Meme Campaigning:
The Effects of Political Campaign Memes on Canadian Voters

by

Amy Caroline Vachon-Chabot

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Arts

Department of Political Science
University of Alberta

ABSTRACT

Political memes were omnipresent on social media during the 2019 Canadian federal election. Nonetheless, how do political memes affect Canadian voters? This question remains unanswered today. This thesis seeks to fill in the existing research gap by following the footsteps and methodology used by Huntington (2017, 2019) in her research on the effects and affect of political memes. To do so, I conducted an online experiment involving 550 potential voters from across Canada to understand the effects of eight political memes that were shared on social media during the 2019 Canadian federal election campaign. These political memes addressed two topics that predominated in this campaign: climate change and a scandal involving images of Prime Minister Justin Trudeau wearing blackface makeup captured before his involvement in politics. The selected political memes targeted the Liberal Party of Canada and the Conservative Party of Canada, as well as their respective leaders Justin Trudeau and Andrew Scheer. I measured the political memes' effects by examining changes in vote likelihood and evaluations (candidate and party) after potential voters viewed the political memes and by looking at whether political memes were considered persuasive or resonated with the potential voters. I also assessed if potential voters' characteristics (demographics and political predispositions) or the content of the memes played a role in explaining the political meme's effects. I found that political memes had a low level of effects on vote likelihood and evaluations, in general. However, the effects were nuanced when certain types of potential voters viewed specific political memes. In other words, potential voters' characteristics and the memes' content can explain how political memes affect potential voters.

PREFACE

This thesis is an original work by Amy Caroline Vachon-Chabot. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “The effects of political memes in the 2019 Canadian federal election,” Pro00096878, January 16, 2020.

ACKNOWLEDGMENTS

Designing and writing a thesis such as this one is impossible without the guidance and support of many people. First of all, my graduate program would not have been the same without my supervisor, Dr. Jared Wesley. Dr. Wesley, I have learned so much from you about research and academia. Thank you for providing your expertise, time, and resources to bring my thesis to fruition. I am also very appreciative of the opportunity to be part of your *Common Ground* project as a research assistant; collaborating within this interdisciplinary initiative was formative. Most of all, I have a deep appreciation for your rigour, organization, and dedication to students' well-being. Your constant availability to offer advice and reassurance or just chat has made my experience so much brighter.

In addition to my supervisor, many others have contributed to my research design process and revising my thesis. From within the University of Alberta, I want to thank Dr. Judith Garder and Dr. Linda Trimble, who accepted to be part of my supervisory committee. Your comments and revision of both my survey questionnaire and thesis were immensely appreciated. Thank you to Dr. Kyle B. Murray for taking the time from your busy schedule to meet with me twice to offer advice on designing my online experiment. Also, I wish to recognize the copy editing service I had from Kelly Parkatti from the Academic Success Center. From elsewhere, thank you to Dr. Heidi E. Huntington, Dr. Mireille Lalancette, and Dr. Fenwick McKelvey for taking the time to discuss with me about your research on political memes and to provide your insights when I was designing my research. A special thanks to Dr. McKelvey for generously sharing the political memes you gathered during the 2019 Canadian Federal Election. I want to also thank a fellow graduate student from l'Université du Québec à Trois-Rivières, Simon Fitzbay. Thank

you, Simon, for collaborating in finding political memes on social media during the 2019 Canadian Federal Election and sharing our interest in political memes.

I also wish to acknowledge the funding received by my supervisor Dr. Jared Wesley from the Kule Institute for Advanced Study (KIAS) and the Killam Research Fund, which has contributed to gathering data through my online experiment survey. I am also grateful for the funding received from the Social Sciences and Humanities Research Council and the Faculty of Graduate Studies and Research as a graduate student.

Lastly, while not directly related to writing my thesis, other people were instrumental in supporting me during this process. A special thanks to some of my fellow graduate students at the University of Alberta, Clare Buckley, Conner Peta, Sagnik Guha, Jason Zhang, QC Gu, and Timothy Van den Brink. I am happy to say that I have made new friends. While the COVID-19 pandemic has changed our interactions in the last few miles of our studies, I share long-lasting memories with you all and look forward to a time where we can celebrate our accomplishments together. To my husband and family, thank you for supporting me unconditionally throughout my journey as a graduate student. Most of all, I am eternally grateful to Dr. Frédéric Boily, professor at Campus Saint-Jean - University of Alberta. Without your encouragement, I would not have pursued graduate studies. You took me under your wing during my undergraduate degree and believed in me. Thank you for having included me in several of your research projects as a research assistant, both during my undergraduate and graduate studies. Not all professors are as generous as you in providing students with multiple opportunities to present at conferences, write book reviews and research papers. I thank you for these opportunities; they have helped me better understand research and academia. I deeply value your continuous mentorship; merci pour tout!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

GLOSSARY OF TERMS

LPC: Liberal Party of Canada

CPC: Conservative Party of Canada

NDP: New Democratic Party

Green: Green Party of Canada

PPC: People's Party of Canada

BQ: Bloc Québécois

CHAPTER 1: INTRODUCTION

Political memes were a feature of the 2019 Canadian federal election as they were circulated on social media platforms during the campaign. This use of memes in an electoral campaign follows a similar practice in other countries.[1] The practice was also not new to Canada at the time of the 2019 federal election as studies have shown that people had already been creating and sharing political memes before then (Lalancette and Small 2020a; Lalancette, Small, and Pronovost 2019). However, there was a spark of interest in this digital content in the weeks leading up to and during the election; many media outlets published pieces on political memes.[2] Some of these media outlets suggested that political memes were making their way into Canadian political discourse and "used as tools of political persuasion" or "new political attack ads" (Gurney 2019; Sciarpelletti 2019; Tenove 2019).

Moreover, the use of political memes in electoral campaigning in Canada is worthy of investigation as it disrupts the traditional ways of campaigning. Generally, Canadian political elites and parties harness a variety of communication strategies and mediums to potentially influence voters, including branding, permanent campaigning, earned news coverage, and other types of marketing (Marland, Giasson, and Esselment 2017; Marland, Giasson, and Lawlor 2018; Marland, Giasson, and Lees-Marshment 2012; Marland, Giasson, and Small 2014a). However, digital media has recently taken centre stage in political communication, enabling citizens to create their own political communication and participate in campaigns (Chacon, Lawlor, and

[1] For studies examining the use of political memes during electoral campaigns in the context of the United States, Brazil, Nigeria, and Russia, see as examples Burroughs 2013; Chagas et al. 2019; Denisova 2019; Dike 2018; Greene 2019; Heiskanen 2017; Lukianova, Shteynman and Fell 2019; Nee and De Maio 2019; Ross and Rivers 2017a, 2017b; Sci and Dewberry 2015; Shifman 2014; Tay 2014.

[2] For examples of news articles on the of use of political memes in Canada, see Cousins 2019; Coutu 2019; Green 2019; Gurney 2019; McIntosh 2019a, 2019b; Sciarpelletti 2019; Syed 2019; Tenove 2019.

Giasson 2018; Lalancette, Raynauld, and Crandall 2019; McKelvey, Côté, and Raynauld 2018; Small, Giasson, and Marland 2014). This shift in political communication brings challenges for Canadian political elites and parties as their control over campaign messages diminishes. As Raynauld, Lalancette, and Crandall explain, "[G]rassroots stakeholders try to influence political discourses as well as decision-making processes otherwise under the control of political insiders" (2019, 16). Other scholars point out the existence of "social media elites," meaning people who are not considered "professionals," who create and share political content that "attempt to influence elections" and have the ability to prime the audience, set an agenda, establish frames, and act as gatekeepers (McKelvey, Côté, and Raynauld 2018, 208-209, 217). Thus, Canadian voters now have a say in which messages are shared during electoral campaigns.

Digital media used in political communication includes political memes, as some view them as a "new genre" of "user-generated" political communication (Huntington 2017; Tenove 2019). Canadian scholars have studied political memes as "visual" political communication (Lalancette and Small 2020a). But, what are political memes exactly? To date, scholars have failed to agree on universal definitions of the terms "internet meme" or "political meme."[3] This lack of consensus stems from factors such as memes' novelty, the ever-changing social media world, and the multiplicity of definitions on the more general term "meme" (Denisova 2019, 7; Journell and Clark 2019, 110; Knobel and Lankshear 2007, 201; Shifman 2014 6, 37-39). Despite the lack of consensus over precise definitions, scholars do identify characteristics of memes.

For starters, Internet memes may consist of videos, GIFs, images, hashtags, phrases, peformances, or songs and take formats such as image macros, photoshopped images, comics, reworked cartoons, and others (Denisova 2019, 47-53; Lalancette, Small, and Pronovost 2019,

[3] Political memes are considered a "sub-genre" of the Internet meme (Wiggins 2019, 65).

106; Milner 2016, 17-18; Shifman 2014, 100-118; Wiggins 2019, 11). The image macro, which is an image with bold white overlay text, most often in Impact font, is a particularly popular format (Lalancette and Small 2020a, 307; Milner 2016, 28; Ross and Rivers 2017b, 287). Some elements that characterize memes are their reliance on humour, participation, imitation, reappropriation, remixing, juxtaposition, and/or anonymity (Denisova 2019; Knobel and Lankshear 2007, 209; Milner 2016; Ross and Rivers 2017a; Shifman 2014; Wiggins 2019). Memes are also characterized by their ability to being shared online and even become "viral," meaning that memes can be shared extensively across the Internet (Lalancette, Small, and Pronovost 2019, 107; Shifman 2014, 41; Wiggins 2019, 45-47).

Additionally, contextual references to events, culture, society, or politics are an important characteristic of memes (Denisova 2019, 31, 36; Huntington 2017, 32; Lalancette, Small and Pronovost 2019, 107). This characteristic has been referred as "intertextuality" (Knobel and Lankshear 2007, 209). Some have described intertextuality as incorporating elements of popular culture (i.e., texts, images, films) within a meme (Huntington 2016, 78; Ross and Rivers 2017a, 292; Wiggins 2019, 34-35). Intertextuality makes memes more challenging to understand, as viewers need to rely on their knowledge to uncover the meme's messaging (Huntington 2019, 3; Ross and Rivers 2017a, 301). Memes have also been described as "inside jokes" or said to target specific groups of people with their messaging (Denisova 2019, 32; DeCook 2018; Greene 2019; Miltner 2014; Tenove 2019; Wiggins 2019, 64, 100; Woods and Hahner 2019, 125).

As for political memes, more particularly, scholars have identified them as a form of political participation and discourse (Huntington 2017, 15-23; Lalancette, Small, and Pronovost 2019, 107; Lalancette and Small 2020a, 2020b; Ross and Rivers 2017a, 2017b). Shifman (2014) highlights that political participation is what characterizes political memes. She explains that

political memes have three purposes: (1) "persuasion or political advocacy," (2) "grassroots action," and (3) "modes of expression and public discussion" (Shifman 2014, 122-123). Others explain that memes foster political participation by making it more accessible because this type of media can easily be created or shared by individuals compared to more traditional forms of media (Denisova 2019, 162; Esteves 2018; Heiskanen 2017, 20; Lalancette and Small 2020a, 2020b; Lalancette, Small, and Pronovost 2019, 122).

Scholars have also pointed out that even though political memes are humorous content, they are used as discourse to make arguments, offer critiques, and potentially persuade people about politics (Denisova 2019, 33-40; Huntington 2016, 91; Huntington 2017; Lalancette, Small, and Pronovost 2019; Lalancette and Small 2020a, 2020b; Miltner 2018, 419-420;Wiggins 2019, 11, 64-65; Woods and Hahner 2019). For example, in Canada, political memes have been used to "denunciate" leaders like Stephen Harper and Justin Trudeau (Lalancette and Small 2020a; Lalancette, Small, and Pronovost 2019). In the United States, political memes have been used to "delegitimize" politicians, meaning that political memes attempt to undermine the political figure's image by portraying a negative image (Ross and Rivers 2017a, 2017b). Based on scholars' research described above, I define a political meme for this study as humorous and contextual images and political communication created by individuals to critique current events (i.e., electoral campaigns) and politicians.

However, there are concerns regarding their content and creators. Scholars have highlighted that negativity and stereotypes have been at the centre of political memes shared during elections (Nee and De Maio 2019, 305; Ross and Rivers 2017a, 2017b). Tenove (2019) also explains that political memes can have negative repercussions on democracy because they cannot be "fact-checked" due to their ambiguity and they "are replacing the nuanced debate

necessary in a healthy democracy." Political memes shared during the 2019 federal election campaign were said to have contributed to misinformation; criticized the LPC and CPC leaders, Justin Trudeau and Andrew Scheer, respectively, and third-party groups created some of them (Cousins 2019; Green 2019; McIntosh 2019a; McKelvey et al. 2020; Syed 2019). Concerns about third-party groups include that they (1) receive funding from sources who are restricted in their donations to political parties, (2) are managed by former political party staffers, and (3) allow political parties to focus on positive campaigning as they are the ones sharing negative content (Green 2019; McIntosh 2019a). Some have also considered that political memes provided an opportunity to circumvent legal restrictions imposed in June 2019 for traditional digital advertising by political parties and third parties (Green 2019; Sciarpelletti 2019).

Considering all of the above, political memes have brought new dynamics to political campaigning in Canada. Nevertheless, we know very little about political memes' influence on voters and electoral results. In a rare media interview, some Canadian meme creators indicated they thought political memes influence electoral campaigns to heighten knowledge or interest in politics, especially in youth (Coutu 2019). Even with this potential influence, few scholars have examined their tangible effects on electoral results. Canadian scholars reported that it is "unclear whether politically fuelled social media pages can actually sway elections" (McIntosh 2019a) and that "[j]ust because you see something doesn't mean you change your behaviour" (McIntosh 2019b). Some reasons for excluding a potential influence on electoral results are that political memes simply highlight a particular event, "reinforce prior bias," or affect political culture (Cousins 2019; McIntosh 2019b; McKelvey et al. 2020, 47). Regardless, we have access to limited empirical data on the effects of political memes on voters' attitudes and behaviour to confirm these observations. Very little Canadian research on political memes exists, and most

studies on the topic consider the context of the United States (Lalancette and Small 2020a; Lalancette, Small, and Pronovost 2019; Wiggins 2019, 58). Thus, Lalancette and Small suggested that political memes need further attention to understand "their significance in the political communication process and relationships with citizens" (2020b, 215). On the other hand, research conducted outside Canada has pointed to a lacuna regarding our knowledge of political memes' effects, whether they be on "political processes such as legislation or regime change" (Shifman 2014, 174) or on influencing political meme viewers (Huntington 2017, 2019).

Along these lines, Huntington points to two problems in the existing literature on political memes: (1) most studies on media effects do not concern user-generated media, and (2) existing research focuses on characterizing memes, thus focusing on meme creators and the creative process rather than their effects on viewers (Huntington 2017, 6, 15; 2019). These gaps in the literature are especially evident in Canadian political communication studies. Researchers point out that there is a general lack of empirical research on the effects of political communication in Canada (Small, Giasson, and Marland 2014, 8). Regardless, Huntington is the sole researcher that has attempted to bridge the research gap on political memes according to the extensive literature review in Chapter 2.

Briefly, Huntington's research (2017; 2019) found that political memes are considered persuasive messaging only by viewers who agree with the messages, that find the political memes funny, and for whom their political views align with the political memes' stances. She explained that this is evidence of "partisan motivated reasoning." Thus, viewers are processing the political meme's messaging according to their pre-existing views (Huntington 2017, 2019). Huntington's findings align with broader studies in Canada that find that political predispositions

"limit the persuasive power of political communication" (Marland, Giasson, and Small 2014b, 235). However, Huntington's study did not consider the effects of political memes in regard to persuasion and attitudes towards the depicted political figures (2017, 88) nor the potential changes in voting behaviour that could result from viewing political memes. She focused on "perceived persuasion" and not "actual persuasion" (Huntington 2017). She underscored the importance of examining how viewers respond to political memes by considering viewers' characteristics, voting behaviour, and candidate evaluations (Huntington 2019, 11-12). Similarly, political humour research suggests that viewers' "individual differences" are considerable in explaining reactions to political humour, but it needs further investigation (Esralew and Young 2012; Young 2004). The following thesis responds to this challenge to study political memes' effects on Canadian voters' attitudes and behaviour.

Research Question

Keeping in mind that political memes were a feature in recent Canadian elections and there is debate surrounding their impact on electoral results, my research is concerned with answering the following questions: How do different types of political memes affect potential Canadian voters? More precisely, does a potential voter's predispositions and the political meme's content play a role in the way they respond to political memes? With this question in mind, I present the structure of my thesis below.

Thesis Structure

Chapter 2 provides an overview of the literature on voting behaviour in Canada, and political communication and humour effects. Considering the lack of research examining political memes in relation to voting behaviour, I developed hypotheses from examining four bodies of literature. First, I examined research on Canadians' voting behaviour to understand

what factors determine vote choice, and I also looked at campaign effects. Second, I turned to candidate evaluations' role in the voting behaviour of Canadian voters and the effects of political humour on evaluations. Third, regarding persuasion, I overviewed Huntington's research and other political humour studies. Lastly, I considered the few findings that exist regarding memes' "resonance," meaning one's attachment to a meme that leads to it being shared (Milner 2016; Miltner 2014).

Chapter 3 provides details about the methodology I used for this study. Building on Huntington's (2017, 2019) methodology and variables, I designed an online experiment survey to uncover political memes' effects by looking at their influence on potential voters' evaluations of political parties and leaders, and their likelihood of voting for a particular party. More precisely, I focused on understanding if certain memes, demographics, and political predispositions mediated the political memes' effects. I also considered how potential voters interpret political memes' messaging to understand the ability of memes to persuade or resonate. I chose to compare memes that focused on the LPC and its leader, Prime Minister Justin Trudeau, as well as memes on the CPC and its leader, Andrew Scheer. I also examined memes that focused on two popular campaign topics: climate change and the blackface scandal involving Justin Trudeau[4] (Marland and Delacourt 2020, 16). I conducted my online experiment with 550 Canadian participants in February and March 2020 (just months after the October 2019 federal election campaign and days before the onset of the COVID-19 pandemic in Canada). Research participants were divided into two groups. In the one group, participants were exposed to memes criticizing the two leaders and in the other group to memes criticizing the two parties. In each group, two memes regarded the blackface scandal and two memes regarded the climate

[4] At the beginning of the campaign, on September 18 and 19, 2019, three photos and one video of Prime Minister Justin Trudeau wearing blackface makeup were leaked in the media. These images were captured during his time in high school and as a teacher, before his involvement in politics (CBC News 2019).

change issue. I selected a total of eight political memes from those shared on Twitter or Facebook during the 2019 Canadian federal election campaign.

Chapter 4 presents the results of my statistical analysis, and how I found that political memes had no effects in regard to overall evaluations of candidates and their parties, and only political memes targeting parties (not leaders) influenced participants' likelihood of voting for one party or another. However, memes had a very low resonance with participants. In other words, participants were very unlikely to share or like political memes on social media. The findings also show that, compared to the influence on participants' attitudes toward opposition parties and leaders, political memes did not affect perceptions of the LPC and Justin Trudeau. Political predisposition, particularly initial feelings toward parties or candidates, explained how the participants were influenced by political memes. As for meme content, memes targeting parties, the climate change issue, and critiquing Justin Trudeau or the Liberals were considered as most persuasive.

Finally, Chapter 5 is a discussion of my findings. I suggest that the effects of political memes on potential voters are similar to the effects of other types of campaign materials or political humour, as these effects depend on the meme's content and the potential voter's characteristics. I also consider five theories to explain my findings (motivated reasoning, affect, negativity bias, knowledge, and the Elaboration Likelihood Model), highlight study limitations, and suggest avenues for further research. Overall, I conclude that political memes are unlikely to influence overall electoral results, given their lack of widespread impact, but that they could be useful to persuade certain voters to think and behave differently under certain circumstances.

CHAPTER 2: LITERATURE REVIEW

Currently, our knowledge of the effects of political campaign memes on voters is limited. Existing research on political memes involves discourse or content analyses of political memes regarding elections, leadership, activism, or memes that are used by specific groups.[5] Most studies of political memes have focused on understanding the rhetorical strategies or discourses of memes (Huntington 2017). Huntington's (2017, 2019) research, which I examine further in this chapter, deviates from this pattern to study political memes' persuasive and emotional effects on viewers. Nonetheless, Heiskanen acknowledged that there is a "debate" surrounding "whether memes were capable of impacting de facto political behavior" because of a "lack of quantitative evidence" (2017, 1). For example, some entertain the idea that political memes might have impacted Donald Trump's election (Heiskanen 2017, 1; Nee and De Maio 2019, 305), while others argue otherwise (Denisova 2019, 186).

Some scholars who have hinted that political memes might affect elections have relied on inferences (e.g., McKelvey et al. 2020; Wiggins 2019, 71; Woods and Hahner 2019, 218). For example, McKelvey et al. concluded that "memes did not predict the outcome" of the 2019 Canadian federal election because Trudeau did not lose the election even with evidence showing that most memes criticized him (2020, 47). The same researchers also used the number of

[5] For example, studies on memes shared during campaigns include the 2008, 2012, 2016 US presidential election campaigns (Burroughs 2013; Denisova 2019; Greene 2019; Heiskanen 2017; Nee and De Maio 2019; Ross and Rivers 2017a, 2017b; Sci and Dewberry 2015; Shifman 2014; Tay 2014); the 2014 Brazilian presidential election (Chagas et al. 2019); the 2015 Nigerian elections (Dike 2018); the 2018 Russian presidential election (Lukianova, Shteynman and Fell 2019); and the 2019 Canadian federal election (McKelvey et al. 2020). Studies on leadership have focused on the prime minister of Croatia (Bebić and Volarevic 2018); Barack Obama as president of the United States of America (Howley 2016); Theresa May as prime minister of the United Kingdom (Lalancette and Small 2020b); Stephen Harper as prime minister of Canada and leader of the Conservative Party of Canada (Lalancette, Small and Pronovost 2019), as well as Justin Trudeau as prime minister of Canada (Lalancette and Small 2020a). Finally, regarding studies on memes used for activism or by groups, these have addressed Occupy Wall Street (Hristova 2014; Huntington 2016; Shifman 2014); the civil war in Ukraine in 2014 (Denisova 2019); and the alt-right (DeCook 2018; Greene 2019; Woods and Hahner 2019).

members on Facebook pages that shared memes on social media to infer that since their numbers had not increased significantly, political memes did not "seem an effective form of persuasion" (Mckelvey et al. 2020, 47). These inferences provide a good starting point for discussions on the possible effects of political memes on voters, but they do not establish causal links with voting behaviour and attitudes.

Turning to the effects of political humour, since political memes are a form of political humour (Huntington 2017), existing studies are no less enlightening. Most studies have overlooked political humour's effects on voting behaviour, with a few exceptions (e.g., Baumgartner 2008; Baumgartner, Morris, and Coleman 2018; Baumgartner, Morris, and Walth 2012). These studies have also focused on contexts outside of Canada, especially the context of presidential campaigns in the United States dating back to 1992.[6] Based primarily on comedy in talk shows and sketches on American television, examining programs like *Saturday Night Live, The Daily Show, The Late Show with David Letterman,* or *The Colbert Report,* this research has focused on several themes, two of which are most pertinent to my study: "attitudes and opinions" towards political figures, or evaluations, and "processing, understanding, and affinity" for political humour, including persuasion (Becker and Waisanen 2013; Huntington 2017). To see a comprehensive review that indicates each theory, variable, stimulus, and method used in the political humour literature examined for this study, see Appendix A.

