D. Clarke, J. Jenson, and J.H. Pammett. 1991. "Partisan Instability in Canada: Evidence from a New Panel Study." In *The Ballot and its Message: Voting in Canada*, ed. Joseph Wearing. 9-28. Toronto: Copp Clark Pitman Ltd.
- Lusztig, M., and M. Wilson. 2005. "A New Right? Moral Issues and Partisan Change in Canada." *Social Science Quarterly* 86 (01): 109-28. doi: 10.1111/j.0038-4941.2005.00293.x.
- McGrane, D. and L. Berdahl. 2012. "Conservative in what way? Suburban Political Attitudes in Six Canadian Provinces." Paper presented at the annual conference of the Prairie Political Science Association, Saskatoon, Saskatchewan, September 22-24.
- Mellon, H. 1992. "New Brunswick: The Politics of Reform" In *The Provincial State: Politics in Canada's Provinces and Territories*, ed. Keith Brownsey and Michael Howlett. 81-112. Toronto: Copp Clark Pitman Ltd.
- Miller, W.E., and J.M. Shanks. 1996. *The New American Voter*. Cambridge: Harvard University Press.

- Nevitte, N., A. Blais, E. Gidengil, and R. Nadeau. 2000. *Unsteady State: The 1997 Canadian Federal Election*. Don Mills: Oxford University Press.
- Nevitte, N., R. Johnston, A. Blais, H. Brady and E. Gidengil. 1995. "Electoral Discontinuity: The 1993 Canadian Federal Election." *International Social Science Journal*. 47: 583-99.
- O'Neill, Brenda. 2001. "A Simple Difference of Opinion? Religious Beliefs and Gender Gaps in Public Opinion in Canada." *Canadian Journal of Political Science/Revue canadienne de science politique* 34:02, 275-298.
- Scheuren, F. 2015. "What is a Survey." Last accessed July 30. [https://www.whatisasurvey.info/downloads/pamphlet\\_current.pdf](https://www.whatisasurvey.info/downloads/pamphlet_current.pdf)
- Statistics Canada. 2005. "Population by Religion, by Province and Territory (2001 Census)." Last Modified January 25, 2005. <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo30a-eng.htm>
- Statistics Canada-Census of Agriculture and Census of Population. 2008. Farm population and total population by rural and urban population, by province, (New Brunswick). Last modified November 12. <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/agrc42e-eng.htm>
- Statistics Canada. 2011a. Table 1 Canada, provinces and territories – Population change, 2006-2011. Last accessed May 22, 2015. <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=Eng&GK=PR&GC=13>
- Statistics Canada. 2011b. Table 6-New Brunswick Population by broad age groups, sex and population change between 2006 and 2011, 2006 and 2011 censuses. Last accessed May 22, 2015. <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=Eng&GK=PR&GC=13>
- Statistics Canada. 2011c. Table 14 New Brunswick – Mother Tongue and language spoken most often at home, 2011 census. Last accessed May 22, 2015. <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=Eng&GK=PR&GC=13>
- Statistics Canada. 2011d. Table 7 New Brunswick – Population by five-year age groups and sex, 2011 census. Last accessed June 8, 2015. <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=Eng&GC=13>

- Statistics Canada. 2013. New Brunswick (Code 13) (table). National Household Survey (NHS) Profile. 2011 National Household Survey. Statistics Canada Catalogue no. 99-004-XWE. Ottawa. Released September 11, 2013. <http://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E> (accessed July 30, 2015).
- Statistics Canada. 2014. CANSIM, table 111-0008. Last modified 2014-07-23. <http://www.statcan.gc.ca/tables-tableaux/sum-som/101/cst01/famil105e-eng.htm>
- Stewart, I. 1994. *Roasting chestnuts the mythology of Maritime political culture*. Vancouver: UBC Press. <http://site.ebrary.com/id/10139146>.
- Thorburn, H.G. 1961. *Politics in New Brunswick*. Toronto: University of Toronto Press.
- Wald, K.D. and G.B. Glover. 2007. "Theological perspectives on gay unions: The uneasy marriage of religion and politics." In *The Politics of Same-Sex Marriage*, eds. Craig A. Rimmerman and Clyde Wilcox. 105-130. Chicago: University of Chicago Press.