Before looking more closely at the literature on voting behaviour and campaign effects in Canada, as well as political humour effects, it is essential to understand what is meant by the term "effects." Researchers have identified four types of media effects: (1) "acquiring," which focuses on how people learn from the media content; (2) "triggering," which is concerned with

[6] See as example, Baumgartner 2008, 2013; Baumgartner and Morris 2006; Baumgartner, Morris, and Walth 2012; Baumgartner, Morris, and Coleman 2018; Becker 2012, 2014b; Esralew and Young 2012; Holbert et al. 2011; Moy, Xenos, and Hess 2006; Weise 1996; Young 2004, 2006, 2012.

emotions and thoughts; (3) "altering," which examines whether media changes "attitudes, opinions, thought-patterns, or behavior"; and (4) "reinforcing," which involves "confirmation of prior beliefs and attitudes" (Wettstein and Wirth 2017, 263-264). Of these, my study partly focuses on determining if political memes have "altering" or "reinforcing" effects.

Canadians' Voting Behaviour and Campaign Effects

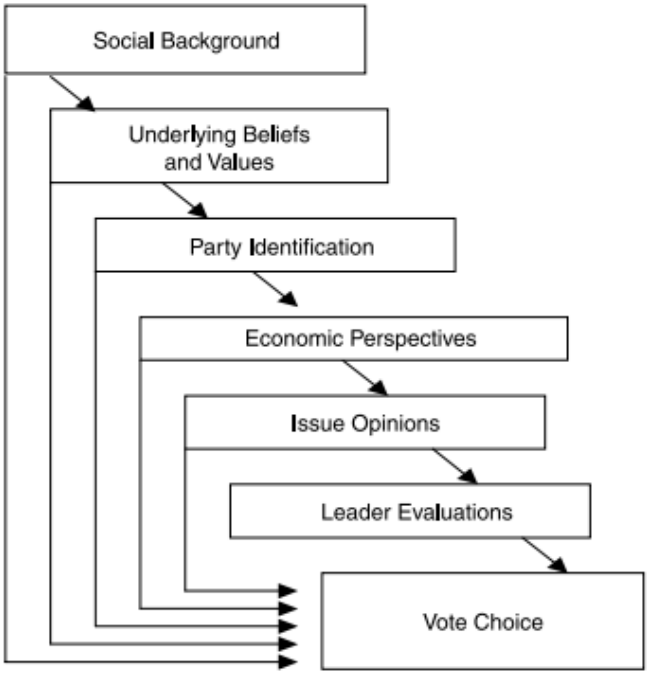
First, turning to voting behaviour literature, there is no simple answer to what influences Canadians' vote choice. Voters consider many factors when casting their vote at the ballot box (Anderson and Stephenson 2010; Blais et al. 2002; Gidengil et al. 2012). Anderson and Stephenson's review of electoral studies identified primary variables including region, religion, gender, marriage, beliefs and attitudes, issue positioning, economic perceptions, partisanship, candidate evaluations, and campaign effects (2010, 15-26). While the literature showcases the importance of all these factors, Anderson and Stephenson point out that some factors may be more important than others for specific voters and specific elections (2010, 281). Furthermore, various voting behaviour models exist, each pointing to their own set of factors that influence voters' decision-making.[7] From these approaches, the block recursive model is favoured in Canadian electoral research as it includes various elements from other models (Anderson and Stephenson 2010, 13; Cross et al. 2015, 167).

In the block recursive model, depicted in Figure 1, factors are ordered in "stages" and include socio-demographics, underlying beliefs and values, and party identification as long-term

[7] These models include the Columbia School, Michigan School, Valence politics, and spatial and rational models. The Columbia School model considers demographics variables (education, income, class, religion, and residence area). The Michigan School model combines long-term influences (ethnicity, race, religion, education, occupation, class, parental partisanship), which determine partisanship, and short-term influences (evaluation of candidates and issues, campaign effects, and conversations with family and friends). The spatial and rational models see voters making their vote choice based on the candidate or party closest to their position on an issue or policy, voting strategically, or abstaining from voting. As for the Valence politics model, it is valence issues, leader evaluations, and partisanship that are influencing factors (Anderson and Stephenson 2010; Gidengil et al. 2012).

influences further from the vote choice compared to short-term influences like economic perceptions, issue opinions and evaluations (Anderson and Stephenson 2010, 13-14; Blais et al. 2002, 84; Cross et al. 2015, 166-167; Gidengil et al. 2006; Gidengil et al. 2012).[8] Factors can also build upon each other, or voters can consider factors independently when making their decisions (Gidengil et al. 2006; Gidengil et al. 2012, 10; Blais et al. 2002, 84-85). In this way, political campaign memes could directly influence voters at the "issue opinions" and "leader evaluations" stage of the model, or earlier long-term influences like socio-demographics, underlying beliefs and values, and party identification could affect these later stages.

Figure 1: The Block Recursive Model



Source: Gidengil et al. 2006, 3; reproduced with permission

[8] In an earlier version of the block recursive model, Canadian scholars had also included evaluations of government performance after issue opinions and strategic considerations after leader evaluations (Blais et al. 2002).

The block recursive model is not immune to limitations; Anderson and Stephenson explain that some scholars have criticized that the block recursive model did not include campaign or media effects (2010, 14). Thus, in addition to the factors described above, looking more closely at campaign effects is necessary since political memes used in the present research are campaign materials. So far, scholars are divided on whether campaigns do have an influence or not. There exists a "minimal effects paradigm," which dismisses the possibility that campaigns affect voting behaviour, but recent studies have found otherwise (Anderson and McGregor 2017, 57; Anderson and Stephenson 2010, 7; Dobrzynska, Blais, and Nadeau 2002, 28). As an example to showcase this debate, we have, on the one hand, Roy and Alcantra, who found through an experimental study that negative campaigning does not increase vote share (2017, 489). On the other hand, studies considering provincial elections found that without the campaign, another party would have won the 2011 Ontario election (Cross et al. 2015, 163) and that advertisements, debates, and issue coverage in the 2003 Ontario and 2011 Quebec elections influenced vote intentions (Fournier, Cutler, and Soroka 2019).

Nonetheless, this debate on campaign effects seems to be nuanced when scholars consider specific predispositions. In other words, campaigns do not have an overall influence, but they matter for certain groups of voters. Various factors explain these variations, for example, media exposure, issue opinion, campaign following, and partisanship. On media exposure, Mendelsohn found that media coverage in the 1988 Canadian election was persuasive for voters, and those who had increased exposure to media coverage gave more importance to a leader's image than partisanship or issue opinions (Mendelsohn 1994, 95-96; see also Small, Giasson, and Marland 2014, 19-20). There is also evidence of campaign effects when scholars have looked at them through the lens of issues. Jenkins found that in the 1993 Canadian federal election, the

campaign primed people on the new Reform Party, thus increasing the Reform Party's support among voters whose predispositions matched the party's position on some issues (2002, 403-404).

As for campaign following, many suggest that campaigns are more likely to influence voters who follow the campaign and are undecided compared to other types of voters. Dobryzynska, Blais, and Nadeau's study of the 1997 Canadian federal election found that media coverage only "temporarily" influenced vote choice and "had no direct impact on the final vote," yet vote choice for a specific party increased with positive coverage and decreased with negative coverage among campaign deciders (Dobryzynska, Blais, and Nadeau 2002, 39). Other scholars have pointed out that campaigns influence campaign followers and deciders, but not partisans (Cross et al. 2015; Fournier et al. 2004; Fournier, Cutler, and Soroka 2019, 154; see also Anderson and Stephenson 2010, 25). For example, Fournier, Cutler, and Soroka found that campaign followers and undecided voters were more likely to vote for the Liberal Party when exposed to positive Liberal ads and negative Conservative ads (2019, 150-151).

Where partisanship comes into play is when we turn to experimental research. Some studies that have compared positive and negative campaigns in previous Canadian federal elections found that negative messages, as opposed to positive messages, do not work on voters (Anderson and McGregor 2017; Daignault 2014; Daignault, Soroka, and Giasson 2013). However, when partisanship is considered, scholars do find campaign effects. For example, while Roy and Alcantra (2017) found that negative campaigning did not influence voters, they explained that the effects changed with partisanship. This is also what scholars who focused on persuasion have found. Scholars who examined argument scrutiny for advertisements shared during the 2011 Canadian federal election found that messages were more persuasive when they concurred with

the viewer's party identification (Daignault 2014, 51; Daignault, Soroka, and Giasson 2013, 182). As for Anderson and McGregor, they looked at campaign messaging on five issues during the 2015 Canadian federal election to find that partisanship explains viewers' "acceptance of messages" (2017, 67).

These above findings on campaign effects bring us back to the observation by Anderson and Stephenson (2010, 281) that some factors are more important for some voters than others. Thus, the literature on voting behaviour and campaign effects in Canada points out that there are differences between voters on the factors that influence them. More precisely, campaign effects seem to be restricted to specific types of voters. Not all scholars' findings point in the same direction, but voters' predispositions are found to be important in explaining campaign effects. We can hypothesize that political memes will influence voters, but only specific voters and based on their particular predispositions.

Candidate Evaluations

As we saw in the previous section, evaluation is a factor that explains Canadians' voting behaviour. Some studies on leader evaluations have shown that this factor has a significant influence on Canadian voters. Bittner examined data from several Canadian Elections Studies to find that leader evaluations are a more important factor explaining Canadians' vote choice compared to factors like socio-demographics and issue opinions, but leader evaluations are a less important factor than partisanship (2010, 184, 198, 200). In a later study, Bittner also found that leader evaluations mattered for voters in all Canadian elections from 1984 to 2015 (Bittner 2018, 302). Other studies that considered federal and provincial elections came to similar conclusions. For example, research based on the 2015 Canadian federal election, the latest election on which data is available, found that leader image was significant in explaining Justin Trudeau's win

because, in comparison to partisanship and perceptions of party performance where all parties were equal, voters had a more favourable view of Trudeau than then-prime minister Stephen Harper (Clarke et al. 2016, 349-350). A 2011 Ontario election study also found that "evaluations of the leaders were very important for voters" (Cross et al. 2015, 180). However, some explain that a leader's popularity, the voter's predispositions, or how they perceive the leader are important in determining evaluations (Gidengil et al. 2012, 17, 101, 104, 111). Therefore, if political campaign memes do have effects in terms of changing potential voters' evaluations of the depicted political figures, we can assume that they might also influence the potential voter's voting behaviour.

Political humour research concerned with candidate evaluations also has found that political humour affect evaluations (Huntington 2017, 37). Researchers using priming and agenda-setting theory have revealed that humorous political messaging can prime viewers on how they view political figures by caricaturing some of their characteristics that viewers can subsequently use to form their evaluations (Esralew and Young 2012; Moy, Xenos, and Hess 2006; Young 2012). Regardless of the theory, several scholars have found that negative humorous messages have negative effects on participant's evaluations of the targeted political figures (Baumgartner 2007, 2008, 2013; Baumgartner and Morris 2006; Baumgartner, Morris, and Coleman 2018; Baumgartner, Morris, and Walth 2012; Becker 2012, 2014b; Becker and Haller 2014; Morris 2009). However, this is not a universal result as alternative studies have found either no effects on candidate evaluations (Young 2004, 17) or the opposite effect where the viewer has a more positive view of the message's target (Baumgartner and Morris 2008, 634). Others also indicate that the effects are only short-term (Young 2012, 227). This last

finding also relates to a study by Dobryzynska, Blais, and Nadeau (2002) that found campaign media have only temporary effects on vote choice.

Just as was the case for campaign effects, predispositions have explained many study results. Scholars often describe the viewer's reliance on predispositions as the use of "cognitive shortcuts" or "heuristics" to rapidly interpret new information and form an evaluation of the depicted subject (Esralew and Young 2012, 340; Huntington 2017, 41-43; Petty and Cacioppo 1986; Polk, Young, and Holbert 2009; Young 2008). These observations bring us back to the remark by Esralew and Young that priming enables people to use "shortcuts" (2012, 339-340). Some also talk about viewers being "biased" or "motivated" when interpreting humorous messages (Becker 2014b, 143; Huntington 2017, 2019; Lamarre, Landreville, and Beam 2009). Some have used the disposition theory of humour that focuses on feelings (like or dislike) that people already have towards the target of a humorous message to explain that these feelings determine whether people will appreciate or not the humour (Becker 2014b, 138-139). This theory comes from scholars Zillmann and Cantor, and shows that people appreciate humour with targets that they dislike, but this appreciation depends on how negative the humorous message is (Becker 2014b, 139-140).

Nonetheless, one predisposition that is showcased in political humour effects research is partisanship. Scholars have found that political humour's effects on evaluations depend on the viewer's party identification or ideology (Baumgartner 2008; Baumgartner, Morris and Walth 2012; Baumgartner, Morris, and Coleman 2018; Becker 2014b, 143; Becker and Waisanen 2013; Young 2004, 2006). For example, Baumgartner (2008) found that content opposite to the viewer's party identification will hurt a candidate's evaluation, while content in line with the viewer's party identification will benefit a candidate's evaluation. Other studies have found that

partisanship does not matter (Becker 2012; Becker and Haller 2014) or that humour that makes fun of a candidate affiliated with the viewer's party identification can still hurt the candidate's evaluations (Baumgartner, Morris, and Coleman 2018; Baumgartner, Morris, and Walth 2012). Becker (2014b) notably critiqued previous studies that examined partisanship for these contradictions. Some scholars have found that political knowledge in addition to partisanship can affect evaluations (Baumgartner, Morris, and Coleman 2018; Becker and Waisanen 2013; Young 2004, 2006). For example, humorous political messages have greater effect on less knowledgeable viewers (Young 2004, 2006). Additionally, research demonstrates that when political figures are not well-known, political humour's negative effects on evaluations is more considerable (Baumgartner 2013; Baumgartner and Morris 2006; Moy, Xenos, and Hess 2006). Similarly, knowing a political figure can have positive effects on the evaluation (Baumgartner 2008).

A few studies on the effects of negative political humour on candidate evaluations have also assessed its effects on voting behaviour, but the results have been mixed. Some scholars, whose results indicated that political humour does affect candidate evaluations, did not find that political humour had an affect on voters' intended vote choices or candidate preferences (Baumgartner 2008; Baumgartner, Morris, and Walth 2012, 101). On the other hand, some found that humour directed towards others had a negative effect on the likelihood of voting for the depicted candidate, while humour that the instigators directed towards themselves had a positive effect (Baumgartner, Morris, and Coleman 2018, 286). Thus, current research on political humour and candidate evaluations suggests that political humour does affect evaluations. However, there is a sparse and unclear understanding of political humour's role in voting behaviour.

Persuasion

Huntington (2017, 209) has characterized political memes as containing arguments and a form of political humour. She had also suggested that characteristics of memes, such as humour and intertextuality, might be important to the memes' persuasiveness (Huntington 2017, 10). Other scholars have described political humour as a tool for political persuasion (Baumgartner and Morris 2006; Morris 2009; Nabi, Moyer-Gusé, and Byrne 2007; Polk, Young, and Holbert 2009; Young 2004). Thus, part of Huntington's research (2017) has been to uncover whether the viewer exposed to the political memes finds them persuasive or not. Studies on the effects of political communication, including political humour, have also examined persuasiveness. To discuss persuasion, they generally rely on the Elaboration Likelihood Model (ELM) (Huntington 2017, 42).

Developed by Petty and Cacioppo, ELM is used to explain "attitude changes" after exposure to persuasive communication (1986, 3). Petty and Cacioppo define "attitudes" as evaluations, "influence" as changes in evaluations, and "persuasion" as "any change in attitudes that results from exposure to a communication" (1986, 5). The theory also establishes that viewers process persuasive communication through a "peripheral route" or a "central route" (Petty and Cacioppo 1986). Communication processed through the peripheral route involves relying on context and affective responses without scrutinizing the arguments, whereas the central route involves cognition through the examination of arguments and reliance on predispositions (Petty and Cacioppo 1986, 3). Therefore, for the purpose of this study, I define persuasion as having an "altering" effect on the voter's vote likelihood and evaluations of politicians or parties. Of note, unlike the present study, "persuasion" in Huntington's work is concerned with the viewer's message processing and not determining if political memes were

persuasive in affecting attitudes or behaviour (Huntington 2019, 4). Therefore, Huntington's study is useful in understanding the potential "reinforcing" effects but not the "altering" ones.

Political humour effects research generally has found that the use of humorous messages increases discounting and decreases argument scrutiny, a result which impedes the message's persuasiveness (Nabi, Moyer-Gusé, and Byrne 2007; Young 2008; Holbert et al. 2011, 190; Polk, Young, and Holbert 2009, 205-206; Becker and Waisanen 2013). As for Huntington, her research found that partisanship plays a significant role in processing political memes' messaging (Huntington 2017, 2019). Huntington's findings are closely related to those of Weise (1996), who found that partisanship matters in the way that viewers react to political cartoons. Viewers thought political cartoons were funnier if they targeted parties that were not in tune with their party identification (Weise 1996). There are also links between Huntington's findings on partisanship and Canadian campaign effects studies that have used ELM and included predispositions. While studying campaign advertisements' persuasiveness, some scholars found that there was "more persuasive resistance to negative ad campaigns," but messages were more persuasive when they concurred with the viewer's party identification (Daignault, Soroka, and Giasson 2013, 182; Daignault 2014, 51). Nonetheless, as part of her online experiment, Huntington compared the effects of political and non-political memes using several independent and dependent variables, as listed in Table 1.

Table 1: Huntington's Dependent and Independent Variables

Independent variables	**Operationalization**
Meme type	Stimuli: political memes, text-only, and non-political meme
Agreement with the meme	1) *Agreement:* self-report 2) *Political ideology*: liberal, moderate, or conservative 3) *Political attitudes*: on liberal or conservative issues depicted in the memes

Viewer's characteristics	1) *Affinity for political humour*: political humour appreciation 2) *Subjective knowledge of pop culture*: self-reported knowledge 3) *Political engagement*: participated in political activities (donations, joined or started groups, shared political media, attended gatherings, worked for a political entity) in the last year 4) *Political interest*: self-reported interest for "government and public affairs" 5) *Media use*: news media (TV, print, website), political comedy, dramas, social media consumption in the past 30 days; looked at, shared, or created memes in the past 30 days 7) *Demographics*: age, gender, education
Other	1) *Third-person perceptions*: statement to rate whether political memes influence or impact political participation for the viewer or others 2) *Perceived funniness*: statement to test the meme's funniness
Dependent variable	**Operationalization**
Affect	1) *Positive and Negative Affect Schedule (PANAS)* (with added feelings of aversion): Participants were asked after each meme to indicate whether they felt these emotions: - Positive (enthusiastic, interested, excited, inspired) - Negative (upset, scared, jittery, afraid) - Aversion (angry, bitter, hatred, contempt) 2) *Global affect self-rating*: general positive and negative feelings without precise emotions
Perceived Persuasiveness	1) Three scales that include more than one statement. Results were averaged. - *Message effectiveness*: to evaluate whether the message was persuasive or convincing. It also measures third-person effects with a statement on whether the message would be persuasive for others. - *Message discounting*: to evaluate the intention behind the message by asking if it was used to persuade, entertain, be

	serious, or joke. - *Argument scrutiny*: to evaluate whether the viewer found the "arguments or statements" to be valid, of high quality, or if viewers were looking for flaws or lacked an understanding. 2) *Political figure and issue favourability*: Participants rated if they felt favourably or unfavourably towards various political figures and issues depicted in the memes.

This table was adapted from Huntington's table on page 89 to include more information (Huntington 2017, 88-105; see also Huntington 2019, 7-8).

Huntington found that political memes were more effective and scrutinized less when they were congruent with the viewer's political ideology and when the viewer agreed with the message and found it funny (2017, 153-155, 176). The finding confirms one of her hypotheses, that is "[p]eople who see political internet memes they agree with will perceive memes to be more persuasive than will people who disagree with the memes" (Huntington 2017, 63). She also suggested that there might be selective perception resulting from the ambiguity behind political memes since there were times when viewers agreed with a political meme regardless of their ideology (Huntington 2017, 173). Her findings showed differences in terms of "perceived persuasiveness" and funniness based on the type of meme content to which the viewer was exposed. She found that liberal memes were scrutinized less than conservative ones (Huntington 2017, 136). There was also a correlation within liberal memes regarding funniness and affinity for political humour, but not for conservative memes (Huntington 2017, 159). Huntington found that the political memes were "more effective" and there was "less argument scrutiny when [the viewer] also already felt favourable toward the political issue depicted" (Huntington 2017, 171). Furthermore, political engagement and interest, pop culture knowledge, media and meme use, gender, and age did not explain "perceived persuasiveness" (Huntington 2017, 146-148).

Huntington's study conclusion does not rely on ELM. Instead, she concludes that "partisan motivated reasoning" comes into play when people view political memes, which is not the case for non-political memes (Huntington 2017, 2019). Lodge and Taber (2013) also proposed this theory to explain how voters process political arguments. They explained that people rely on partisanship when processing messages and "accept those facts and arguments they agree with and discount or actively counterargue those that challenge their preconvictions," which includes their "beliefs and feelings" (Lodge and Taber 2013, 149-150). For her part, Huntington explained that motivated reasoning occurs when people prefer "information sources that support or reinforce their existing attitudes or beliefs, as well as process that information according to those attitudes or beliefs" (Huntington 2017, 44; see also Huntington 2019). The theory holds that there are three ways people process the information to confirm their biases: (1) selective exposure to the information, (2) selective perception in the interpretation of information, and (3) selective judgment in the scrutiny of information (Huntington 2019, 4; Huntington 2017, 45). Thus, people are "biased" and tend to dismiss messaging incongruent with their perceptions and agree with what is congruent (Huntington 2017, 45; Lamarre, Landreville, and Beam 2009; Lodge and Taber 2013).

Overall, Huntington's research on political memes exhibits a similar pattern to some studies on campaign effects and political humour research that have considered candidate evaluations. Processing political memes' messaging depends on partisanship but also on factors like agreement and perceived funniness (Huntington 2017). Thus, we can hypothesize that partisanship, agreement with the meme, the meme's perceived funniness, and the viewer's predispositions will be important in determining how viewers respond to political campaign memes.

Resonance

Finally, one characteristic of political memes that has remained outside of Huntington's scope involves "resonance" and, consequently, meme sharing. Milner (2016) explains that resonance is an essential characteristic of memes. He defines resonance as a cultural and personal attachment to the meme (Milner 2016, 30). The idea of resonance related to memes initially came from Miltner as she found, through focus group sessions examining non-political memes, that "people create, share, and spread memetic texts because the content is emotionally resonant for them on some level" (Miltner 2014). Thus, viewers must relate to memes to share them (Milner 2016, 29; Miltner 2014).

While Milner (2016) and Miltner (2014) precisely refer to "resonance," other studies on memes have also commented on meme sharing more broadly. A study evaluating the acceptability of memes through an online experiment found that participants "higher in stereotype-supporting beliefs were less likely to object to the meme" (Duchscherer and Dovidio 2016, 341). Researchers also found that people are more prone to share memes if they find them "socially acceptable" (Duchscherer and Dovidio 2016, 343). Through interviews, Denisova (2019) uncovered that people shared political memes during the 2014 civil war in Ukraine to highlight their "grievances" and "disrupt" Russian propaganda, but also to "let off steam, locate the like-minded individuals and restore confidence in one's principles and aspirations" (2019, 161-162). She also contended that people "share memes that endorse their pre-existing views" or because of their "emotional appeal" (Denisova 2019, 193-194). Another example concerning viewers' behaviour comes from observing meme-sharing on social media in the lead-up to the 2012 US presidential election. Burroughs found that people shared memes because a meme's humour offers the sharer the opportunity to "distance" themselves from the message while still

agreeing (2013, 272). Other scholars have made remarks on meme sharing that further reiterates that the viewer's agreement, emotions, or group identification influence them to share the memes (Journell and Clark 2019, 116; Tenove 2019; Ross and Rivers 2017a, 286-287). Overall, it can be said that meme sharing results from whether the meme resonates with viewers and if they agree with the meme's messaging.

While Huntington's research has not addressed meme sharing in her study, she focused on understanding overall affect (emotions/feelings) when viewers were examining political memes. More precisely, she did not test whether the meme resonated with the viewer, but still examined how people felt when they were viewing the political memes. Huntington (2017) tested for affective responses to political memes using affective intelligence theory. This theory suggests that when people process information, they rely on their emotions/feelings of enthusiasm, anxiety, and aversion (Marcus et al. 2000; Huntington 2017, 53-54). Huntington's (2017) findings showed that meme viewers tended to experience more aversion than enthusiasm and anxiety. However, these feelings were moderated by perceptions of the meme's funniness and the viewer's overall use of memes (Huntington 2017, 132).

The literature review demonstrated that existing studies on political memes have examined how people process political memes' messaging and why they share these memes. The findings of these studies do not allow us to hypothesize the impact of political memes on attitudes and voting behaviour. Thus, turning to campaign materials and political humour effects, we find that these can impact voting behaviour or candidate evaluations. Existing research suggests that viewers' predispositions, like partisanship or ideology, and the content of political humour explained the results.

Hypotheses

Based on the literature examined above, I make the following hypotheses:

1) Political memes will affect vote likelihood for specific potential voters.
2) Evaluations: Political memes will negatively affect the potential voter's evaluation of the target of the messaging (i.e., politician or party).
3) Evaluations: Political memes corresponding with the potential voter's political predisposition will reinforce existing evaluations.
4) Persuasion: The political meme's persuasiveness will be dependent on the
    a) potential voter's predispositions;
    b) potential voter's understanding of the references made in the meme;
    c) political meme's content.
5) Persuasion: Agreeing with the political meme's message will make it more persuasive to the potential voter.
6) Persuasion: Finding the political meme funny will make it more persuasive to the potential voter.
7) Resonance: On social media, potential voters will be more likely to "like" or "share" political memes that resonate with them. Thus, potential voters will need to agree with the messaging, and the political meme will need to be in alignment with the potential voters' predispositions to lead to a "like" or "share" on social media.

CHAPTER 3: METHODOLOGY

To test my seven hypotheses, I followed in the footsteps of those who have examined campaign and political humour effects by conducting an online survey experiment. To briefly explain, experimental designs randomly place participants into two or more groups and expose them to treatments (or no treatment) to make comparisons (Morin-Chassé and Lachapelle 2015; Ruble 2018; Tikkanen 2018). This method was privileged by Huntington (2017, 2019) to study the effects of political memes. She explained her choice by indicating that experiments are "the method of choice" to examine cause and effect (Huntington 2017, 65). Political science methodological handbooks also point out that political scientists have relied on experimental research to overcome the "fundamental problem of causal inference" (Morin-Chassé and Lachapelle 2015, 208, 210). As highlighted in Chapter 2, this type of inference is present in the study of political memes, making experimental design an appropriate choice.

An experimental design is even more suitable in the case of my study for two reasons. First, Anderson and Stephenson (2010) highlighted that the study of campaign effects has generally relied on surveys. However, this method can portray an inaccurate picture of a phenomenon as the data is "dependent" on respondents' answers and a "snapshot," making experiments more appropriate to uncover if campaigns influence voters (Anderson and Stephenson 2010, 7-8; see also Huntington 2017, 66). Second, Daignault explains, "[e]xperiments are better suited to the study of short-term responses in political communication" (2014, 45). This observation is crucial when we consider that I am studying political memes shared during campaigns and that campaign effects are a short-term influence on voting behaviour.

Experiments are not impervious to limitations. Scholars have insisted that experiments can lack internal and external validity, the latter signifying that findings are only applicable to a precise situation portrayed in the study (Anderson and Stephenson 2010, 8; Baumgartner and Morris 2006, 2008; Baumgartner, Morris, and Coleman 2018; Huntington 2017; Morin-Chassé and Lachapelle 2015, 212; Young 2004, 2012). For instance, there may be artificial responses because participants are conscious that they are partaking in an experiment, which is a phenomenon known as the "Hawthorne effect" (Morin-Chassé and Lachapelle 2015, 212). Scholars also explain that experiment designs should be closely related to "the investigated phenomenon's usual function in non-experimental contexts" to achieve external validity (Morin-Chassé and Lachapelle 2015, 212; see also Huntington 2017). Thus, some argue that online experiments have external validity (Baumgartner 2007, 333). For example, the online component of the design allows participants to use their computers in their own environments rather than being in an artificial environment like a lab (LaMarre et al. 2014, 421). Regardless, since my study intends to build theory, the benefits outweigh these limitations. Now that I have outlined some of the advantages and limitations of using experimental designs, I lay out in the following sections the design of my online survey experiment.

Study Approach

My online experiment survey was modelled closely on Huntington's design (2017) (see Appendix B for my questionnaire), but with a few variations. I had two treatment groups and no control group. This choice differs from the traditional approach and Huntington's study, which have at least one treatment group and a control group (Huntington 2017; Morin-Chassé and Lachapelle 2015; Ruble 2018; Tikkanen 2018). I am relying on a "within-subjects design," which uses pre-tests and post-tests results as a basis for comparison, instead of a "between-

subjects design," which compares post-test results for treatment and control groups (Morin-Chassé and Lachapelle 2015, 214). Furthermore, this decision to have two treatment groups instead of one treatment group and one control group, or adding an additional group for control, was made to be able to compare differences between types of memes while considering my limited financial resources. The lack of a control group makes my design "preexperimental" (Ruble 2018). Like Huntington, I also randomly assigned participants to their treatment group. Randomly assigning participants is important to maximize internal validity (Morin-Chassé and Lachapelle 2015, 212; Tikkanen 2018).

My approach to selecting the experiment's stimuli, which is political memes, was also similar to Huntington's (2017). Instead of creating my own stimuli, using political memes shared on social media during the campaign allowed me to capture the effects of campaign communications. This decision did not allow me to control and manipulate the variables found within each meme as would normally be required in experiments to ensure internal validity (Huntington 2017; Tikkanen 2018). However, choosing political memes shared on social media was necessary to best reflect the effects of campaign political memes and ensure external validity. This decision was in line with Huntington's (2017, 2019) approach to selecting memes, as she explained that creating memes would impede on validity, and with the approaches of others who have used real-world stimuli to increase external validity (LaMarre et al. 2014, 421). On the other hand, my political meme selection differed from Huntington (2017) as the political memes that she chose were not all on the same topic and did not present the same political figures in both groups. Instead, I opted to present two topics and two political figures, as I will explain in greater detail below. Huntington had also separated conservative memes into one group and liberal memes into another, which is something that I did not incorporate.

Furthermore, part of Huntington's study (2017) focused on assessing political memes' effects by looking at "perceived persuasiveness." Only analyzing perceived persuasiveness would bring us to the same limitation of surveys, making the data "dependent" on respondent's views (Anderson and Stephenson 2010, 7-8). Thus, I combined two approaches to be able to assess political memes' effects on potential voters. First, I use a pre-test/post-test design to measure changes to evaluations and vote likelihood to understand political meme's altering or reinforcing effects and thus their ability to persuade. In other words, I measured vote likelihood, and candidate and party evaluations before and after exposure to political memes in the assigned treatment group. The use of this design deviates from Huntington's method as she had post-test only design (2017, 65-66; 2019). Even though some highlight that having a pre-test has the risk of priming participants (Ruble 2018), post-test-only designs are problematic for other reasons. Methodological handbooks argue that designs without a pre-test offer no basis for comparison, and "causality still cannot fully be determined because the researcher does not know if the difference existed prior to the manipulation or not" (Tikkanen 2018).

Second, to have a basis for comparison with Huntington's study and political humour research, I incorporated an evaluation of message processing variables. More precisely, perceived persuasiveness, argument scrutiny, message discounting, funniness, and agreement are factors considered by viewers when processing messages and pertain to persuasion, as we saw in Chapter 2. I also considered if political memes resonate and lead to a like or share on social media. Assessing both message processing variables and resonance required participants to be presented with each individual political meme one at a time. Participants were then asked to answer questions on statements about each political meme. This process and the chosen variables

were based on Huntington's (2017) questionnaire design. Now, I will turn to a more detailed description of the construct of my instrument.

Instrument Design

My instrument incorporated similar variables and operationalization as Huntington's study (2017). In my pre-test, I had a series of questions to test for demographic variables (age, gender, ethnicity/race, region, education, time in Canada), partisanship, ideology, retrospective vote choice in the 2019 Canadian federal election, party and leader evaluations, issue opinions, campaign engagement, and vote likelihood. Of note, unlike Huntington, who had only considered ideology (2017, 2019), I tested for both ideology and party identification. This choice builds on other political humour studies' approaches as some had considered both variables and also suggested that it was necessary to include both variables (Baumgartner, Morris, and Coleman 2018; Baumgartner, Morris, and Walth 2012; Becker 2012, 808; Becker 2014a; Young 2006; Morris 2009). I also made some adjustments to Huntington's question formulations or added new questions to measure for campaign engagement, issue opinions, party and leader evaluations, and vote likelihood. Regarding the former two variables, Huntington (2017) had tested for "political figure and issue favourability," but suggested that future research consider affect (emotions/feelings) "toward the object or subject of the meme" (2017, 166).

In the pre-test only, I included two 7-point Likert agreement scale questions to test issue opinions on political correctness and the environment (see questions 11 and 12 in Appendix B), which are topics addressed in the chosen stimulus (as discussed further below). These questions were meant to gauge predispositions related to the blackface scandal and climate change. Regarding campaign engagement, I based my question (see question 9 in Appendix B) on the question posed by Baumgartner and Huntington. Both researchers measured political

engagement "in the past 12 months" by presenting various options, but Baumgartner asked her research participants to "check all that apply," and Huntington opted for a 5-point scale for each option (Baumgartner 2008, 757; Huntington 2017, 228-229). Rather than asking participants to think about their political engagement in the past 12 months, I adapted my question so my research participants would reflect on their campaign engagement in the context of the 2019 Canadian federal election. I also opted for using "check all that apply" for the same question.

In both the pre-test and post-test, I presented participants with feeling thermometers to capture their feelings toward all major parties and the leaders of those parties in the 2019 Canadian federal election before and after viewing the political memes (see questions 13, 14, 17, and 18 in Appendix B). Feeling thermometers are often used in political science research (Nelson 2011). Becker also used this type of measure for candidate evaluations in two of her political humour studies (2012, 2014), as did Baumgartner (2013). As for vote likelihood, I included a 10-point scale rating to measure the likelihood that participants would vote for the parties "if a federal election was held today" (see questions 15 and 19 in Appendix B).

Finally, in the post-test only, participants were presented with individual memes.[9] First, participants were asked to indicate, on a 7-point Likert agreement scale, if they agreed or disagreed with specific statements about each meme they viewed. These statements were: "This image is persuasive" (perceived persuasiveness), "This image is funny" (funniness), "This image is negative" (negativity), "This image is accurate" (accuracy), "This image is only a joke" (discounting), "The image's message is weak" (weakness), "I agree with the image's message" (agreement), and "I know about the topic this image is referring to" (knowledge). These

[9] There was also an open-ended question before being shown individual political memes to examine the participants' first thoughts after seeing the political meme. I did not consider this question in my results analysis, but it was intended to measure argument scrutiny based on Canadian campaign advertisement research (Daignault 2014; Daignault, Soroka, and Giasson 2013).

statements were adapted from Huntington's design (2017) to reduce the length of my survey, as Huntington had twelve statements and my study had eight statements, and to include new statements. I added a different statement to test for argument scrutiny, that is weakness, based on research on motivated political reasoning (Lodge and Taber 2013). I also added a question to test for knowledge. Motivated political reasoning research has tested knowledge's impact on argument scrutiny (Lodge and Taber 2013). Huntington had also tested for pop culture knowledge to find that it did not impact political memes' effects, but she maintained that there was a need for further investigation on the topic of knowledge (2017, 161). Thus, I have included the variable, but I adapted it from Huntington since she related her question to pop culture knowledge more generally. I rather wanted to examine whether participants knew each meme's reference. There were also two questions to test for each meme's resonance by looking at the participant's propensity to "like" or "share" the memes on social media: "If you would see this meme on social media would you 'like' it?" and "If you would see this meme on social media would you 'share' it?"

When selecting the experiment stimuli, eight memes were chosen from those shared on social media during the campaign (see Appendix C). Memes were collected either on Twitter each day or on specific Facebook meme pages.[10] All memes selected were part of the *Know Your Meme* dictionary or *ImgFlip* meme generator, indicating recognition as a meme type. I chose negative memes targeting Trudeau, Scheer, the Liberals, and the Conservatives, as well as those addressing the blackface scandal and climate change. According to my close monitoring of social media during the campaign, these memes best reflect the most popular memes circulating on social media during the 2019 federal election. This decision also reflected McKelvey et al.'s

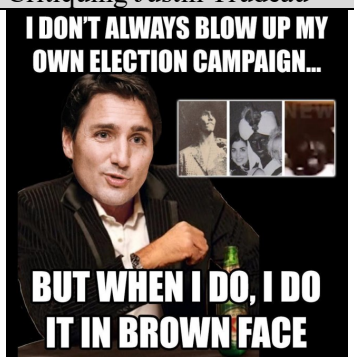
[10] Fenwick McKelvey and his team of students at Concordia University identified the Facebook pages and gathered the memes during and following the campaign period. This dataset, which was also used in Mckelvey et al. 2020, was shared with me following their data collection.

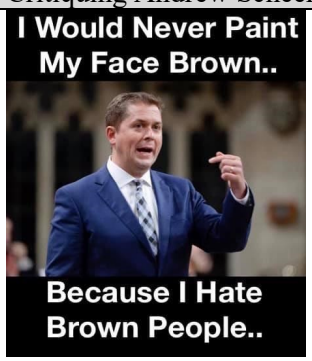
content analysis that revealed the top five topics of the campaign memes, which were (1) "questioning Trudeau's character/morality," (2) "defeat Liberals/elect Conservatives or NDP," (3) "questioning Scheer's character/morality," (4) "Party platform/what the parties stand for (not coded elsewhere)," and (5) "Environmental/ecological issues/climate change" (2020, 46). According to their study, positive memes mostly benefited Jagmeet Singh and Andrew Scheer, but 96% of the memes they examined were negative (McKelvey et al. 2020, 46). They also found two categories of memes: those shared by anti-Trudeau groups and those shared by Liberal and NDP groups (McKelvey et al. 2020, 46). In addition to critiquing leaders, political memes supported or did not support parties, or addressed campaign issues and platforms (McKelvey et al. 2020, 46).

I included two manipulation checks in my questions. Manipulation checks are often used in other political humour studies to confirm the participant considered the stimuli in the same way as the researcher (e.g., Baumgartner and Morris 2006; Becker 2012, 2014a, 2014b; Becker and Haller 2014; LaMarre et al. 2014; Nabi, Moyer-Gusé, and Byrne 2007; Young 2004, 2008). Huntington (2017) had considered the meme's recall to be a manipulation check because she used in her study real (not artificially created) political memes. Thus, considering that I opted for political campaign memes, I asked participants if they recalled seeing each of the memes during the 2019 Canadian federal election. Measuring recall was even more important as some have suggested that being previously exposed to the stimulus could influence the results (Baumgartner 2013, 610). Therefore, I added a yes or no question to uncover whether participants had seen the political memes during the campaign. I also included a question on the meme's negativity within the statements since I had selected only negative political memes.

Furthermore, my online experiment followed a 2x2 factorial design, as illustrated in Tables 2 and 3. I divided each participant into one of two main groups according to the meme's target (leader or party). Within each group, all participants were exposed to the same four memes: two critical of Trudeau or the LPC, with one focusing on the blackface scandal and the other on climate change, and two critical of Scheer or the CPC, also on the blackface scandal and climate change.

Table 2: 2x2 Factorial Design of the Experiment – Treatment Group 1

<table>
<tr><th colspan="3">Group 1 – Target: Leader</th></tr>
<tr><th>Stance/Topic</th><th>Critiquing Justin Trudeau</th><th>Critiquing Andrew Scheer</th></tr>
<tr><td>Blackface Scandal</td><td> 

Meme 1: Justin Trudeau's face juxtaposed on The Most Interesting Man in the World meme with three pictures of Justin Trudeau wearing blackface that were circulated in the media. This meme showcases the negative impact on the Liberals' campaign.</td><td> 

Meme 2: Image macro meme to deflect the blackface scandal over to Andrew Scheer. This meme portrays him as a "racist."</td></tr>
<tr><td>Climate Change</td><td> 

Meme 3: Image macro meme that uses irony to criticize the carbon tax imposed by Justin Trudeau's government and argue that it does little for the environment.</td><td> 

Meme 4: I think I forgot something, Two and a Half Men meme to criticize the Conservatives' platform climate plan. This meme also argues that climate change does not preoccupy Conservatives.</td></tr>
</table>

Table 3: 2x2 Factorial Design of the Experiment – Treatment Group 2

Group 2 – Target: Party		
Target/ Topic	Critiquing the LPC	Critiquing the CPC
Blackface Scandal	 **Meme 5:** *Forest Gump* meme to argue that LPC partisans are minimizing the blackface scandal.	 **Meme 6:** *Daily Struggle* meme to argue that the CPC is torn between two discourses, as they want to criticize Trudeau for the blackface scandal but also want to excuse their "past mistakes." In other words, criticizing Trudeau would minimize their credibility when defending their "racism."
Climate Change Issue	 **Meme 7:** *Three-headed dragon* meme to argue that the climate plan in the campaign platforms of the LPC is weak compared those of the Green Party and the NDP	 Meme 8: *The Simpsons* meme to argue that climate plan in the CPC's campaign platform is weak.

Deployment

The study obtained ethics approval from the University of Alberta's Research Ethics Board (REB) on January 16, 2020. The instrument, preceded by an informed consent form as per ethics requirements, was programmed into the *Qualtrics* platform. The software allowed for randomizing the assignment of participants to each treatment group.[11] Before the main questionnaire deployment, I conducted a pilot test in an introductory-level class (POLS 101) in the Department of Political Science at the University of Alberta on February 5, 2020, with 61 participants. I made changes to the questionnaire following this pilot testing to remove or add some questions and reorganize the questionnaire order. An amendment for the modified questionnaire was submitted to the REB and approved on February 19, 2020.

The study's data collection period started on February 27, 2020, and was completed on March 5, 2020. This period began 18 weeks after the 2019 Canadian federal election and ended three weeks prior to the onset of the COVID-19 pandemic in Canada. A total of 550 participants were recruited from across the country through Qualtrics' pre-assembled market research panels consisting of people who have already agreed to be contacted to respond to surveys. Quota sampling was used to obtain a representative sample of eligible voters. These quotas were based on age (50% 18-40 years old; 50% more than 40 years old), party identification (30% Liberals; 30% Conservatives; 40% other), and region (39% Ontario; 22.5% Quebec; 13.5% British Columbia; 18.5% Prairies – Alberta, Saskatchewan, and Manitoba; 6.5% Maritimes – New-Brunswick, Prince Edward Island, Newfoundland and Labrador, and Nova Scotia).

[11] I was unable to randomize the order in which the stimuli were presented as the structure of the survey on Qualtrics did not allow me to do so.

My study differs from other political humour studies that have, for the most part, focused on youth aged 18 to 24.[12] Choosing a Canada-wide sample was necessary to overcome a research gap prompted by using university student-only samples and to understand the effects of political memes on a broader population (Baumgartner and Morris 2006; Baumgartner and Morris 2008; Huntington 2017, 2019; Lamarre, Landerville, and Beam 2009). My study follows those who have started using wider samples to provide more generalizable findings and increase external validity (Baumgartner, Morris and Coleman 2018; Morin-Chassé and Lachapelle 2015, 212). On the other hand, my study's external validity is impeded by the fact that I used a quota sample. Results with non-probability samples cannot be generalized to the broader population (Young 2012). Nonetheless, my study is still an improvement over studies that have used student-only samples in terms of generalizability.

Sample Overview

Appendix D provides a sample overview for demographic and political predisposition variables, including breakdowns based on gender, age, ethnicity/race, region, education, time in Canada, vote choice in the 2019 federal election, ideology, and party identification, as well as for the initial leader and party evaluations, the indexes on issue opinions,[13] and campaign engagement. In terms of the 100-point feeling thermometers, I coded those who rated between 0 and 24 as very unfavourable, between 25 and 49 as unfavourable, 50 as neutral, between 51 and 75 as favourable, and between 76 and 100 as very favourable. To construct an index for the political correctness issue, I combined each of the three 7-point scale statements (see Appendix

[12] See as examples, Baumgartner 2007, 2008, 2013; Baumgartner and Morris 2006, 2008; Baumgartner, Morris, and Walth 2012; Becker 2014a, 2014b; Becker and Haller 2014; Esralew and Young 2012; Holbert et al. 2011; Huntington 2017, 2019; LaMarre, Landreville, and Beam 2009; LaMarre et al. 2014.

[13] For questions measuring issue opinions, the indication provided to participants for the scale was inadvertently inversed (1 = strongly agree; 7 = strongly disagree). Therefore, it should be kept in mind that this difference might have had an impact on the results for these questions.

B, question 11). Participants who scored between 1 and 7 were coded as 1 (high critic of political correctness), between 8 and 14 as 2 (moderate critic of political correctness), and between 15 and 21 as 3 (low critic of political correctness). For the environmental support issue (see Appendix B, question 12), I did the same as above and combined each of the five 7-point scale statements. Participants who scored between 1 and 7 were coded as 1 (very supportive), between 8 and 14 as 2 (supportive), between 15 and 21 as 3 (moderate), between 22 and 28 as 4 (unsupportive), and between 29 and 35 as 5 (very unsupportive). As for campaign engagement (see Appendix B, question 9), participants who had checked "none of the above" were coded as 0 (not engaged), those who had checked one or two options were coded as 1 (engaged), those who had checked three or four options were coded as 2 (very engaged), and those who had checked five options, the maximum, were coded 3 (extremely engaged).