## Appendix A

### Survey Questions of Independent Variables

#### **Gender**

Gender

- Male
- Female

#### **Age**

What year were you born in

- None

#### **Linguistic Identity**

Mother Tongue

- English
- French
- Other

#### **Education Level**

Education

- Some elementary/secondary/high school
- Completed secondary/high school
- Some technical/community college
- Completed technical/community college
- Some university
- Bachelor's degree
- Master's degree
- Professional degree or doctorate

#### **Geographic Region**

Region (self-identified)

- Northeast (Restigouche, Gloucester, Northumberland counties)
- Southeast (Kent, Westmorland, Albert counties)
- Southwest (Charlotte, Kings, and St. John counties)
- Central (York, Sunbury, Queens counties)
- Northwest (Madawaska, Victoria, Carleton counties)

#### **Partisanship**

In PROVINCIAL politics, do you usually think of yourself as a: Liberal, Progressive Conservative, New Democrat, Green, or none of these?

- Liberal
- Progressive Conservative
- New Democrat
- Green
- People's Alliance
- Other
- None of these

### **Ideological Orientation**

Market Regulation 0 = Favours high levels of regulation and control of the market. 10 = Favours deregulation of markets at every opportunity. Please indicate where on this scale you would place yourself.

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- Unsure

### **Urban/Suburban/Rural**

Do you live in an urban, suburban, or rural environment?

- Urban
- Suburban
- Rural

### **Religious Affiliation**

Which of the following best describes your religious affiliation?

- Roman Catholic
- Protestant
- Evangelical Christian
- Jewish
- Muslim
- Buddhist
- Hindu
- Sikh
- No affiliation/Atheist
- Other

How important is your religion to you?

- Very important
- Somewhat important
- Somewhat unimportant
- Very unimportant

### **Income**

And now your last year's total household income before taxes. That includes income FROM ALL SOURCES such as savings, pensions, rent, as well as wages. Was it...

- ...less than \$20,000
- ...between \$20,000 and \$30,000
- ...between \$30,000 and \$40,000

- ...between \$40,000 and \$50,000
- ...between \$50,000 and \$60,000
- ...between \$60,000 and \$70,000
- ...between \$70,000 and \$80,000
- ...between \$80,000 and \$90,000
- ...between \$90,000 and \$100,000
- ...more than \$100,000
- Prefer not to say

### **Moral Traditionalism**

Moral Policies 0 = favours more traditional policies on matters such as abortion, homosexuality, and euthanasia. 10 = favours less traditional policies on matters such as abortion, homosexuality, and euthanasia. Please indicate where on this scale you would place yourself.

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- Unsure

### **Feminist identity**

Using a 100-point scale, where 0 means that you really dislike the country, province or group, and 100 means that you really like it, how do you feel about the following?  
Feminists

- None

### **Environmental identity**

Using a 100-point scale, where 0 means that you really dislike the country, province or group, and 100 means that you really like it, how do you feel about the following?  
Environmentalists

- None

For each of the following statements, please indicate if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. 'Protecting the environment is more important than creating jobs.'

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

## Dependent Variable Survey Questions

### Policy Preference

#### *Abortion*

For each of the following statements, please indicate if you strongly agree, somewhat agree, somewhat disagree, or strongly agree. ‘The government should make abortion services more accessible to women in New Brunswick.’

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

#### *Fracking*

For each of the following statements, please indicate if you strongly agree, somewhat agree, somewhat disagree, or strongly agree. ‘The environmental costs of shale gas fracking outweigh any economic benefits.’

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

### Leadership Evaluation

Using a 100-point scale, where zero means that you really dislike the leader and 100 means you really like the leader, how do you feel about the following party leaders? David Alward.

- None

Using a 100-point scale, where zero means that you really dislike the leader and 100 means you really like the leader, how do you feel about the following party leaders? Brian Gallant.

- None

Using a 100-point scale, where zero means that you really dislike the leader and 100 means you really like the leader, how do you feel about the following party leaders? Dominic Cardy.

- None

### Vote Choice

Which party did you vote for?

- NB Liberal Party
- NB New Democratic Party
- NB Progressive Conservative Party
- NB Green Party
- NB People’s Alliance

- Other (please specify)

## Curriculum Vitae

Joseph Murray Sanford

### Education:

Bachelor of Arts **2012-2014**

UNB Saint John Saint John, NB

Bachelor of Science (Hons.) **2008-2012**

UNB Saint John Saint John, NB

### Publications:

Flewelling, A. J., Ellsworth, K, T., Sanford, J., Forward, E., Johnson, J. A., and Gray, C. A. 2013. Macroalgal Endophytes from the Atlantic Coast of Canada: A potential Source of Antibiotic Natural Products? *Microorganisms*.175-187.

### Conference Presentations:

Interprofessional Health Research Day: poster presentation. **2012**

Science Atlantic: oral presentation. **2012**