I chose quota sampling for this research based on age, region, and party identification. Regional quotas were determined according to the proportions of the Canadian population, and results were reflective of those proportions (Statistics Canada, "Population estimates, quarterly"). Regarding age, there was an expected oversampling of the population under 40 compared to the population (Statistics Canada, "Population estimates on July 1st"). I further divided participants into generational groups based on the cutoff dates established by Pew Research (Dimock 2019). For the other variables that were not included in the quotas, percentages were generally comparable to those of Canada's general population. For example, on ethnicity/race, 21.1% of participants had other races or ethnicities than White or mixed, which is close to the percentage of visible minorities in Canada (22.27%) (Statistics Canada, 2016 Census of Population). For the amount of time participants had lived in Canada, 74.9% of participants had lived in Canada all their lives, compared to 76.6% in the general population (Statistics Canada, 2016 Census of

Population). In terms of education levels, participants were more likely to have a high school diploma or university education than the Canadian average (Statistics Canada, 2016 Census of Population). One variable that could be considered problematic for a representative sample is gender. Compared with general Canadian population estimates, women were oversampled by approximately seven percentage-points in my study (Statistics Canada, "Population estimates on July 1st").

Overall, there were 273 participants in treatment group 1 (exposed to leader-based memes) and 277 participants in treatment group 2 (exposed to party-based memes). Both treatment groups were similar on many pre-test variables (see Appendix D). Nonetheless, some categories had + or - 2% differences between the two treatment groups. For demographic variables, compared to treatment group 2, treatment group 1 had more participants who were from Ontario (+2.4%), had a trade/apprenticeship or college education level (+5.2%), were born in 1980 or earlier (+3.5%), were unsupportive of environmental measures (+4.1%), or were *very engaged* in the campaign (+2.8%). More participants in treatment group 2 than treatment group 1 did not have a high school diploma (+3.6%) or were born in 1981 or later (+3.5%). As for political predispositions, treatment group 1 seemed to be slightly more supportive of the Liberals, and treatment group 2 was more supportive of the Conservatives. There was a greater proportion of participants in treatment group 1 that had voted for the LPC in 2019 (+3.3%), or that had feelings that were *neutral* (+2%) or *favourable* (+2.1%) toward the LPC, *very unfavourable* (+2.5%) or *favourable* (+4.1%) toward the CPC, *favourable* toward Justin Trudeau (+3.8%), or *very unfavourable* toward Andrew Scheer (+4.2%). A higher percentage of people in group 2 moderately supported environmental measures (+6.6%), held a conservative ideology (+4.3%), voted for the CPC in 2019 (+2.2%), had *unfavourable* feelings toward the LPC

(+5.3%), *very favourable* feelings toward the CPC (+8.1%), *unfavourable* feelings toward Justin Trudeau (2.9%), or *favourable* feelings toward Andrew Scheer (+3%).

Table 4 illustrates the frequencies of recall for each meme. The vast majority of participants did not recall seeing the memes although a higher proportion did report seeing the blackface scandal memes that were specifically targeting Trudeau and the Liberals.

Table 4: Recall Percentages for Each Meme

	Leader Memes					Party Memes			
	Meme 1 Trudeau Blackface	Meme 2 Scheer Blackface	Meme 3 Trudeau Climate	Meme 4 Scheer Climate		Meme 5 LPC Blackface	Meme 6 CPC Blackface	Meme 7 LPC Climate	Meme 8 CPC Climate
Recall; yes (Y), no (N), don't know (?)	27.9% (Y) 59.2% (N) 12,9% (?) n = 272	12.8% (Y) 73.3% (N) 13.9% (?) n = 273	13.2% (Y) 72.4% (N) 14.3% (?) n = 272	10.6% (Y) 74.7% (N) 14.7% (?) n = 273		21.3% (Y) 58.8% (N) 19.9% (?) n = 277	14.5% (Y) 67% (N) 18.5% (?) n = 276	10.5% (Y) 72.6% (N) 17% (?) n = 277	9.7% (Y) 69.7% (N) 20.6% (?) n = 277

Statistical Analysis

Even though I have used a quota sample, I chose to report results based on statistical significance measures. Choosing this method could be contested since I did not have a probability sample necessary for inferential statistics (Berdahl and Archer 2015; 156). However, according to guidelines from Public Services and Procurement Canada on analyzing non-probability surveys, the fact that I used a randomized experimental design makes this choice of method acceptable: "The exception to the rule against reporting statistical significance tests of differences is non-probability surveys that employ an experimental design in which respondents are randomly assigned to different cells in the experimental design. In this case, it is appropriate to use and report on statistical significance tests to compare results from different cells in the design." (Public Services and Procurement Canada, 2014).

I used SPSS Statistics to conduct three types of statistical analysis to answer my research question and test the various hypotheses. First, to test for differences between the two treatment groups on vote likelihood and evaluations, I compared paired pre-test and post-test means and verified for statistically significant results with paired samples t-tests. For determining significance, I used a 5% ($p < 0.05$) confidence level, which is commonly employed in small-sample political science survey research (Berdahl and Archer 2015, 285). However, because I selected a 5% confidence level, it should be considered that my results are subject to Type I errors, meaning a "false positive" (Berdahl and Archer 2015, 284). In order to evaluate whether there were differences between political memes based on the topic, stance, and target, I also used paired t-tests to compare mean differences on message processing variables.

Second, I examined whether relationships existed between certain groups of people and their message processing. To do so, I conducted a bivariate analysis using measures of association. Particularly, I examined correlation coefficients by looking at the direction, strength, and significance of these relationships. Again, I used five percent ($p < 0.05$) for the confidence level. As for correlation thresholds, I used some guidelines from political science research to determine the strength of each relationship: 0.00 (no relationship), 0.01-0.09 (extremely weak relationship), 0.10-0.20 (weak relationship), 0.21-0.30 (moderate relationship), 0.31-0.49 (moderately strong relationship), 0.50-0.99 (strong or very strong relationship), and 1.00 (perfect relationship) (Berdahl and Archer 2015, 309). In my results chapter, I only report findings that have moderate or stronger than moderate relationships (>0.21) and statistical significance at the five percent ($p < 0.05$) confidence level. Lastly, I used descriptive statistics to determine the percentages of participants liking and sharing on social media for each meme to test for resonance.

CHAPTER 4: RESULTS

This chapter presents the results from my online experiment in four sections: voting behaviour, evaluations, persuasion, and resonance. In each section, I examine the effects of political memes by looking at differences based on the memes' content and the potential voters' characteristics. To consider the memes' content, I compare treatment groups and individual memes results. For potential voters' characteristics, I factor in demographics (age, gender, region, education level, time in Canada, ethnicity/race) and political predispositions (party identification, ideology, 2019 federal election vote, issue opinions, evaluations, and campaign engagement) as independent variables.

Voting Behaviour

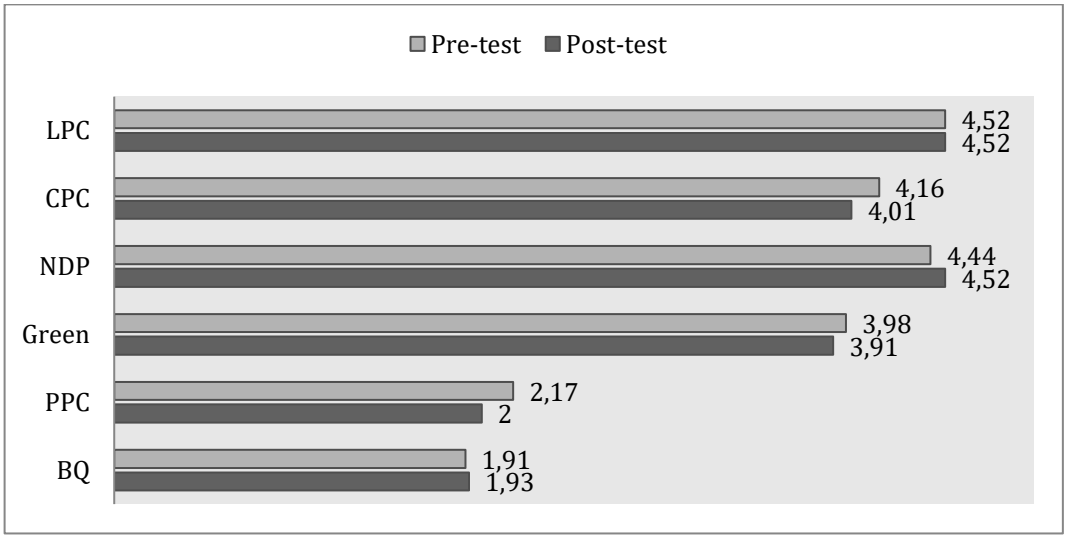
To test my first hypothesis, which concerns vote likelihood and specific types of voters, I examined responses from the vote likelihood for political parties scale by looking at participants overall and specific groups. More precisely, I compared paired pre-test and post-test means to examine whether there was any variation. I also conducted paired sample t-tests to determine if variations were statistically significant.[14] Below, four findings stem from my analysis: (1) political memes negatively affected vote likelihood, especially for participants who viewed memes targeting parties; (2) vote likelihood for the LPC was unaffected by political memes; (3) political memes' effects on vote likelihood depend on demographics and political predispositions; and (4) political memes particularly affect conservative participants' vote likelihood for parties.

Looking at overall participants, I found a decrease in vote likelihood for parties for participants who were assigned memes targeting parties as opposed to those who were assigned

[14] This type of analysis excluded participants that did not answer questions both in the pre-test and post-test.

with memes targeting leaders. Figure 2 illustrates means for vote likelihood for parties before and after viewing memes targeting leaders; there are almost no variations for vote likelihood for the LPC and BQ. On the other hand, vote likelihood for the CPC, Green Party, and PPC decreased, while vote likelihood for the NDP increased. Regardless of these variations, there were no statistically significant results.[15] On the other hand, Figure 3 illustrates that vote likelihood for all political parties decreased after participants viewed memes targeting parties, except for vote likelihood for the LPC, which remained unchanged. Results were also statistically significant for all political parties, except for the LPC and BQ.[16] Thus, findings show that political memes targeting parties have negatively affect vote likelihood for those parties, except for the LPC. While comparing vote likelihood before and after seeing political memes for overall participants was useful to uncover differences between types of memes, it has not been established whether political memes affect specific types of voters.

Figure 2: Paired Vote Likelihood Means – Treatment Group 1 (Leader Memes)

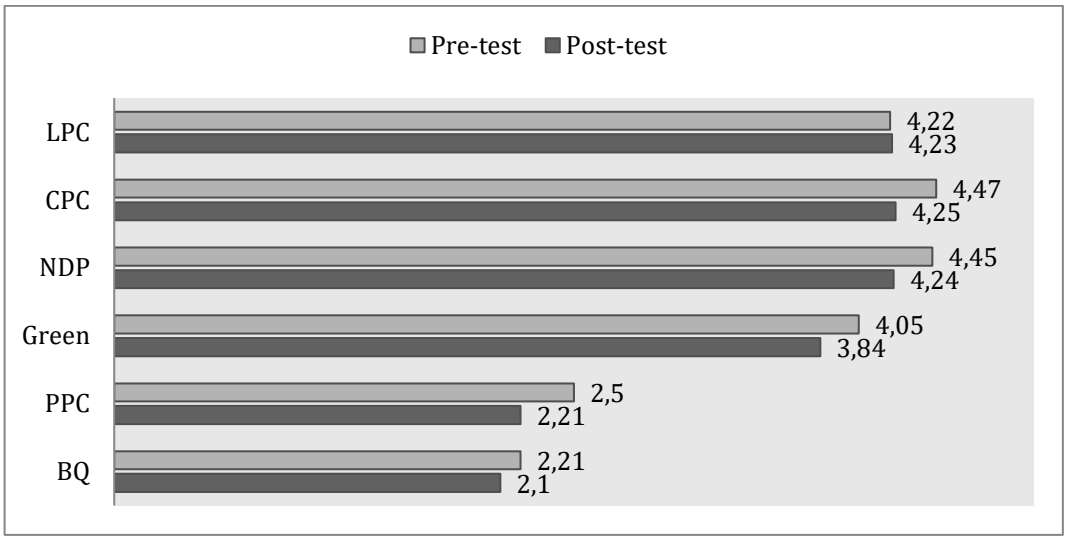


***** *Standard deviations: LPC (3.63 pre-test / 3.66 post-test), CPC (3.75 pre-test / 3.73 post-test), NDP (3.4 pre-test /*

[15] LPC: t (246) = -0.051, p = 0.960; CPC: t (242) = 1.528, p = 0.128; NDP: t (236) = -0.953, p = 0.341; Green Party: t (231) = 0.730, p = 0.466; PPC: t (219) = 1.637, p = 0.103; BQ: t (218) = -0.323, p = 0.747.
[16] LPC: t (240) = -0.089, p = 0.929; CPC: t (231) = 2.865, p = 0.005; NDP: t (221) = 2.253, p = 0.025; Green Party: t (221) = 2.359, p = 0.019; PPC: t (203) = 2.752, p = 0.006; BQ: t (195) = 1.771, p = 0.078.

3.48 post-test), Green Party (3.2 pre-test / 3.23 post-test), PPC (2.67 pre-test / 2.64 post-test), BQ (2.82 pre-test / 2.9 post-test). Number of participants: LPC (n = 247), CPC (n = 243), NDP (n = 237), Green Party (n = 232), PPC (n = 220), BQ (n = 219).

Figure 3: Paired Vote Likelihood Means – Treatment Group 2 (Party Memes)



***** *Standard deviations: LPC (3.74 pre-test / 3.72 post-test), CPC (3.85 pre-test / 3.84 post-test), NDP (3.34 pre-test / 3.31 post-test), Green Party (3.49 pre-test / 3.4 post-test), PPC (3 pre-test / 2.81 post-test), BQ (3.12 pre-test / 3.06 post-test). Number of participants: LPC (n = 241), CPC (n = 232), NDP (n = 222), Green Party (n = 222), PPC (n = 204), BQ (n = 196).*

Therefore, I take a closer look at specific groups of participants by considering demographics and political predispositions. Unlike my previous analysis, I present only statistically significant vote likelihood means variations for the three major political parties: the LPC, CPC, and NDP (see Appendix E for full results).[17] For the demographic variables, I find the same pattern as with the overall participants. There are statistically significant results within the treatment group in which participants viewed memes targeting parities, but not for the group who viewed memes targeting leaders.[18] Furthermore, all results concerned either the CPC or

[17] I decided to focus only on the LPC, CPC, and NDP to concentrate on political parties and leaders depicted in the political memes. However, including the NDP was a way to still have some results that touched on political parties that were not targeted by the political memes.

[18] There was one statistically significant result ($t(13) = 2.332$, $p = 0.036$) for the Maritimes region in the leader meme group. There was a decrease in the CPC vote likelihood mean going from 3.57 (SD = 3.48) in the pre-test to 2.43 (SD = 3.48) in the post-test. However, the number of participants in the category was less than 20 (14 participants); thus, I have not considered these results.

NDP and showed a decrease in vote likelihood for those parties. However, political memes affected group categories within demographic variables differently in terms of their vote likelihood for the CPC or NDP, as illustrated in Table 5. The likelihood of voting for the CPC after viewing memes targeting parties decreased for those who were born in 1981 and later, lived in Western Canada, identified as women, were of White or mixed ethnicity/race, or had lived in Canada all their lives. The likelihood of voting for the NDP decreased for those who were born in 1980 and earlier, lived in Western Canada, identified as men, had trade or college education levels, had not lived in Canada all of their lives, or were of White or mixed ethnicity/race. Of note, region and ethnicity/race were the only two variables for which, within the same category, there were negative effects on vote likelihood for both the CPC and NDP. Therefore, the effects of political memes on vote likelihood for specific parties depended on demographics. This finding raised the question of whether a similar effect would be seen for political predispositions.

Table 5: Paired Vote Likelihood Means – Demographics Variables – Treatment Group 2

Variable	Category	Party vote likelihood	Pre-test	Post-test	Paired sample T-test
Age	Born 1980 or earlier	NDP	M = 4.01 SD = 3.33 n = 112	M = 3.78 SD = 3.41 n = 112	t (111) = 2.270, p = 0.025
	Born 1981 or later	CPC	M = 5.15 SD = 3.82 n = 114	M = 4.87 SD = 3.83 n = 114	t (113) = 2.355, p = 0.020
Gender	Women	CPC	M = 4.76 SD = 3.93 n = 131	M = 4.5 SD = 3.86 n = 131	t (130) = 2.574, p = 0.011
	Men	NDP	M = 4.13 SD = 3.35 n = 99	M = 3.82 SD = 3.81 n = 99	t (98) = 2.385, p = 0.019
Region	West	CPC	M = 6.26 SD = 3.65 n = 73	M = 6.04 SD = 3.71 n = 73	t (72) = 2.078, p = 0.041
		NDP	M = 3.76 SD = 3.4 n = 71	M = 3.41 SD = 3.25 n = 71	t (70) = 2.112, p = 0.038
Education level	Trade or college	NDP	M = 4.28 SD = 3.21 n = 68	M = 3.91 SD = 3.29 n = 68	t (67) = 2.001, p = 0.049

Time in Canada	All their lives	CPC	M = 4.28 SD = 4.05 n = 174	M = 4.07 SD = 4.02 n = 174	t (173) = 2.749, p = 0.007
	Part of their lives	NDP	M = 4.61 SD = 3.06 n = 54	M = 4.17 SD = 2.91 n = 54	t (53) = 2.898, p = 0.005
Ethnicity/Race	White and mixed	CPC	M = 4.43 SD = 4 n = 176	M = 4.21 SD = 3.93 n = 176	t (175) = 2.880, p = 0.004
		NDP	M = 4.19 SD = 3.4 n = 168	M = 3.97 SD = 3.31 n = 168	t (167) = 1.981, p = 0.049

I found more statistically significant results from examining political predispositions, especially for initial feelings toward parties and candidates, as opposed to findings concerning overall participants and demographics. Furthermore, statistically significant results not only concerned memes targeting parties but also memes targeting leaders.[19] Nonetheless, there is some continuity between these findings and above overall findings because there were very few results involving the LPC. Also, most results showcasing an effect on vote likelihood after viewing political memes pointed to a decrease in vote likelihood for the concerned parties. Examining Table 6, out of 25 statistically significant vote likelihood variations that were identified, 15 concerned the CPC, seven concerned the NDP, and only three concerned the LPC. Also, I only found two vote likelihood increases in the group that viewed memes targeting leaders, one vote likelihood increase for the NDP for participants who were *engaged* in the campaign, and another vote likelihood increase for the LPC for those with *favourable* feelings toward Justin Trudeau. Thus, for the most part, results showed that political memes negatively affected vote likelihood for the CPC and NDP.

[19] For memes targeting leaders, paired sample t-tests showed statistically significant results in all categories except for opinions on political correctness and environment measures, as well as for the LPC's evaluation. For memes targeting parties, there are statistically significant results in all categories except for opinions on political correctness and Justin Trudeau's evaluation.

Table 6: Paired Vote Likelihood Means – Political Predisposition Variables

Variable	Category	Treatment group	Party vote likelihood	Pre-test	Post-test	Paired sample t-test
Party identification	Conservative Party	Leader memes	CPC	M = 8.11 SD = 2.33 n = 75	M = 7.81 SD = 2.37 n = 75	t (74) = 2.584, p = 0.012
		Party memes	CPC	M = 8.49 SD = 1.99 n = 79	M = 8.1 SD = 2.31 N = 79	t (78) = 2.779, p = 0.007
			NDP	M = 2.91 SD = 3.17 n = 70	M = 2.51 SD = 2.83 n = 70	t (69) = 2.572, p = 0.012
2019 federal election vote	CPC	Leader memes	CPC	M = 8.24 SD = 2.17 n = 70	M = 7.91 SD = 2.25 n = 70	t (69) = 2.823, p = 0.006
	Other		CPC	M = 2.22 SD = 2.96 n = 68	M = 2.04 SD = 2.84 n = 68	t (67) = 2.341, p = 0.022
	CPC	Party memes	NDP	M = 3.09 SD = 3.2 N = 67	M = 2.61 SD = 2.83 N = 67	t (66) = 2.716, p = 0.008
Ideology	Conservative	Leader memes	CPC	M = 8.37 SD = 2.46 n = 62	M = 7.84 SD = 2.72 n = 62	t (61) = 2.609, p = 0.011
		Party memes	NDP	M = 2.92 SD = 3.23 n = 63	M = 2.56 SD = 3.06 n = 63	t (62) = 2.607, p = 0.011
CPC feelings	Very unfavourable	Leader memes	CPC	M = 0.82 SD = 1.99 n = 90	M = 0.58 SD = 1.78 n = 90	t (89) = 2.680, p = 0.009
	Very favourable		CPC	M = 9.12 SD = 1.97 n = 34	M = 8.71 SD = 2.08 n = 34	t (33) = 2.508, p = 0.017
	Very unfavourable	Party memes	LPC	M = 5 SD = 3.97 n = 81	M = 4.79 SD = 3.85 n = 81	t (80) = 2.156, p = 0.034
	Unfavourable		CPC	M = 3.66 SD = 2.21 n = 35	M = 3.2 SD = 2.21 n = 35	t (34) = 2.308, p = 0.027
	Favourable		CPC	M = 6.54 SD = 2.44 n = 52	M = 6.15 SD = 2.4 n = 52	t (51) = 2.062, p = 0.044
			NDP	M = 4.11 SD = 2.86 n = 47	M = 3.66 SD = 2.75 n = 47	t (46) = 2.358, p = 0.023
LPC feelings	Very unfavourable	Party memes	CPC	M = 6.01 SD = 4.2 n = 74	M = 5.76 SD = 4.22 n = 74	t (73) = 2.254, p = 0.027
	Unfavourable		NDP	M = 4.67 SD = 3.12 n = 39	M = 3.97 SD = 3.06 n = 39	t (38) = 2.610, p = 0.013
Justin Trudeau feelings	Very unfavourable	Leader memes	CPC	M = 5.73 SD = 4.16 n = 89	M = 5.38 SD = 4.14 n = 89	t (88) = 3.049, p = 0.003

	Favourable		LPC	M = 6.18 SD = 1.81 n = 72	M = 6.44 SD = 1.88 n = 72	t (71) = -2.724, p = 0.008
Andrew Scheer feelings	Very unfavourable	Leader memes	CPC	M = 1.3 SD = 2.26 n = 100	M = 0.95 SD = 1.91 n = 100	t (99) = 2.665, p = 0.009
		Party memes	LPC	M = 5.26 SD = 3.93 n = 88	M = 5.05 SD = 3.87 n = 88	t (87) = 2.276, p = 0.025
			CPC	M = 0.86 SD = 1.87 n = 87	M = 0.68 SD = 1.6 n = 87	t (86) = 3.178, p = 0.002
Political correctness opinion	Low critic	Party memes	CPC	M = 4.83 SD = 3.84 n = 118	M = 4.5 SD = 3.88 n = 118	t (117) = 2.583, p = 0.011
	Moderate critic		NDP	M = 5.32 SD = 3.2 n = 81	M = 4.95 SD = 3.26 n = 81	t (80) = 2.193, p = 0.031
2019 campaign engagement	Engaged	Leader memes	NDP	M = 4.37 SD = 3.65 n = 41	M = 4.68 SD = 3.75 n = 41	t (40) = -2.059, p = 0.046
	Not engaged	Party memes	CPC	M = 4.47 SD = 3.73 n = 128	M = 4.19 SD = 3.72 n = 128	t (127) = 2.441, p = 0.016

The results regarding initial feelings toward parties and leaders particularly illustrate that political memes affect various groups of participants differently and that there are little effects on vote likelihood for the LPC. For example, in both treatment groups, participants with either unfavourable or favourable feelings toward the CPC had a decrease in their vote likelihood for the CPC. On the other hand, in the group that viewed memes targeting leaders, participants who had *very unfavourable* or *unfavourable* feelings toward the LPC had their vote likelihood for other parties than the LPC negatively affected. I also found a similar pattern looking at initial feelings toward candidates. For the group that viewed memes targeting leaders, there were no effects on the vote likelihood for the LPC for participants who had *very unfavourable* feelings toward Justin Trudeau. In fact, there was a decrease in vote likelihood for the CPC and an increase in vote likelihood for the LPC for those with *favourable* feelings toward Justin Trudeau. As for Andrew Scheer, participants in both treatment groups who had *very unfavourable* feelings

toward him had a decrease in their vote likelihood for the CPC. These findings regarding vote likelihood for the LPC are unlike those for the CPC. For the latter, regardless of whether the participant had negative or positive initial feelings for the CPC or Andrew Scheer, their vote likelihood for the CPC was still negatively affected. Therefore, these results further cement my observation that the LPC seems rather immune to political memes' negative effects compared to other parties.

Lastly, there were findings concerning conservative participants that are important to highlight. Statistically significant vote likelihood findings almost exclusively concerned conservative participants and did not apply to other partisans, voters, or ideologies. There was only one occasion where a result did not concern conservative participants. Looking at some demographic variables more closely (i.e., age, gender, and region), we discover more nuanced illustrations of this finding. For example, participants who were of a younger age, were women, or lived in Western Canada were more likely to be CPC partisans and also show a decrease in their vote likelihood for the CPC. Nonetheless, my findings showed that participants who were conservative when it came to their party identification, ideology, vote choice, or initial feelings toward parties/candidates were affected more by political memes. Indeed, there were negative effects of viewing political memes on vote likelihood for the CPC.

Overall, my first hypothesis was supported; political memes affect vote likelihood. However, my results are to be considered with some precautions. The mean variations I examined were not substantial as they were all under 1-point. Nonetheless, the results showed that certain particularities characterized political memes' effects on vote likelihood. First, these effects were rather negative; only two results illustrated an increase in vote likelihood after seeing political memes, and all other results showed decreases. Statistically significant mean

variations that I found were not consistent for all treatment groups and types of potential voters; results were dependent on specific groups of people and types of memes. Conservatives also stood out as participants who were predominantly affected by these vote likelihood mean variations. Additionally, a finding that was not captured in my hypothesis but should be noted is that political memes do not seem to affect the likelihood of voting for the LPC compared to the likelihood of voting for other parties. Now that we have looked at the effects of political memes on vote likelihood, I turn to the effects on candidate and party evaluations.

Evaluations

This section focuses on testing my second and third hypotheses. My second hypothesis suggested that political memes would negatively affect the potential voter's evaluation of the depicted leaders or parties. My third hypothesis suggested that political memes would reinforce existing positions in accordance with predispositions. Using the same procedure I followed to test my first hypothesis, I compared paired pre-test and post-test means and conducted paired sample t-tests to determine if variations were statistically significant. However, this time I did so using the candidate and party evaluation scales. I used the candidate evaluation scale when conducting testing on the group exposed to memes targeting leaders and the party evaluation scale on the group exposed to memes targeting parties. It is noteworthy that I considered means that were 49 or less as indicative of an unfavourable evaluation and means that were 51 or more as indicative of a favourable evaluation. To determine whether positions were reinforced or not, I looked at the direction of the mean variations. In other words, if the participants' evaluations were unfavourable before seeing the memes and there was a *decrease* in the evaluations after seeing the memes, I considered this as political memes having *reinforced* participants' positions. On the other hand, if participants had unfavourable evaluations before seeing the memes and

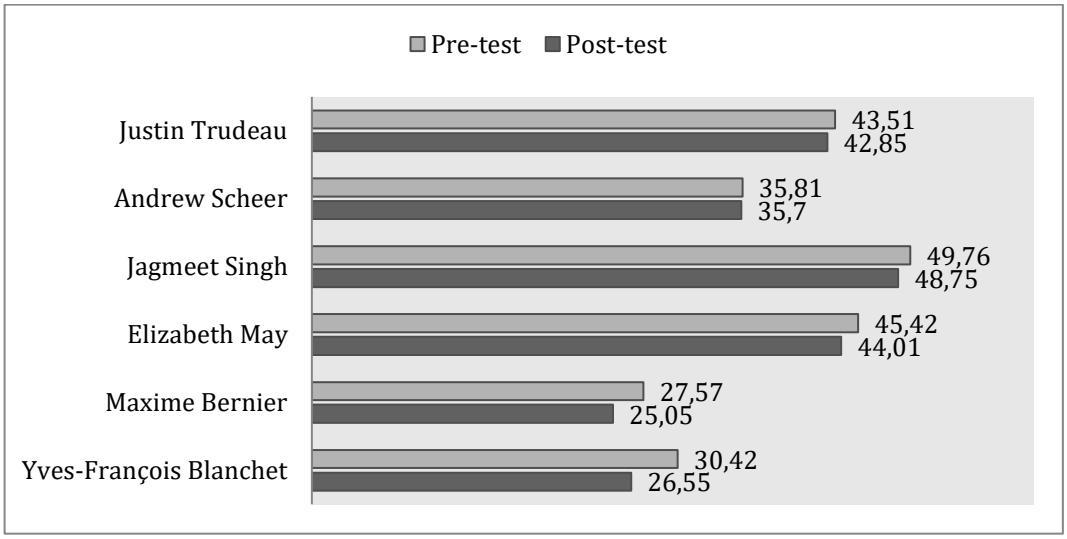
there was an *increase* in evaluations after seeing the memes, I considered this as political memes having *altered* participants' positions.

The results analysis revealed four general findings, two of which were similar to what I found regarding vote likelihood: (1) political memes had no effect on evaluations for overall participants; (2) political memes had effects on evaluations when considering demographics and political predispositions, especially initial feelings toward the candidates and parties; (3) political memes had negative effects on evaluations regarding the NDP/Jagmeet Singh and CPC/Andrew Scheer, as well as minimal effects on evaluations regarding the LPC/Justin Trudeau; (4) political memes both reinforced and altered participants' evaluations.

Starting with overall participants, I found that political memes did not affect candidate and party evaluations in the same way that they did for vote likelihood. There were not many results indicating that political memes were having negative effects on evaluations. Turning to Figure 4, we see that evaluations of leaders decreased after viewing political memes targeting leaders and only slightly in some instances. However, results for the three leaders of the major political memes were not statistically significant, including the leaders depicted in the political memes (Justin Trudeau and Andrew Scheer). There were statistically significant results only for Maxime Bernier and Yves-François Blanchet.[20]

[20] Justin Trudeau: t (252) = 0.811, p = 0.418; Andrew Scheer : t (240) = 0.134, p = 0.893 ; Jagmeet Singh : t (235) = 1.279, p = 0.202; Elizabeth May : t (215) = 1.318, p = 0.189 ; Maxime Bernier: t (201) = 2.525, p = 0.012 ; Yves-François Blanchet : t (184) = 4.002, p = 0.000.

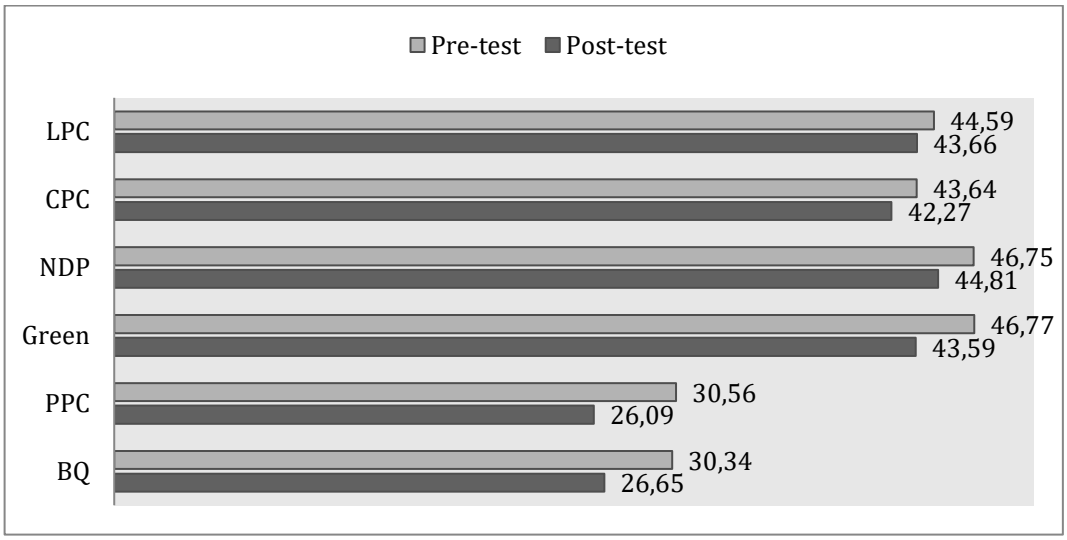
Figure 4: Paired Leader Evaluations Means – Treatment Group 1 (Leader memes)



** Standard deviations: Justin Trudeau (34.2 pre-test / 34.05 post-test), Andrew Scheer (31.68 pre-test / 31.72 post-test), Jagmeet Singh (30 pre-test / 32.15 post-test), Elizabeth May (27.8 pre-test / 30 post-test), Maxime Bernier (27.16 pre-test / 27.27 post-test), Yves-François Blanchet (30.05 pre-test / 29.31 post-test). Number of participants: Justin Trudeau (n = 253), Andrew Scheer (n = 241), Jagmeet Singh (n = 236), Elizabeth May (n = 216), Maxime Bernier (n = 202), Yves-François Blanchet (n = 185).*

I found the same scenario as in the above looking at results of party evaluations for participants who viewed political memes targeting parties, as illustrated in Figure 5. Evaluations slightly decreased, and results were statistically significant only for the Green Party, PPC, and BQ. Again, no statistically significant variations concerned the three major political parties, including the parties depicted in the political memes (LPC and CPC). Thus, the findings were consistent across types of memes as there was no impact on evaluations in both treatment groups for the depicted parties and leaders.

Figure 5: Paired Party Evaluations Means – Treatment Group 2 (Party memes)



* *Standard deviations: LPC (33.11 pre-test / 34.11 post-test), CPC (33.29 pre-test / 34.69 post-test), NDP (29 pre-test / 29.82 post-test), Green (31.02 pre-test / 32.10 post-test), PPC (29.26 pre-test / 29.1 post-test), BQ (32.02 pre-test / 31.85 post-test). Number of participants: LPC (n = 239), CPC (n = 233), NDP (n = 216), Green (n = 213), PPC (n = 190), BQ (n = 190).*

To determine whether these findings extend to different groups of people, I considered demographic and political predisposition variables. Tables 7 and 8 show statistically significant variations in evaluations for the three major political parties (see Appendix F for full results). Even if I found in the above that there was no effect on evaluations in both treatment groups, results showed that this was not the case when demographics and political predispositions were factored in. There are different results when factoring in participants' characteristics, which is a finding that reflects results on vote likelihood illustrated in the previous section. Nonetheless, as opposed to vote likelihood results, fewer variables showed effects on evaluations. This finding is unsurprising since evaluations were unaffected for overall participants. I also found that most statistically significant results concerned initial feelings toward parties and candidates in a similar way to vote likelihood results. Gender and region again figured in these results, more precisely the categories of women and Western Canada, which I had pointed out were groups more likely to be CPC partisans. Thus, political memes have fewer effects on evaluations than

vote likelihood but still have some effects when we consider specific voter characteristics rather than overall participants.

Table 7: Paired Evaluation Means – Demographics

Variable	Category	Test group	Evaluations	Pre-test	Post-test	Paired sample t-test
Gender	Women	Party memes	CPC	M = 46 SD = 33.16 n = 130	M = 43.05 SD = 34.36 n = 130	t (129) = 2.055, p = 0.042
Region	West	Leader memes	Jagmeet Singh	M = 47.12 SD = 30.4 n = 78	M = 44.17 SD = 32.59 n = 78	t (77) = 1.997, p = 0.049

Table 8: Paired Evaluation Means – Political Predispositions

Variable	Category	Test group	Evaluations	Pre-test	Post-test	Paired sample t-test
2019 Vote Choice	LPC	Leader memes	Jagmeet Singh	M = 56.24 SD = 22.61 n = 74	M = 59.03 SD = 27.3 n = 74	t (73) = -2.049, p = 0.044
	CPC			M = 30.03 SD = 25.6 n = 71	M = 26.87 SD = 26.97 n = 71	t (70) = 2.107, p = 0.039
	None			M = 56.63 SD = 31.27 n = 24	M = 51.5 SD = 33.99 n = 24	t (23) = 2.313, p = 0.030
Environmental measures support opinion	Moderate	Leader memes	Andrew Scheer	M = 41.1 SD = 30.9 n = 40	M = 44.08 SD = 33.57 n = 40	t (39) = -2.208, p = 0.033
	Very Unsupportive			M = 34.44 SD = 34.04 n = 71	M = 30.69 SD = 31.61 n = 71	t (70) = 2.683, p = 0.009
LPC feelings	Very unfavourable	Leader memes	Jagmeet Singh	M = 29.74 SD = 30.75 n = 74	M = 27.01 SD = 31.2 n = 74	t (73) = 2.471, p = 0.016
	Unfavourable		Andrew Scheer	M = 34.74 SD = 25.22 n = 31	M = 40.61 SD = 27.72 n = 31	t (30) = -3.079, p = 0.004
	Very favourable			M = 28.91 SD = 31.47 n = 55	M = 25.67 SD = 30.68 n = 55	t (54) = 2.140, p = 0.037
	Favourable	Party memes	CPC	M = 36.83 SD = 27.25 n = 60	M = 33.35 SD = 27.18 n = 60	t (59) = 2.213, p = 0.031
	Very favourable		LPC	M = 88.23 SD = 8.07 n = 52	M = 85.56 SD = 13 n = 52	t (51) = 2.040, p = 0.047
CPC feelings	Favourable	Party memes	NDP	M = 46.58 SD = 23.86 n = 50	M = 41.16 SD = 25.13 n = 50	t (49) = 2.029, p = 0.048

	Very favourable		CPC	M = 89.21 SD = 8.62	M = 84.48 SD = 17.4	t (51) = 2.072, p = 0.043
Justin Trudeau feelings	Very unfavourable	Leader memes	Jagmeet Singh	M = 32.66 SD = 31.03 n = 90	M = 28.89 SD = 31.84 n = 90	t (89) = 2.935, p = 0.004
	Very favourable		Justin Trudeau	M = 89.9 SD = 8.51 n = 51	M = 84.43 SD = 19.65 n = 51	t (50) = 2.085, p = 0.042
	Very unfavourable	Party memes	LPC	M = 9.85 SD = 15.29 n = 85	M = 6.91 SD = 12.72 n = 85	t (84) = 2.441, p = 0.017
Andrew Scheer feelings	Very unfavourable	Leader memes	Andrew Scheer	M = 4.89 SD = 6.91 n = 104	M = 7.61 SD = 13.55 n = 104	t (103) = -2.198, p = 0.030
	Very favourable			M = 90.76 SD = 8.56 n = 29	M = 86.31 SD = 11.81 n = 29	t (28) = 2.331, p = 0.027
	Very unfavourable	Party memes	CPC	M = 12.53 SD = 17.61 n = 89	M = 9.44 SD = 15.36 n = 89	t (88) = 2.370, p = 0.020
	Unfavourable		NDP	M = 45.12 SD = 23.53 n = 43	M = 39.37 SD = 22.23 n = 43	t (42) = 2.104, p = 0.041

Tables 7 and 8 also how that political memes have negative effects on evaluations, especially for the NDP / Jagmeet Singh and CPC / Andrew Scheer. For the most part, there are decreases in evaluations for both treatment groups after viewing political memes. However, on four occasions, there were increases in evaluations after exposure only in the treatment group that viewed political memes targeting leaders. For example, those who voted for the LPC in 2019 had an increased evaluation of Jagmeet Singh, and those *moderately* supportive of environmental measures had an increased evaluation of Andrew Scheer. As for initial feelings, participants with *unfavourable* feelings toward the LPC and *very unfavourable* feelings toward Andrew Scheer had an increase in their evaluations of Andrew Scheer. When it came to the effects on the depicted leaders or parties in the political memes viewed by participants, evaluations of the LPC and Justin Trudeau were only minimally affected; out of 19 statistically significant mean variations, nine concerned the CPC or Andrew Scheer, seven concerned the NDP or Jagmeet Singh, and three concerned the LPC or Justin Trudeau. These findings showed that the LPC and,

this time around, also its leader Justin Trudeau, seemed immune to political memes' negative or positive effects. Rather, it was the NDP / Jagmeet Singh and the CPC / Andrew Scheer that were negatively affected by political memes.

Finally, still factoring in results illustrated in Tables 7 and 8, political memes altered and reinforced existing evaluations. Turning to altering effects, on eight occasions, evaluations that were on the unfavourable side increased after viewing political memes to become more favourable, and evaluations on the favourable side decreased to become more unfavourable. As for reinforcing effects, on 12 occasions, initially unfavourable evaluations decreased after viewing political memes to become even more unfavourable. There was also one occasion where evaluations that were already favourable increased after viewing memes targeting leaders to become more favourable. Reinforcing effects were more evident in the treatment group that viewed memes targeting parties as opposed to the treatment group that viewed memes targeting leaders. Out of the eight variations in evaluations for the treatment group that viewed memes targeting parties, six showed that evaluations were reinforced. On the other hand, effects were almost equally divided between altering (six results) and reinforcing (seven results) within the treatment group that viewed memes targeting leaders. Nonetheless, close amounts of results between both types of effects point out that political memes have both reinforcing and altering effects.

To summarize, the results in this section indicate that my second hypothesis is only partially supported. By "partially supported," I mean that when we consider overall participants, the hypothesis is not supported, but when we consider specific types of participants, the hypothesis is supported. When looking more closely at specific groups of participants, there is some indication that political memes did affect evaluations. This finding is particularly evident

when participants' initial feelings toward parties and leaders are considered. Additionally, the effects are mostly negative but were positive on some occasions. As for my third hypothesis, it is also only partially supported. Looking at overall participants, there were no changes in evaluations, whereas the opposite was true when looking at participants' responses through demographics and political predispositions. Variations in evaluations within groups of participants showed that political memes were both reinforcing and altering existing positions; thus, they were not only reinforcing. On more than one occasion, political memes were not necessarily reinforcing positions. After viewing political memes, some positive evaluations became more negative and some negative evaluations became more positive. However, reinforcing effects were prominent within the treatment group that had viewed memes targeting parties, illustrating that there are once again differences between types of memes. Furthermore, I also found the same finding that I observed in the vote likelihood results, where political memes minimally affected the LPC / Justin Trudeau; results mostly concerned the CPC / Andrew Scheer and the NDP / Jagmeet Singh.

Persuasion

This next section focuses on persuasion results and, more particularly, testing my fourth, fifth, and sixth hypotheses. The fourth hypothesis suggests that potential voters' predispositions, their understanding of the meme's reference, and/or the meme's content would affect the meme's persuasiveness. The fifth and sixth hypothesis respectively suggest that potential voters' agreement with the political meme and finding the political meme funny will make it more persuasive. To test all hypotheses (except 3c that relates to the meme's content), my approach is different from the previous sections because I did not have pre-test or post-test results relating to message processing. Message processing variables are knowledge, agreement, weakness,

discounting, accuracy, negativity, funniness, and perceived persuasiveness. In this way, I used correlation coefficients to uncover any relationships between these variables, predispositions, and demographics. I also considered the direction, strength, and significance of these relationships. When there were prominent results for some relationships, I supplemented with percentages of agreement and disagreement on message processing variable statements. As for my hypothesis 3c, I used a slightly different approach to my analysis, as I could not evaluate memes' content through correlations. I combined means on message processing variables to create groupings of two based on target (leader or party), topic (climate change or blackface scandal), and stance (critiquing the LPC / Justin Trudeau or the CPC / Andrew Scheer). I then compared these combined means to determine political memes' content persuasiveness.[21] On the whole, four findings stand out for persuasion: (1) differences existed between types of political memes, for example, those on parties, climate change, and critiquing the LPC or Justin Trudeau had more effects on participants; (2) demographics and political predispositions were important in explaining participants' message processing, especially in the treatment group that viewed memes targeting leaders; (3) the political meme's funniness, agreement with by the participant, and accuracy mattered to persuasion; and (4) knowledge of the meme's reference mattered to persuasion only for political memes on climate change.

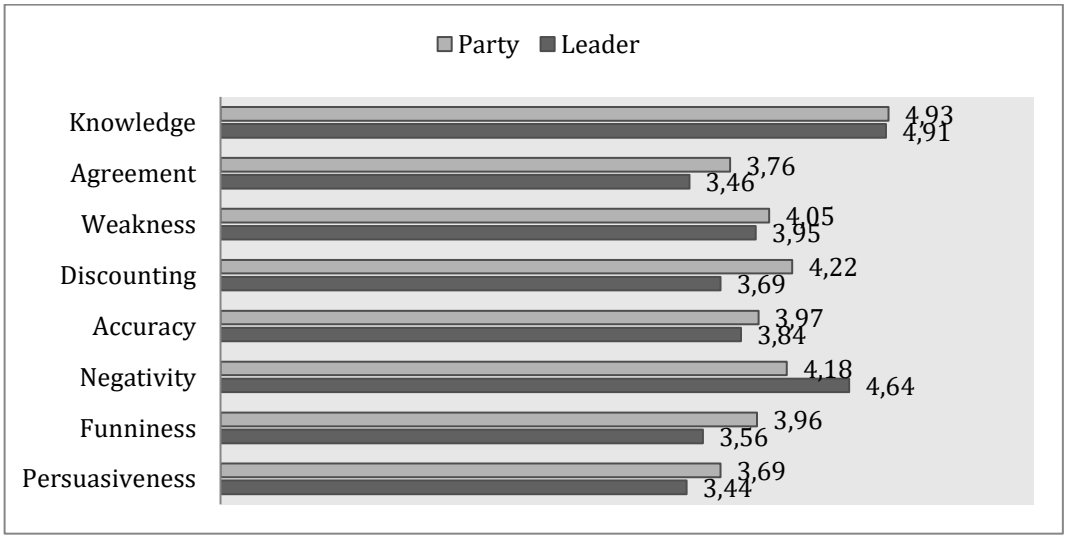
First, looking at the meme's content, three groups of memes followed similar patterns and were considered more persuasive: political memes that targeted parties, were on climate change, and critiqued the LPC or Justin Trudeau. This finding is illustrated in Figures 6, 7, and 8,

[21] Out of the group combinations I created, the only group I was able to run a t-test for to determine the statistical significance of mean differences was for the target. For the other groups, I was unable to run a t-test because the same participants were in these groups; the groups did not have completely different participants, as was the case for the target groups. Even though I could not conduct t-tests for the stance and topic groups, I included them in my results section as they can enlighten us as to whether this type of content in the meme could potentially impact participants.

which show the level of agreement with the statements associated with each message processing variable. There were higher means for the three types of memes listed in the above on persuasiveness (perceived persuasiveness) compared to political memes that targeted leaders, were on the blackface scandal, and critiqued the CPC or Andrew Scheer.[22] This indicates that participants considered the former three types of memes as more persuasive compared to the later three. In addition to this perceived persuasiveness variable, means for other message processing variables were illustrated in Figures 6, 7, and 8. Looking at the results, for the same political memes that were seen as more persuasive (targeting parties, climate change, critiquing the LPC or Justin Trudeau) had higher means on accuracy, agreement, and funniness. Thus, participants considered that these memes were also more accurate, that they agreed more with the memes' messages, and that the memes were funnier (funniness) than the other three types of memes.[23] Regarding the memes targeting leaders, on the blackface scandal, and critiquing the CPC or Andrew Scheer, there were higher means for negativity.[24] This finding suggested that participants found these memes as more negative than other political memes in the study. Additionally, for the memes on the blackface scandal and those critiquing the CPC or Andrew Scheer, there were higher means for weakness and discounting, suggesting that participants found these memes weaker and considered them as a joke more than the other political memes.[25]

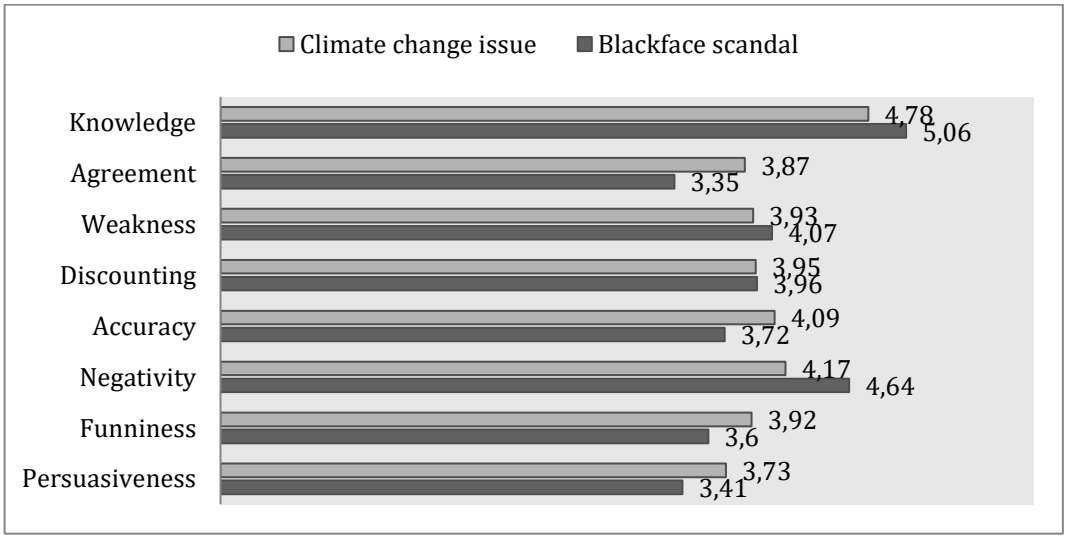
[22] The difference between means for the group of memes targeting parties and targeting leaders is statistically significant for perceived persuasiveness.
[23] The difference between means for the group of memes targeting parties and targeting leaders is statistically significant for agreement and funniness.
[24] The difference between means for the group of memes targeting parties and targeting leaders is statistically significant for negativity.
[25] The mean differences between the types of memes for the finding on discounting are negligible.

Figure 6: Combined Means for Statement Agreement Scales – Target



* *Standard deviations: Knowledge (1.99 Leader / 1.89 Party), Agreement (2.05 Leader / 1.89 Party), Weakness (1.92 Leader / 1.8 Party), Discounting (2.02 Leader / 1.89 Party), Accuracy (1.99 Leader / 1.82 Party), Negativity (1.95 Leader / 1.75 Party), Funniness (2.1 Leader / 2.05 Party), Persuasiveness (1.94 Leader / 1.9 Party).*
**Numbers of responses: Knowledge (1083 Leader / 1090 Party), Agreement (1088 Leader / 1090 Party), Weakness (1086 Leader / 1096 Party), Discounting (1087 Leader / 1095 Party), Accuracy (1087 Leader / 1095 Party), Negativity (1088 Leader / 1097 Party), Funniness (1087 Leader / 1097 Party), Persuasiveness (1092 Leader / 1096 Party).*
**T-tests: Knowledge (t (2171) = -0.216, p = 0.829), Agreement (t (2176) = -3.627, p = 0.000), Weakness (t (2180) = -1.325, p = 0.185), Discounting (t (2180) = -6.362, p = 0.000), Accuracy (t (2180) = -1.645, p = 0.100), Negativity (t (2183) = 5.761, p = 0.000,Funniness (t (2182) = -4.524, p = 0.000), Persuasiveness (t (2185) = -3.010, p = 0.003).*

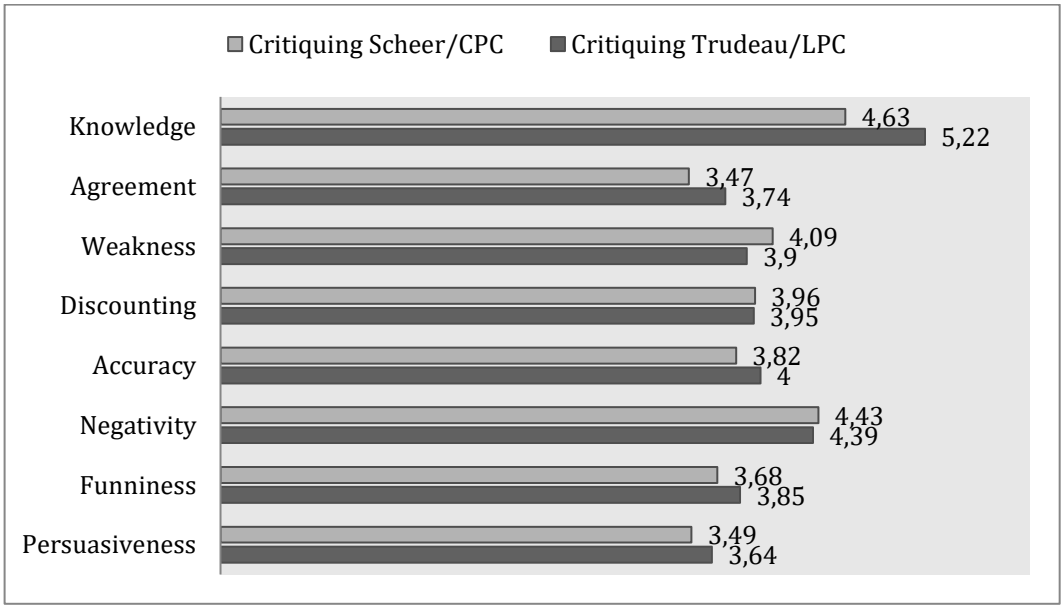
Figure 7: Combined Means for Statement Agreement Scales – Topic



** Standard deviations: Knowledge (1.98 Blackface / 1.88 Climate), Agreement (1.98 Blackface / 1.94 Climate), Weakness (1.91 Blackface / 1.81 Climate), Discounting (2.03 Blackface / 1.92 Climate), Accuracy (1.93 Blackface / 1.87 Climate), Negativity (1.9 Blackface / 1.81 Climate), Funniness (2.1 Blackface / 2.06 Climate), Persuasiveness (1.94 Blackface / 1.9 Climate).*

**Numbers of responses: Knowledge (1087 Blackface / 1086 Climate), Agreement (1089 Blackface / 1089 Climate), Weakness (1092 Blackface / 1090 Climate), Discounting (1093 Blackface / 1089 Climate), Accuracy (1091 Blackface / 1091 Climate), Negativity (1095 Blackface / 1090 Climate), Funniness (1093 Blackface / 1091 Climate), Persuasiveness (1095 Blackface / 1093 Climate).*

Figure 8*:* Combined Means for Statement Agreement Scales – Stance



**Standard deviations: Knowledge (1.82 Trudeau-LPC / 2 Scheer-CPC), Agreement (2.02 Trudeau-LPC / 1.92 Scheer-CPC), Weakness (1.86 Trudeau-LPC / 1.85 Scheer-CPC), Discounting (1.98 Trudeau-LPC / 1.97 Scheer-CPC), Accuracy (1.92 Trudeau-LPC / 1.89 Scheer-CPC), Negativity (1.88 Trudeau-LPC / 1.87 Scheer-CPC), Funniness (2.1 Trudeau-LPC / 2.1 Scheer-CPC), Persuasiveness (1.97 Trudeau-LPC / 1.88 Scheer-CPC).*
**Numbers of responses: Knowledge (1084 Trudeau-LPC / 1089 Scheer-CPC), Agreement (1089 Trudeau-LPC / 1089 Scheer-CPC), Weakness (1092 Trudeau-LPC / 1090 Scheer-CPC), Discounting (1090 Trudeau-LPC / 1092 Scheer-CPC), Accuracy (1091 Trudeau-LPC / 1091 Scheer-CPC), Negativity (1094 Trudeau-LPC / 1091 Scheer-CPC), Funniness (1092 Trudeau-LPC / 1092 Scheer-CPC), Persuasiveness (1094 Trudeau-LPC / 1094 Scheer-CPC).*

Next, examining individual memes provides another perspective that further highlights differences based on the meme's content. For instance, meme 2 (blackface scandal / targeting Andrew Scheer) and meme 3 (climate change / targeting Justin Trudeau) stand out from the others, as represented in Table 9. On more than one occasion, these two memes either have the highest or lowest means from all the experiment's political memes. In other words, for these memes, participants agreed the most or the least with some statements used for measuring message processing variables. For example, meme 2 had the lowest mean for agreement (2.88), accuracy (3.52), and funniness (3.16), and the highest mean for negativity (5.13). Thus, participants considered meme 2 to be the least agreed with, least accurate, and least funny, as well as the most negative political meme. On the other hand, meme 3 had the highest mean for

agreement (4.05), accuracy (4.35), and persuasiveness (3.94), and the lowest mean for weakness (3.67). It was the most agreed with, most accurate, most persuasive, and strongest political meme for participants. Memes 2 and 3 also shared a similarity in that they had the two lowest means on discounting, meaning that participants took these memes most seriously. Since these two memes were both within the leader meme group, these results highlight how similar memes do not always function in the same way.

Table 9: Means for Statement Agreement Scales - Individual Memes

	Leader memes				Party memes			
	Meme 1 Trudeau Blackface	Meme 2 Scheer Blackface	Meme 3 Trudeau Climate	Meme 4 Scheer Climate	Meme 5 LPC Blackface	Meme 6 CPC Blackface	Meme 7 LPC Climate	Meme 8 CPC Climate
Knowledge	5.48 (M) 1.84 (SD) n = 269	4.51 (M) 2.07 (SD) n = 271	5.23 (M) 1.76 (SD) n = 271	4.44 (M) 2.06 (SD) n = 272	5.38 (M) 1.84 (SD) n = 274	4.89 (M) 2.02 (SD) n = 273	4.79 (M) 1.78 (SD) n = 270	4.66 (M) 1.83 (SD) n = 273
Agreement	3.25 (M) 2.06 (SD) n = 272	2.88 (M) 1.94 (SD) n = 272	4.05 (M) 2.07 (SD) n = 272	3.65 (M) 1.94 (SD) n = 272	3.78 (M) 1.98 (SD) n = 272	3.49 (M) 1.83 (SD) n = 273	3.89 (M) 1.89 (SD) n = 273	3.88 (M) 1.84 (SD) n = 272
Weakness	4 (M) 1.97 (SD) n = 271	3.96 (M) 2 (SD) n = 272	3.67 (M) 1.85 S(D) n = 272	4.13 (M) 1.82 (SD) n = 271	4 (M) 1.84 (SD) n = 275	4.32 (M) 1.79 (SD) n = 273	3.91 (M) 1.78 (SD) n = 274	3.97 (M) 1.77 (SD) n = 273
Discounting	4.03 (M) 2.06 (SD) n = 272	3.45 (M) 2.05 (SD) n = 272	3.37 (M) 1.93 (SD) n = 271	3.9 (M) 1.98 (SD) n = 272	4.24 (M) 2.01 (SD) n = 274	4.12 (M) 1.91 (SD) n = 275	4.15 (M) 1.79 (SD) n = 273	4.37 (M) 1.84 (SD) n = 273
Accuracy	3.6 (M) 1.2 (SD) n = 272	3.52 (M) 1.97 (SD) n = 271	4.35 (M) 1.98 (SD) n = 272	3.9 (M) 1.93 (SD) n = 272	3.96 (M) 1.89 (SD) n = 274	3.8 (M) 1.84 (SD) n = 274	4.09 (M) 1.76 (SD) n = 273	4.04 (M) 1.79 (SD) n = 274
Negativity	4.67 (M) 2.02 (SD) n = 273	5.13 (M) 1.92 (SD) n = 272	4.43 (M) 1.88 (SD) n = 272	4.31 (M) 1.9 (SD) n = 271	4.38 (M) 1.82 (SD) n = 276	4.37 (M) 1.74 (SD) n = 274	4.06 (M) 1.74 (SD) n = 273	3.9 (M) 1.66 (SD) n = 274
Funniness	3.73 (M) 2.22 (SD) n = 272	3.16 (M) 2.01 (SD) n = 272	3.63 (M) 2.06 (SD) n = 271	3.72 (M) 2.06 (SD) n = 272	3.94 (M) 2.09 (SD) n = 275	3.58 (M) 2 (SD) n = 274	4.08 (M) 2.03 (SD) n = 274	4.24 (M) 2.03 (SD) n = 274
Persuasive-ness	3.15 (M) 1.98 (SD) n = 273	3.19 (M) 1.89 (SD) n = 273	3.94 (M) 1.96 (SD) n = 273	3.48 (M) 1.85 (SD) n = 273	3.7 (M) 1.96 (SD) n = 275	3.57 (M) 1.87 (SD) n = 274	3.78 (M) 1.9 (SD) n = 273	3.7 (M) 1.88 (SD) n = 274

Given that these results show that there are differences between political memes based on their content, next we can consider the role of participants' characteristics in the effects of these political memes. Looking at correlations for message processing variables, illustrated in Appendix G, I found that most moderate or higher relationships were within the treatment group

that viewed memes targeting leaders, and concerned ethnicity/race, age, initial feelings, party identification, 2019 vote choice, and ideology.[26] Thus, demographics (except region, education, and gender) and political predispositions (except campaign engagement and issue opinion) seemed to explain differences in how participants were processing political memes' messages. Also, more specific results on demographics and political predispositions pointed to three prominent findings.

First, based on ethnicity/race and age, participants who found political memes less persuasive, agreeable, accurate, or funny also seemed to discount them less or find the messages stronger. The groups involved within these two demographic variables were participants of White or mixed ethnicity/race, and participants born in 1980 or earlier. This finding is evident when looking at agreement and disagreement for all message processing variables that showed relationships with ethnicity/race and age. For example, on meme 1 (blackface scandal / targeting Justin Trudeau), there were moderate positive relationships for ethnicity/race with accuracy, persuasiveness, agreement, weakness, and funniness. Looking at agreement and disagreement for all of these variables, results showed that more White or mixed participants disagreed.[27] On meme 2 (blackface scandal / targeting Andrew Scheer), there were moderate positive relationships with ethnicity/race and negativity, weakness, and agreement. More White or mixed

[26]Aside from these variables for which correlations were numerous, there was one moderate relationship between persuasiveness and education level on meme 2 (blackface scandal/targeting Andrew Scheer); two moderate relationships between weakness and gender for meme 6 (blackface scandal/targeting the CPC) and meme 7 (climate change / targeting the LPC); one moderate relationship between negativity and gender for meme 8 (climate change / targeting the CPC); two moderate relationships between the amount of time the participant had spent in Canada and for persuasiveness (negative relationship) and agreement for meme 1 (blackface scandal / targeting Justin Trudeau); one moderate relationship between the amount of time the participant has spent in Canada and agreement (negative relationship) for meme 2 (blackface scandal / targeting Andrew Scheer).

[27] *Disagree*: accuracy: White/mixed – 50.2%, other ethnicities/races– 37.7%; persuasiveness: White/mixed – 65.7%, other ethnicities/races – 43.5%; agreement: White/mixed – 59.4%, other ethnicities/races – 49%; weakness: White/mixed – 42.8%, other ethnicities/races – 24.5%; funniness: White/mixed – 48.8%, other ethnicities/races – 35.8%.

participants, compared to other ethnicities/races, agreed that meme 2 was negative,[28] and disagreed that it was weak or that they agreed with it.[29] Finally, for meme 3 (climate change / targeting Justin Trudeau) and meme 4 (climate change / targeting Andrew Scheer), there were moderate negative relationships for persuasiveness, negativity, and funniness, as well as a positive relationship between ethnicity/race and discounting for meme 3. For these memes, I found that more White or mixed participants than other ethnicities or races disagreed that they were negative, persuasive, and funny.[30] As for discounting on the climate change meme targeting Justin Trudeau, more White or mixed participants disagreed that this meme was only a joke.[31]

Concerning age, some relationships were divided between all four memes targeting leaders; there were moderate to moderately strong positive relationships with agreement and funniness. There were also positive moderate relationships with discounting for meme 3 (climate change / targeting Justin Trudeau) and meme 4 (climate change / targeting Andrew Scheer) and with persuasiveness for meme 4. When looking at disagreement percentages with each of the statements associated with these variables, older participants (born in 1980 or earlier) disagreed more, compared to younger participants (born in 1981 or later), that memes 1 to 4 were funny[32] or that they agreed with their messages,[33] that memes 2 and 3 were a joke,[34] and that meme 4

---

[28] *Agree:* negativity: White/mixed – 71.2%, other ethnicities/races – 64.1%

[29] *Disagree:* weakness: White/mixed – 43.5%, other ethnicities/races – 35.8%; agreement: White/mixed – 70.3%, other ethnicities/races – 41.5%.

[30] Meme 3: persuasiveness, White/mixed – 42.9%, other ethnicities/races – 20.8%; negative, White/mixed – 33.5%, other ethnicities/races – 17%; funniness, White/mixed – 52.9%, other ethnicities/races – 35.8%. Meme 4: persuasiveness, White/mixed – 50.5%, other ethnicities/races – 32%; negative, White/mixed – 33.1%, other ethnicities/races – 26.4%; funniness, White/mixed – 50.3%, other ethnicities/races – 28.3%.

[31] *Disagree:* White/mixed – 59.6%; other ethnicities/races – 33.9%.

[32] Meme 1: born 1980 and earlier – 62.5%, born 1981 or later – 28.7%; Meme 2: born 1980 and earlier – 72.8%, born 1981 or later – 46.7%; Meme 3: born 1980 and earlier – 66.6%, born 1981 or later – 29.8%; Meme 4: born 1980 and earlier – 60.5%, born 1981 or later – 28.7%.

[33] Meme 1: born 1980 and earlier – 68.7%, born 1981 or later – 43.5%; Meme 2: born 1980 and earlier – 75.4%, born 1981 or later – 52.5%; Meme 3: born 1980 and earlier – 48.2%, born 1981 or later – 26.3%; Meme 4: born 1980 and earlier – 57.1%, born 1981 or later – 29.5%.

was persuasive.[35] Therefore, for both ethnicity/race and age, these findings seemed to point to a pattern; the same people who took political memes more seriously (i.e., less discounted or finding the message stronger) also did not find them funny, agreeable, accurate, or persuasive.

Second, results on party identification, ideology, and 2019 election vote choice showed moderate relationships and all, except one,[36] concerned accuracy and agreement. They also applied to all political memes targeting leaders and meme 5 (blackface scandal / targeting LPC). Percentages of agreement or disagreement with the political memes' accuracy and agreement with their messages showed that the meme's stance (conservative or liberal) needed to correspond with the participants' political predispositions to be considered as accurate or agreeable. In other words, participants who identified as CPC supporters, had a conservative ideology, and voted for the CPC in 2019 would find inaccurate or disagreed with political memes when they targeted Andrew Scheer or the CPC. On the other hand, for participants who identified as LPC supporters, had a progressive ideology, and voted for the LPC in 2019, they would find inaccurate or disagreed with political memes that targeted Justin Trudeau or the LPC.

For ideology, there were relationships with accuracy for meme 2 (blackface scandal / targeting Andrew Scheer) and meme 3 (climate change / targeting Justin Trudeau). Percentages of agreement with the political memes' accuracy showed that participants with a conservative ideology disagreed the most with meme 2's accuracy[37] and agreed the most with meme 3's

---

[34] Meme 2, discounting: born 1980 and earlier – 61.8%, born 1981 or later – 41.8%; Meme 3, discounting: born 1980 and earlier – 67.1%, born 1981 or later – 40.3%.

[35] Meme 4, persuasiveness: born 1980 and earlier – 57.5%, born 1981 or later – 32.8%.

[36] There is only one other correlation that concerns persuasiveness with ideology for meme 4 (climate change / Andrew Scheer).

[37] Progressive, 37.5% (D), 48.2% (A); conservative, 75.3% (D), 13.9% (A); moderate 48.8% (D), 30.1% (A); independent, 34.4% (D), 44.8% (A); not political, 41.4% (D), 21.9% (A).

accuracy.[38] Looking at party identification, there were relationships with accuracy for meme 1 (blackface scandal / targeting Justin Trudeau), meme 2 (blackface scandal / targeting Andrew Scheer), meme 3 (climate change / targeting Justin Trudeau), and meme 5 (blackface scandal / targeting the LPC). For meme 5, there was also a relationship with agreement. Looking more closely at percentages of disagreement, CPC supporters disagreed the most with the accuracy of meme 2, and LPC supporters disagreed the most with the accuracy of meme 1.[39] LPC supporters also disagreed the most with meme 5's message,[40] and were the second group (after non-party identifiers) that disagreed the most that the meme was accurate.[41] However, for meme 3, it was the opposite: other party supporters, the CPC, and LPC supporters agreed almost equally with the accuracy.[42] For vote choice, there were relationships with accuracy for meme 1 (blackface scandal / targeting Justin Trudeau), meme 2 (blackface scandal / targeting Andrew Scheer), meme 4 (climate change / targeting Andrew Scheer), and meme 5 (blackface scandal / targeting the LPC). There was also a relationship with agreement for meme 4 and meme 5. When I examined disagreement percentages, I found a similar scenario as the other two variables above. CPC voters disagreed the most with the accuracy for memes 2 and 4, and LPC voters disagreed the most with the accuracy of meme 1.[43] There were also similar results in regard to agreement,

---

[38] Progressive, 38.6% (D), 47.3% (A); conservative, 15.4% (D), 78.5% (A); moderate 40.1% (D), 43.8% (A); independent, 17.2% (D), 65.5% (A); not political, 34.2% (D), 24.4% (A).

[39] Meme 1 - accuracy: LPC, **57.8% (D),** 25.3% (A); CPC, 35.1% (D), 50.1% (A); Other 49.4% (D), 31.6% (A); None, 47.2% (D), 13.9% (A). Meme 2 - accuracy: LPC, 48.2% (D), 38.5% (A); **CPC, 68.8% (D),** 17.5% (A); Other 34.2% (D), 42.5% (A); None, 45.8% (D), 14.3% (A).

[40] Meme 5 - agreement: **LPC, 55.7% (D),** 22.8% (A); CPC, 26.5% (D), 55.5% (A); Other 31.6% (D), 44.7% (A); None, 52.9% (D), 14.6% (A).

[41] Meme 5 - accuracy: LPC, 50.1% (D), 26.3% (A); CPC, 20.3% (D), 59.5% (A); Other 33.8% (D), 45.5% (A); **None, 51.5% (D),** 14.3% (A).

[42] Meme 3 - accuracy: LPC, 37.4% (D), 48.2% (A); CPC, 20.1% (D), 50.1% (A); Other 28.8% (D), 50.7% (A); **None, 41.6% (D),** 22.3% (A).

[43] Meme 1 - accuracy: **LPC, 61.7% (D),** 24.5% (A); CPC, 33.9% (D), 49.3% (A); Other 47.4% (D), 34.2% (A); None, 41% (D), 18% (A); Meme 2 - accuracy: LPC, 46.5% (D), 38.3% (A); **CPC, 71.8% (D),** 16.9% (A); Other 38.2% (D), 42% (A); None, 41% (D), 18% (A). Meme 4 - accuracy: LPC, 36% (D), 48.9% (A); **CPC, 60.6% (D),**

where the CPC voters disagreed the most with meme 4 and the LPC voters disagreed the most with meme 5.[44]

Third, looking at initial feelings toward candidates and parties, I found some negative relationships, meaning that participants who had unfavourable feelings agreed with the statement and those with favourable feelings disagreed with the statement. I also found positive relationships, meaning that participants who had unfavourable feelings disagreed with the statement and those with favourable feelings agreed with the statement. These negative and positive relationships were best evaluated in conjunction with the meme's messaging and target. As a general rule, political memes whose stance did not correspond to the participants' initial feelings were not considered funny, agreeable, accurate, or persuasive. Therefore, my findings were similar to those above in the sense that the meme's stance needed to correspond to the participants' initial feelings toward the parties or candidates. There were also only a few results concerning the LPC and Justin Trudeau a finding similar to those on vote likelihood and evaluations.

Looking at initial feelings toward the LPC and Justin Trudeau, there were only a few negative and positive moderate relationships. When considering initial feelings toward the LPC, there was a moderate negative relationship with accuracy for meme 5 (blackface scandal / targeting the LPC) and a moderate positive relationship with negativity for meme 8 (climate change / targeting the CPC). With regard to feelings toward Justin Trudeau, there were moderate negative relationships with accuracy and with agreement for meme 1 (blackface scandal / targeting Justin Trudeau), as well as moderate positive relationships with weakness for meme 5

25.4% (A); Other 31.6% (D), 42% (A); None, 20.6% (D), 35.9% (A). Meme 5 - accuracy: **LPC, 50.7% (D),** 26% (A); CPC, 24.4% (D), 59% (A); Other 35.9% (D), 44.8% (A); None, 34.2% (D), 29.3% (A).

[44] Meme 4 - agreement: LPC, 44.2% (D), 40.7% (A); **CPC, 63.4% (D),** 22.6% (A); Other 36.8% (D), 40.8% (A); None, 25.7% (D), 18% (A). Meme 5 - agreement: **LPC, 54.7% (D),** 25.3% (A); CPC, 28.2% (D), 55% (A); Other 35.1% (D), 39% (A); None, 42.9% (D), 26.2% (A).

(blackface scandal / targeting the LPC) and with negativity for meme 7 (climate change / targeting the LPC) and meme 8 (climate change / targeting the CPC).

Turning to results for initial feelings toward the CPC and Andrew Scheer, there were considerably more results. For initial feelings toward the CPC, most relationships concerned persuasion variables with memes that targeted either Justin Trudeau or the Liberals. There were moderate positive relationships for meme 1 (blackface scandal / targeting Justin Trudeau) with persuasiveness, accuracy, agreement, and funniness; for meme 2 (blackface scandal / targeting Andrew Scheer) with discounting; for meme 3 (climate change / targeting Justin Trudeau) with accuracy and agreement; for meme 5 (blackface scandal / targeting the LPC) with accuracy and persuasiveness; and for meme 6 (blackface scandal / targeting the CPC) with persuasiveness and agreement. These latter results for meme 6 seemed to be an exception. These results suggest that participants who had favourable feelings toward the CPC found this meme targeting the CPC persuasive and agreeable. For feelings toward Andrew Scheer, there were positive moderate relationships for memes 1, 3, and 5, which all targeted Justin Trudeau or the LPC. There were relationships with accuracy, agreement, and funniness for meme 1; with persuasiveness for meme 3; with persuasiveness, accuracy, and agreement for meme 5; and lastly, with persuasiveness for meme 6. Again, meme 6 was an exception to the rule, since it targeted the CPC. Overall, relationship results between message processing variables and demographics or political predispositions pointed to political memes being less persuasive, agreeable, accurate, or funny to participants depending on the participants' characteristics.

These above findings bring us to this next section that examines if factors outside demographics and political predispositions impact political memes' persuasiveness. By looking at relationships within message processing variables, illustrated in Appendix G, my analysis

showed moderate to moderately strong relationships with knowledge and even stronger links between perceived persuasiveness and agreement, accuracy, and funniness. Turing to knowledge, there were almost exclusively positive moderate to moderately strong relationships for memes on climate change targeting both leaders and parties (memes 3, 4, 7, 8).[45] This finding indicates that the meme's content affects the way potential voters respond to political memes as well as consistent across both treatment groups and for the same type of meme. The positive relationships were also only with perceived persuasiveness (memes 3, 7, 8), agreement (memes 3, 4, 7, 8), accuracy (memes 3, 4, 7, 8), and funniness (7, 8), thus suggesting that the more participants knew what the political meme was about, the more it was considered persuasive, agreeable, funny, and accurate. Therefore, knowledge of the meme's context matters in assessing a meme's persuasiveness, accuracy, funniness, and agreement only for political memes on an issue. As for agreement, accuracy, and funniness, I found moderately strong or strong relationships with perceived persuasiveness in memes targeting either leaders or parties. These relationships were the strongest of my study, and were especially strong with memes targeting parties. Generally, relationships with agreement varied between 0.441-0.605, with funniness between 0.345-0.582, and with accuracy between 0.353-0.532. Thus, we could conclude here that agreement, accuracy, and funniness matter to persuasion. The fact that relationships were stronger in the party meme group is also similar to my previous findings where party memes had more impact on vote likelihood or were more persuasive.

To summarize, my fourth, fifth, and sixth hypotheses are supported. For my third hypothesis, when it comes to potential voters' predispositions (hypothesis 3a), I found through looking at demographics and political predispositions that ethnicity/race, age, initial feelings

[45] There is only one other moderate relationship with understanding the reference, and it is with meme 6 (blackface scandal / targeting the CPC) for accuracy.

toward candidates and parties, party identification, 2019 vote choice, and ideology mattered in explaining political memes' effects. Additionally, on more than one occasion, political memes for which there were relationships with message processing variables were congruent with the participants' predispositions. Relationships mostly regarded perceived persuasiveness, funniness, accuracy, and agreement. As for the political memes' effects in terms of their content (hypothesis 3c), I found some differences; political memes that targeted parties, were on climate change, and critiqued Justin Trudeau or the LPC seemed to be more persuasive to participants. There was also a repeating pattern whereby most relationships with the message processing variables were in the leader meme group. Also, all relationships concerning knowledge were for climate change memes. As for the link between persuasiveness and the participant's knowledge about the reference made within each meme (hypothesis 3b), when participants stated that they knew more about the reference, they also considered the political memes as more persuasive, agreeable, funny, and accurate. As for my fourth and fifth hypotheses, I found that agreement and funniness did have a relationship with perceived persuasiveness, but there was also a relationship with accuracy.

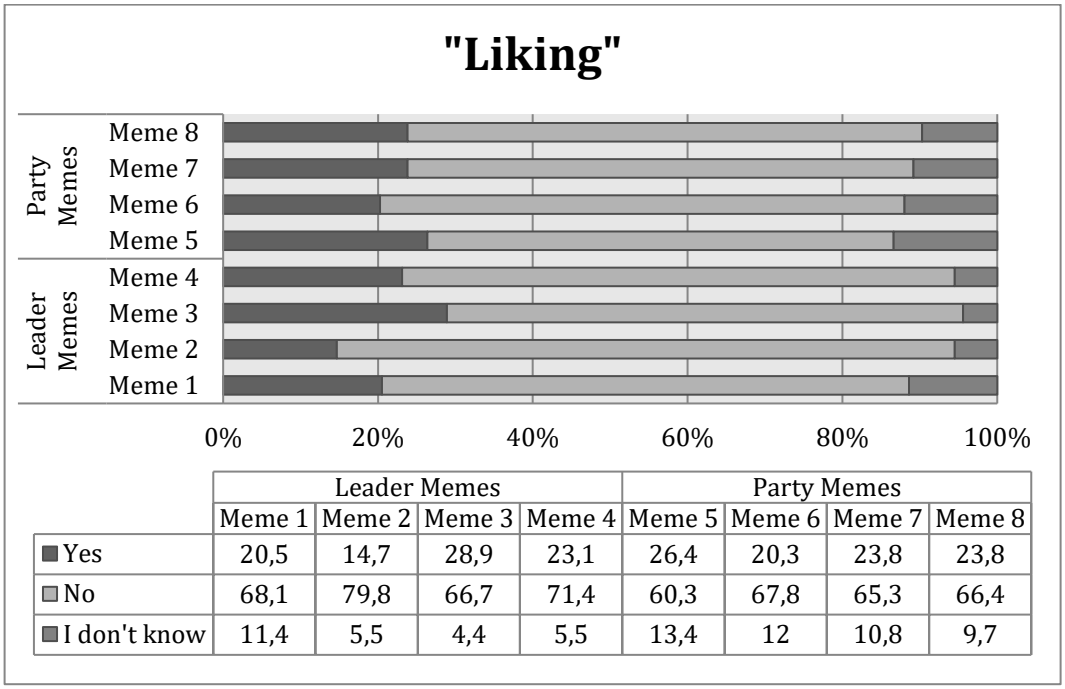
Resonance

Finally, my seventh hypothesis was concerned with the resonance of political memes. This last hypothesis suggested that potential voters would be more likely to "like" or "share" political memes on social media that resonated with them. My approach to testing this hypothesis was similar to the approach used in the previous section. I first looked at whether political memes resonated with overall participants by looking at percentages of agreement and disagreement with "sharing" or "liking" political memes on social media. Through bivariate analyses, I also looked at correlation coefficients to determine if relationships existed between

resonance, demographics, and political predispositions. I supplemented with the percentages of "yes" answers on whether participants would "like" or "share" the memes on social media to better understand these relationships.

As will be presented below, I found that political memes generally did not resonate with participants. Nonetheless, participants were more likely to "like" and "share" memes they agreed with, and participants' characteristics also mattered. First, most participants would not "share" and "like" the political memes on social media. Looking at Figures 9 and 10, the percentages of participants willing to "like" or "share" the political memes were no more than 28.9% for "liking" and no more than 21.2% for "sharing". Percentages were generally in the 20% range for the former and the 10% range for the latter. Thus, participants preferred "liking" memes to "sharing" them. When looking at each meme individually, however, there are differences. Participants were less willing to "like" or "share" memes on Andrew Scheer and the CPC than to "like" or "share" those on Justin Trudeau and the CPC (except meme 8). Also, they were less willing to like and share blackface memes compared to climate change memes (except meme 5).

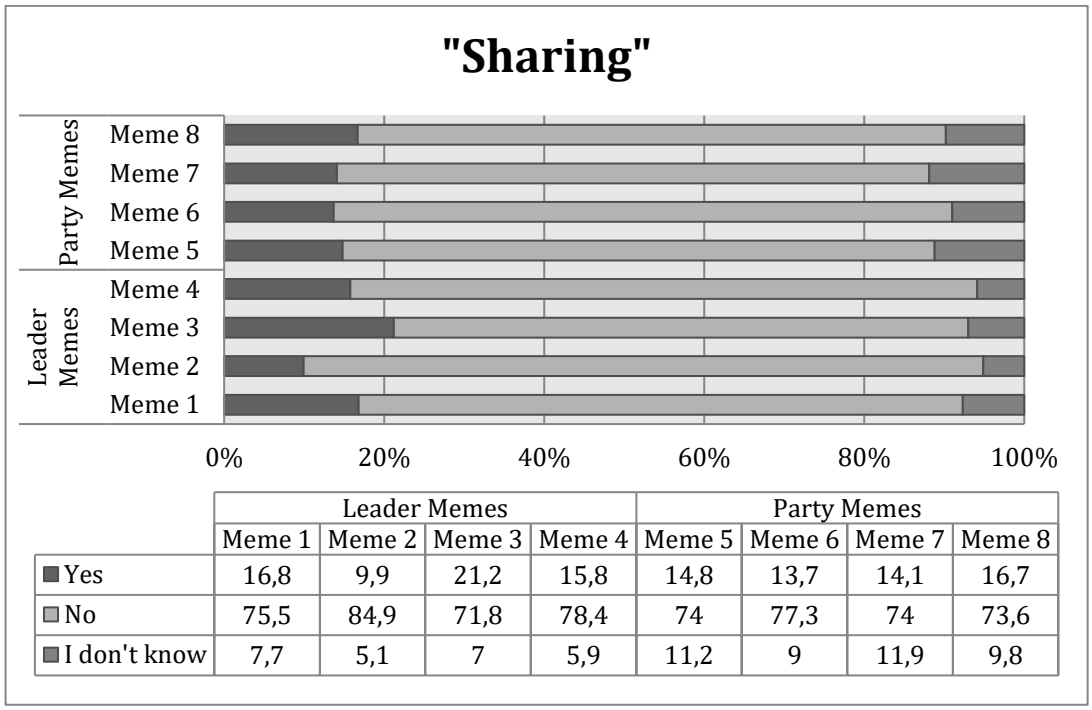
Figure 9: Percentages for "Liking" Each Meme on Social Media



	Leader Memes				Party Memes			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Yes	20,5	14,7	28,9	23,1	26,4	20,3	23,8	23,8
No	68,1	79,8	66,7	71,4	60,3	67,8	65,3	66,4
I don't know	11,4	5,5	4,4	5,5	13,4	12	10,8	9,7

**Numbers of participants: Meme 1 (n = 273), Meme 2 (n = 272), Meme 3 (n = 273), Meme 4 (n = 273), Meme 5 (n = 277), Meme 6 (n = 276), Meme 7 (n = 277), Meme 8 (n = 277).*

Figure 10: Percentages for "Sharing" Each Meme on Social Media



	Leader Memes				Party Memes			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Yes	16,8	9,9	21,2	15,8	14,8	13,7	14,1	16,7
No	75,5	84,9	71,8	78,4	74	77,3	74	73,6
I don't know	7,7	5,1	7	5,9	11,2	9	11,9	9,8

** Numbers of participants: Meme 1 (n = 273), Meme 2 (n = 272), Meme 3 (n = 273), Meme 4 (n = 273), Meme 5 (n = 277), Meme 6 (n = 277), Meme 7 (n = 277), Meme 8 (n = 276).*

Next, looking at Appendix G for relationships, agreement with the meme, demographics, and political predispositions seemed to matter to explain why participants would "share" political memes or not. First, I found moderate to moderately strong relationships between participants' agreement with the meme's message and their likelihood of "liking" and "sharing" it. These results were consistent across both treatment groups and for all political memes. However, relationships were stronger for "liking"; correlation coefficients ranged from 0.372 to 0.464 for memes targeting leaders and from 0.421 to 0.471 for memes targeting parties. Thus, correlation coefficients were lower with "sharing", ranging from 0.284 to 0.373 for memes targeting leaders and from 0.321 to 0.441 for memes targeting parties.

Second, I found moderate relationships with age and ethnicity/race, ideology, party identification, and initial feelings toward candidates and parties. These results are similar to what I found in the previous section on persuasion. For demographics variables, relationships occurred only within the party meme group. For age, there was a moderate relationship with "liking" for meme 6 (blackface scandal / targeting Andrew Scheer), and it was younger participants (born in 1981 or later) that were more willing to "like" the meme.[46] For ethnicity/race, there were moderate relationships with "sharing" for meme 5 (blackface scandal / targeting the LPC) and meme 6 (blackface scandal / targeting the CPC). Looking more closely at which participants are more willing to "share" the memes, it was participants from other ethnicities/races in both instances.[47] On political predisposition variables, all relationships were moderate and within both treatment groups. There were relationships with "sharing" for meme 3 (climate change / targeting Justin Trudeau) and meme 5 (blackface scandal / targeting the LPC) for ideology. Participants who had a conservative or independent ideology were more willing to "share"

[46] Yes: born 1980 or earlier (11.5%), born 1981 or later (29.8%).

[47] Meme 5 - Yes: White/mixed (10.2%), other ethnicities/races (29.3%). Meme 6 - Yes: White/mixed (9.3%), other ethnicities/races (31%).

memes 3[48] and 5.[49] For party identification, there were relationships with "liking" meme 5 (blackface scandal / targeting the LPC) and meme 7 (climate change / targeting the LPC). For meme 5, participants who identified as CPC supporters were more willing to "like" the political meme,[50] while for meme 7, it was participants who supported other parties than the CPC or LPC.[51] This latter finding could be related to the meme's content since meme 7 regarded climate change and critiqued the Liberal party by suggesting that the NDP and Green Party had better climate action plans in their campaign platforms. Overall, participants who had a conservative ideology, were CPC supporters, or had favourable feelings towards the CPC and Andrew Scheer were more willing to "like" or "share" memes overall but also political memes targeting either Justin Trudeau or the LPC.

As for initial feelings toward candidates and parties, these affected the most "liking" and "sharing" the political memes. This result is akin to what I found in previous sections, as initial feelings generate more statistically significant results. Again, there were only a few results that concerned Justin Trudeau or the LPC. There were no relationships with initial feelings toward Justin Trudeau, and there were only relationships between initial feelings toward the LPC and "liking" for meme 3 (climate change / targeting Justin Trudeau) and meme 5 (blackface scandal / targeting the LPC). Participants who had *very unfavourable* or *unfavourable* feelings toward the LPC were more willing to "share" these two memes.[52] However, for initial feelings toward the CPC, there were relationships with "liking" for meme 5 (blackface scandal / targeting the LPC) and meme 8 (climate change / targeting the CPC), and also with "sharing" for meme 1 (blackface

---

[48] Yes: progressive (8.8%); conservative (36.9%); moderate (12.5%); independent (41.4%); not political (16.7%).
[49] Yes: progressive (14.5%); conservative (20.5%); moderate (13%); independent (20%); not political (2.7%).
[50] Yes: Liberal (14.6%); Conservative (41.7%); other (27.3%); none (14.7%).
[51] Yes: Liberal (11%); Conservative (26.2%); other (40.3%); none (11.8%).
[52] Meme 3 - Yes: very unfavourable (32.9%); unfavourable (35.5%); favourable (21.1%); very favourable (31.6%). Meme 5 - Yes: very unfavourable (41.6%); unfavourable (14%); favourable (26.3%); very favourable (32.1%).

scandal / targeting Justin Trudeau) and meme 3 (climate change / targeting the LPC). As for feelings toward Andrew Scheer, memes where there were relationships was almost identical to the above relationships with initial feelings toward the CPC. There were relationships with "liking" for meme 5 (blackface scandal / targeting the LPC) and meme 6 (blackface scandal / targeting the CPC), as well as with "sharing" for meme 1 (blackface scandal / targeting Justin Trudeau) and meme 3 (climate change / targeting the LPC). Participants who had f*avourable* or *very favourable* feelings toward the CPC were more willing to "like"[53] or "share" some of these political memes mentioned in the above.[54] There was also the case for participants who had f*avourable* or *very favourable* feelings toward Andrew Scheer when it came to "liking"[55] or "sharing" the political memes.[56] These result patterns regarding "liking" and "sharing" were somewhat consistent with what I found by examining initial feelings for the LPC. When examining initial feelings for Andrew Scheer and the CPC, most of the political memes with relationships (except meme 8 and meme 6) were those that targeted Justin Trudeau and the LPC. In other words, it seemed that political memes were most likely to be liked or shared when they corresponded to the participant's initial feelings toward the depicted parties or candidates within the political meme. Therefore, results from my previous sections can be applied to resonance, meaning that the meme's stance needs to be congruent with the participant's initial feelings toward the parties or candidates to resonate with them. This finding suggests that the meme's content has a role in explaining the results. My fifth hypothesis was supported as I found a

---

[53] Meme 5 - Yes: very unfavourable (18.8%); unfavourable (24.3%); favourable (25.9%); very favourable (54.7%). Meme 8 - Yes: very unfavourable (23.5%); unfavourable (27%); favourable (15.5%); very favourable (43.4%).
[54] Meme 1 - Yes: very unfavourable (8.5%); unfavourable (22.5%); favourable (15.7%); very favourable (34.3%). Meme 3 - Yes: very unfavourable (9.6%); unfavourable (22.5%); favourable (24.3%); very favourable (45.7%).
[55] Meme 5 - Yes: very unfavourable (14.1%); unfavourable (26%); favourable (33.8%); very favourable (50%). Meme 6 - Yes: very unfavourable (13%); unfavourable (18%); favourable (23.1%); very favourable (44.8%).
[56] Meme 1 - Yes: very unfavourable (8.5%); unfavourable (14%); favourable (23.3%); very favourable (37.9%). Meme 3 - Yes: very unfavourable (13.2%); unfavourable (12%); favourable (30%); very favourable (51.7%).

correlation between agreement with a meme's content and "liking" or "sharing" it on social media, as well as with many predisposition variables.

CHAPTER 5: DISCUSSION

The findings presented in the preceding chapter have established that different types of political memes have various effects on Canadian potential voters. Thus, two questions remain: *why and how do political memes affect potential voters' attitudes and behaviour?* First, the general findings for vote likelihood, evaluations, persuasion, and resonance need to be considered. Evaluations are a factor that explains voting behaviour, and research has shown that evaluations have effects on Canadian's vote choice (Bittner 2010, 2018). However, political memes did not seem to affect overall candidate and party evaluations of the depicted political figures regardless of the treatment groups. I also found that memes did not seem persuasive as most means for message processing variables were not over 4-point level (except for knowledge and negativity). This result showed that participants were either neutral or disagreed on the statements used to measure message processing. Therefore, it could be argued that memes were not persuading potential voters. These are interesting findings when compared with overall vote likelihood as there is evidence suggesting negative effects on participants that viewed party memes.

However, more specific results showed that political memes' effects on potential voters depended on the types of meme and potential voter. For example, it was only when factoring in demographics and political predispositions that political memes negatively affected evaluations and had "reinforcing" or "altering" effects. This scenario also applied to results on vote likelihood, persuasion, and resonance. These findings were unsurprising, considering that I found in my literature review that viewers' predispositions and the political humour's content explained some campaign and political humour effects. Thus, political memes shared during the 2019 Canadian federal election were no different from other campaign materials or political humour. The potential voter's characteristics and the meme's content were significant to understand the

nuances in the effects of political memes on potential voters. To make sense of the differences between memes, as well as between potential voters, I considered five theories: (1) motivated reasoning, (2) affect (emotions/feelings), (3) negativity bias, (4) knowledge, and (5) Elaboration Likelihood Model.

Motivated Reasoning and Affect

Huntington (2017, 2019) used motivated reasoning theory to explain the effects of political memes on viewers. Similarly, political humour studies also found that predispositions like partisanship or ideology explained the effects of this form of communication on viewers, especially on evaluations of candidates (Baumgartner 2008; Baumgartner, Morris and Walth 2012; Baumgartner, Morris, and Coleman 2018; Becker 2014b, 143; Young 2004, 2006). My findings did show that participants' reactions to political memes corresponded with their predispositions. In fact, on numerous occasions, the meme's stance needed to correspond to the participants' predispositions, like their initial feelings toward parties or candidates, to have an effect. Thus, there could be evidence of motivated reasoning.

I did find some instances in my results that support the partisan motivated reasoning theory. For example, participants who identified as CPC supporters, had a conservative ideology, and voted for the CPC in 2019 would find inaccurate or disagree with political memes when they targeted Andrew Scheer or the CPC (i.e., memes 2 and 4). For participants who identified as LPC supporters, had a progressive ideology, and voted for the LPC in 2019, found political memes that targeted Justin Trudeau or the LPC (i.e., memes 1 and 5) inaccurate or disagreed with them. Similarly, party identification acted as a predictor of "liking" meme 5 (blackface scandal / targeting the LPC) and meme 7 (climate change / targeting the LPC). However, most relationships with predispositions suggested that motivated reasoning would be based on initial

feelings toward parties or candidates rather than partisanship. I did not find any statistically significant results for partisanship when examining results on evaluations. There were also no strong relationships involving opinions on political correctness and the environment, suggesting that issue opinions did not explain political memes' effects. This finding conflicted with Huntington's research as she found that positive feelings toward political issues found within the memes mattered to explain some effects on the effectiveness and argument scrutiny variables (Huntington 2017, 171).

As for initial feelings toward candidates or parties, if the political memes' stance did not correspond to the participants' initial feelings, they were not considered funny, agreeable, accurate, or persuasive. For example, regarding initial feelings toward Andrew Scheer, there were moderate positive relationships with memes 1, 3, and 5 on persuasiveness, which indicated motivated reasoning as these memes all targeted Justin Trudeau or the LPC. Participants who had *very unfavourable* or *unfavourable* feelings toward the LPC were also more willing to "share" meme 3 (targeting Justin Trudeau) and meme 5 (targeting the LPC). These findings somewhat relate to Becker's (2014b) observation that participants did not like humour attacking their favourite candidate. Another example that showcased motivated reasoning was that participants who were *very unfavourable* toward Andrew Scheer had their vote likelihood for the CPC decrease after viewing the memes.

Nonetheless, there is a divergence with my study from Huntington's study (2017, 2019) that took place in the United States because I found more statistically significant results with initial feelings toward parties and candidates than with partisanship. In this case, I suggest that this might relate to differences between Canada and the United States on partisanship strength. Compared to the United States, where partisanship is a decisive factor in voting behaivour, in

Canada there is debate on whether partisanship matters as much (Anderson and Stephenson 2010; Bélanger and Stephenson 2010). Scholars have found that some Canadians have "flexible partisanship" or that vote choice is flexible, and voters rely on short-term factors, like campaigns and evaluations, to determine their vote choice (Clarke et al. 2019; Gidengil et al. 2012, 66). Thus, I suggest that "flexible partisanship" might be an explanation for my findings on initial feelings toward parties and candidates. However, my divergent findings are not unrelated to motivated reasoning. Lodge and Taber talk about how feelings "promote persistence of attitudes and motivated biases in the treatment of political arguments and evidence" (2013, 169).

However, this idea that initial feelings matter when explaining the effects of political memes bring us back to Huntington's study. She suggested that the "hot cognition hypothesis," which has links with "pre-existing affect" and motivated reasoning, applies to political memes (Huntington 2017, 55, 170-172). Huntington explains that "affect towards an issue or figure acts as a heuristic for interpretation of new information" (2017, 170-172). The disposition theory of humour that Becker applied to political humour also refers to affect, as it suggests that the viewer's response "depends upon the respondent's affective disposition toward the protagonist involved" (Zillman and Cantor 1976, 93, as cited in Becker 2014b, 138). In the case of my study, predispositions certainly explain the political memes' effects, but these effects seem to be based on feelings toward candidates and parties rather than on party identification. Overall, evidence supports the idea that motivated reasoning does play a role in explaining how political memes effects on potential voters in Canada. This conclusion brings us to the next section on negativity bias, where feelings partly explain political memes' persuasiveness.

Negativity Bias

As we saw in Chapter 4, participants saw campaign memes as negative. All means were over the 4-point level the agreement scale for the negativity variable (except meme 8), meaning that people agreed that memes were negative. Additionally, while I have not explored the results of an open-ended thoughts question that I had included in my study, some comments made by participants in response to this question further highlight this negativity. Terms such as "propaganda," "fake news," "childish," "immature," "ridiculous," "silly," "offensive," "stupid," "uneducated" were often used to describe political memes, even though some used more positive terms like that the memes were "funny and true" and "hilarious." Some even said the following: "Extremely negative campaign, I am not impressed"; "They are hate speech and should not be allowed"; or "It didn't offend me at all, I took it as a joke, but I can imagine it offending some people." Thus, even though I did not consider feelings in this research, my findings on negativity could reflect what Huntington (2017) found when testing for affect (emotions/feelings). Political memes created more "aversion" than non-political memes and "delegitimization" could be the cause (Huntington 2017, 166). On the contrary, "the more positive overall someone felt, the more they saw the memes as effective" (Huntington 2017, 171). This relates back to Huntington's observation that affect can be an "outcome" of the exposure to content (2017, 56). Therefore, political memes' negativity, as found in my study, could explain why some memes were not as persuasive.

Furthermore, participants considered the blackface scandal and memes targeting leaders as the most negative, and they also happened to be the least persuasive memes. Thus, there seemed to be dissonance with previous findings on political humour. Many scholars have found that disparaging humorous messages have negative effects on candidate evaluations (e.g.,

Baumgartner 2007, 2008, 2013; Baumgartner and Morris 2006; Baumgartner, Morris and Coleman 2018; Becker 2012, 2014b; Becker and Haller 2014; Baumgartner, Morris, and Walth 2012; Morris 2009). My findings, on the other hand, showed that evaluations were generally not affected when considering overall participants. Scholars have also found that humour that attacks other people negatively affects the vote likelihood for the depicted political figure (Baumgartner, Morris, and Coleman 2018, 286). Yet, even if participants considered memes targeting leaders as more negative, memes targeting parties had a greater effect on overall vote likelihood.

Moreover, studies taking place in a Canadian context have relied on negativity bias. Negativity bias is a theory that suggests that people "react more intensely to negative information than to positive information" (Daignault 2014, 40; Daignault, Soroka, and Giasson 2013, 172; see also Fournier, Soroka, and Nir 2020). Previous studies on campaign advertisements have shown an increased attention and “resistance to persuasion” for negative advertisements (Daignault 2014, 51; Daignault, Soroka, and Giasson 2013). Roy and Alcantara also found that voters frowned upon negative campaigning (2016, 489). Considering that potential voters find political memes negative could explain why these memes were not that persuasive. While not referring to an explicit theory, political humour studies also found evidence that differences between positive and negative content exist. For example, Baumgartner suggested that her conflicting findings on evaluations might be linked to the fact that Barack Obama benefited from “more lighthearted” humour (Baumgartner 2013, 610). Becker also found that her research participants "found more aggressive cartoon to be too severe" (Becker 2014b, 140).

This negativity bias could also explain the low resonance of political memes found in my study. For example, participants were less inclined to “share” blackface memes, which they considered the most negative. This finding relates to Shifman’s observation that positive and

humorous contents are more prone to become "viral," in other words being shared extensively, than it is the case for negative content (2014, 66-67). Nonetheless, another reason could be explaining the "sharing" of blackface memes: the findings of Duchscherer and Dovidio (2016) on memes' "social acceptability." Blackface memes could have been considered socially unacceptable because of the sensitive topic (racism) compared to climate change memes.

My research also showed that political memes affected conservative participants more than other participants. For example, the CPC was more negatively affected by political memes, and vote likelihood decreased in situations where it was unexpected (i.e., among participants with favourable feelings towards the CPC or Andrew Scheer). This scenario is akin to findings that humour that makes fun of a candidate affiliated with the viewer's party identification can still hurt that candidate's evaluations (Baumgartner, Morris and Walth 2012; Baumgartner, Morris and Coleman 2018). However, negativity bias could also explain these findings. Research has found that negativity can affect some people more than others, such as conservatives. A cross-national study that included Canada found some evidence, but this evidence was too "small" to support such claims (Fournier, Soroka, and Nir 2020). However, these researchers explained that they have relied on physiological responses rather than attitudes (Fournier, Soroka, and Nir 2020), as I have in my research. They explained that other research exists on attitudes to suggest that there are links between negativity bias and political ideology (Fournier, Soroka, and Nir 2020). Thus, because of a clear distinction between conservatives and other potential voters, I suggest that the negativity bias theory perhaps explains these differences between types of potential voters.

Knowledge

In addition to negativity, as shown in the previous section, potential voters' knowledge of a political meme's content is also important. My conclusion regarding knowledge has two elements: one that concerns knowledge of the person or topic and another that concerns misunderstanding. First, my results suggest that political memes depicting candidates know to a lesser extent (i.e., Andrew Scheer) and touching on a political issue (i.e., climate change) have more effects than other types of political memes. For example, less effective memes concerned those on the incumbent, Justin Trudeau, and on the blackface scandal, which was a heavily mediatized scandal, as well as memes for which participants had a higher recall rate in the experiment. This was unsurprising considering that incumbents are generally better known by voters than other leaders (Gidengil et al. 2012) and that the literature showed that political humour that targets well-known politicians has fewer effects than political humour that does not (Moy, Xenos, and Hess 2006, 205; see also Baumgartner and Morris 2006; Baumgartner 2013). Some have even suggested that knowing a political figure can positively affect the evaluation (Baumgartner 2008), but in the case of my study, the results were relatively neutral regarding the LPC and Justin Trudeau. Nonetheless, I did not specifically test for the participant's knowledge on each candidate and topics within each meme, so I cannot confirm a definitive correlation.

Second, considering that a correlation exists between knowledge and persuasiveness and that people understood less the political memes on Andrew Scheer and the CPC, it could be argued that these memes were less persuasive. These memes also had lower persuasiveness (except meme 1) and percentages showing that they were less likely to be liked or shared. These results support scholars' observations that intertextuality makes memes more difficult to understand (Huntington 2019, 3; Ross and Rivers 2017a, 301). Therefore, for people who did

not understand the political memes, these memes were also less likely to resonate. On the other hand, my findings were contradictory as participants understood less the memes on the climate change, but percentages showed participants were more inclined to share them than the blackface memes. This latter finding could perhaps link us back to negativity bias.

I am also suggesting a difference between what could be considered political knowledge and understanding the reference made within the political meme. The differences in my above findings could indicate that people with less political knowledge, such as on the topic of candidates or issues, would find the memes more persuasive. However, if the person did not understand the reference made within the political memes, they would find the memes less persuasive. Political humour research has found that political knowledge has effects on evaluations and that humorous political messages have greater effects on those who are less knowledgeable (Becker and Waisanen 2013; Young 2004, 2006; Baumgartner, Morris and Coleman 2018; Young 2004, 14; Young 2006; Baumgartner 2013; Moy, Xenos, and Hess 2006). This political knowledge piece could explain why some political memes were seen as more persuasive even though they were on lesser known candidates or issues, but they were not persuasive when the participant misunderstood the memes. However, when I tested for education, which has previously been used in Canadian voting behaviour research as a proxy for factual political knowledge (Matthews 2010, 220-221), this factor did not come out as statistically significant. Therefore, I cannot conclude with absolute certainty whether the participants' overall political knowledge, rather than only knowledge on the meme's content, had an effect.

Elaboration Likelihood Model

Finally, the above sections on negativity bias and knowledge have set the stage for the Elaboration Likelihood Model (ELM) theory. To reiterate, the ELM theory suggests two routes for message processing: the peripheral route (affect and less scrutinizing) and the central route (predispositions and more scrutinizing) (Petty and Cacioppo 1986, 3). Studies have found that political humour, including memes, is processed in the peripheral route where emotion trumps scrutiny (Huntington 2017; Young 2004; Baumgartner and Morris 2008; Baumgartner, Morris, and Coleman 2018; Baumgartner 2007, 2008). When a viewer uses the peripheral route of persuasion, it is because there is a lack of "motivation" and lower "ability" (i.e., knowledge) to process the message (Petty and Cacioppo 1986, 4).

I first considered the effects linked to knowledge in the context of this theory. Viewers generally reported understanding the memes' content (all means were over 4-point level). Yet, the blackface and Justin Trudeau memes were the ones that people had more knowledge about and found the least persuasive. For example, higher means on the statement relating to knowledge indicate that participants agreed more that they knew what the blackface scandal memes referred to (mean: 5.06) in comparison with climate change memes (mean: 4.78). Even with this increased knowledge, climate change memes were more persuasive to participants. The lower knowledge concerning the climate change memes could limit the "ability" to process the messaging along the central route, moving the processing into the peripheral route according to the ELM theory.

On the other hand, participants could have processed memes targeting leaders through the central route as they had relationships with persuasiveness with political predispositions. However, some observations caused me to question the application of this theory. In considering

memes critiquing Justin Trudeau / LCP or Andrew Scheer / CPC, I did not find similar patterns. The memes critiquing Andrew Scheer and the CPC were less persuasive. Given that Andrew Scheer and the CPC were not the incumbents at the time, these memes should have been more persuasive. Additionally, I was only able to test for "ability" and not "motivation" because the latter is related to interest in politics (Holbert et al. 2011, 193), which I have not tested for in my online experiment. The only factor I tested for that could be considered as motivation was campaign engagement, but I did not find correlations with persuasion.

Nonetheless, where the ELM theory seemed to have traction was when considering negativity. Scholars have explained that humour and its "positive affect" is the culprit in explaining a processing with the peripheral route (Baumgartner and Morris 2008; Baumgartner 2007). As outlined in the preceding chapter, participants saw memes targeting parties as less negative than memes targeting leaders. Unsurprisingly, I found that participants who viewed memes targeting parties were also more likely to find the memes funny, which in turn contributed to higher rates of persuasiveness and stronger effects on voting behaviour. Similarly, participants who viewed the blackface memes considered them as the most negative, least funny, and least persuasive. Thus, if people disagree that the meme is funny, they also disagree that it is persuasive. These findings align with those of Huntington (2017, 2019) as she found that funniness is a mediator for persuasiveness. She also suggested that humour is "closely related to affective responses" (Huntington 2017, 57). Additionally, positive feelings that viewers have when they look at political humour makes this type of communication more persuasive as Young explains, "a desire to maintain that positive mood would certainly reduce the listener's motivation to scrutinize the claims presented in the message" (2008, 124). Thus, ELM helps us understand how negativity plays a role in whether political memes are persuasive or not.

Additionally, Huntington (2017) found that political memes were taken more seriously than non-political memes and were consequently less persuasive. I found the same result in my study in that people who took political memes more seriously (less discounting and less funny) found them less persuasive. As for the party memes, they were also discounted more but were still found to be more persuasive. Huntington explained, "It is possible that part of political memes' persuasive effects comes from their humour, which in effect splits viewers' cognitive effort to focus more closely on getting the joke, while allowing the underlying political argument to be processed more peripherally" (Huntington 2017, 177). Therefore, scholars have found that humour can decrease the "motivation" to counterargue because the message is not taken as seriously (Polk, Young, and Holbert 2009; Young 2008). Thus, the ELM theory applies to my findings but only for humour rather than knowledge. This conclusion reinforces that viewers' feelings are a determining factor in explaining their persuasion and also Huntington's (2017) hypothesis that affect does matter.

Limitations and Further Studies

Overall, my study has brought multiple insights into how political memes affect potential voters, but there are some limitations and avenues for further study. There are six limitations in my experiment design, which concern testing, stimuli selection, question formulation, and deployment. First, my experiment had no control group and included a pre-test, which can potentially prime participants into thinking a certain way (Tikkanen 2018). For some, not having a control group is a design "flaw" (Tikkanen 2018). Thus, an improvement to the testing method would be the use of the Solomon four-group design. This design includes two groups with a pre-test and post-test, and two groups with a post-test only, and each set of groups has one control

group, which enables the researcher to rule out any pre-test effects on the participants (Tikkanen 2018).

Second, the stimuli I selected were original campaign memes. This choice impeded the control over each variable within the stimuli (Huntington 2017, Tikkanen 2018). Two specific examples come to mind. First, not all political memes had the same type of humour. Even if my study was not specifically looking at this characteristic, these humour differences might have affected the participants' responses. Studies show that different humour types, like satire and irony, have different effects on processing the messaging (Polk, Young, and Holbert 2009; Holbert et al. 2011; Becker and Haller 2014; Baumgartner, Morris and Coleman 2018; Becker 2012; Becker and Waisanen 2013; LaMarre et al. 2014). Another example showcasing the lack of control is that meme 7 targeted the LPC party and also featured the NDP and Green Party, unlike the other memes. Some scholars also highlight that participants can be affected by the stimuli before the experiment when the researcher chooses to use original material, consequently affecting the results (Esralew and Young 2012; Huntington 2017, 108). Even though I showed that the recall rate for each political meme used in my study was relatively low (no more than 30% and mostly under 15%), the fact that some participants did indeed recall the political memes is something to consider when interpreting my results.

Still on the limitation regarding stimuli selection, the fact that I included more than one topic, target, and stance also made it difficult to pinpoint which of these three variables was having the most impact. Since the groups were divided based on the type of target (leader or party), I could not determine if the topic or the stance played a role in explaining the political meme's impact on vote likelihood and evaluations. I did find differences based on the topic and stance in my mean comparisons for the message processing variables. However, I was unable to

do t-tests for statistical significance. Thus, all memes should have been on the same topic (either blackface or climate change) and critiquing the same leader or party (either Andrew Scheer/CPC or Justin Trudeau/LPC). I also did not test for clarity of memes beforehand, unlike Huntington. She did so to avoid including stimuli that people had difficulty understanding and "avoid confounding the study results with the level of information or idea conveyed by each presentation format, and not the meme form itself" (2019, 7; see also 2017). My research showed that some memes were less understood than others, so adding this extra step could have mitigated a possible relation between knowledge of the reference and lack of clarity.

Third, when it came to questions, I could not effectively test for issue opinions due to a mix up in the directives given to the participants in the online experiment survey for the questions regarding this variable. In this sense, issue opinions as a predisposition could have been affecting voters' processing of political memes, but my results were unable to adequately capture their effects. I was also unable to randomize the meme order when I programmed the experiment in Qualtrics. Thus, it is uncertain whether there was an order effect that impacted the results. According to research on persuasion, "arguments presented first tend to have greater impact" (Haugtvedt and Liu 2012). Huntington had also randomized the order in which the participants viewed each stimulus "to limit order presentation effects" (2017, 83; 2019, 6). In both of my groups, participants saw blackface memes before the climate change memes. Since blackface memes dealt with racism (a sensitive issue), participants might have seen climate change memes as less negative in comparison.

Finally, relating to deployment, the experiment was conducted approximately four months after the campaign. Thus, the sentiments captured at the time of the study may not have been the same sentiments as those experienced during the campaign. Becker (2014b) highlighted

this type of limitation as she conducted an experiment dealing with political campaign humorous stimuli five months after the campaign she examined. Additionally, even though I deployed my experiment to a general Canadian population and took steps to maximize external validity, I had a non-probability sample that impeded on generalizability (Berdahl and Archer 2015, 168). Some of my participant groups were similar to the Canadian population, but I still had some groups overrepresented in certain categories (i.e., gender and age). Also, since potential voters would most likely view political memes online, my design had greater external validity, but was not perfect since it was not conducted on social media (Huntington 2017, 189).

Besides considering the limitations of this particular study, there are other ways of studying campaign memes that can be considered to improve our understanding of the effects of political memes on potential voters. My suggestions for further studies involve using different stimuli, variables, methods, context, and timing. Concerning stimuli, researchers could replicate the online experiment to test whether the tone of political memes matter. I focused exclusively on negative political memes. However, some positive memes were shared during the campaign, for example, concerning Jagmeet Singh and the NDP (McKelvey et al. 2020). I also found that the political memes that participants considered more negative than others were also less effective (i.e., blackface memes). Therefore, questions for future research could include whether positive political memes have different effects on potential voters and if they would be more persuasive. This suggestion also relates back to the differences that Canadian researchers have found between negative and positive campaigning (Anderson and McGregor 2017; Daignault, Soroka, and Giasson 2013; Daignault 2014) and the fact that positive affect brought on by humour makes political humour more persuasive (Baumgartner and Morris 2008; Baumgartner 2007; Young 2008; Huntington 2017).

Furthermore, as discussed at the start of this thesis, political communication has shifted to include user-generated content. My study has not offered a basis for comparing user-generated content with traditional political communication. As Becker and Waisanen's literature review reveals, "[B]roader conclusions might be drawn about whether the impacts that stem from exposure to user-generated vs. professionally produced content are differential, if only as a matter of degree" (2013, 174). Huntington has also suggested comparing memes "to other forms of political humour or information" for the exact purpose of comparing user-generated content with traditional media (2019, 12). Thus, researchers could compare political memes with either political cartoons or advertisements on the basis that political memes have been compared to these types of media (Chen 2018; Heiskanen 2017, 4; Huntington 2016, 2017, 2019; Lalancette, Small and Pronovost 2019; Sciarpelletti 2019). Advertisements have also been at the centre of Canadian political communication studies, thus offering comparable data in a Canadian context. Becker said that further investigations on political humour could find ads as a "useful check" (2012, 808). This comparison of political memes with traditional political communication could be even more useful since one of the characteristics of political memes is anonymity, and we do not know without a doubt if political parties are creating some of these memes to advance their interests (Denisova 2019, 38, 40). However, Canadian politicians or political parties have overtly harnessed this type of communication in some instances (Coutu 2019; Green 2019; Gurney 2019). Therefore, we need to uncover the differences between political memes and political advertisements.

When it comes to questions to include for testing specific variables, there is a need to further investigate affect, resonance, and partisanship, as well as political knowledge and interest. First, unlike Huntington (2017), I had not tested for participants' affective responses to political

memes. However, my findings seemed to point toward the possibility that affect (feelings/emotions) explains how people are processing the political meme's messaging, whether through negativity, initial feelings towards the candidates or party, and humour. Aside from Huntington's findings (2017), other scholars have also suggested that memes have the potential to tap into emotions (Denisova 2019; Journell and Clark 2019; Lalancette and Small 2020a, 320; Miltner 2014; Shifman 2014; Tenove 2019). Thus, future studies should include a dimension to test a participant's affective response when viewing the stimuli to understand if this dimension explains why potential voters are persuaded or not by the political memes.

Second, the question used to measure resonance might not have effectively measured it since the question was related to social media "sharing" and "liking". Some people might not have social media, even with its popularity. Also, people might not be inclined to "like" or "share" content on social media, but the political meme could still be resonating. Testing resonance by looking at whether the person appreciates the political meme or not might show different results. Therefore, we would need to include a question on liking or disliking the meme itself rather than the act of "sharing" or "liking" on the platform to better measure resonance.

Third, for partisanship, testing the strength of the partisanship might have yielded different results. Some have found different levels of attachments to political parties in Canada (Bélanger and Stephenson 2010) in addition to the concept of flexible partisans presented earlier (Clarke et al. 2019; see also Bélanger and Stephenson 2010). Because of this difference in partisanship strength in Canada, it would be worth testing whether partisanship strength could additionally explain the results. This suggestion is also based upon Weise's (1996) limitation on the fact that he did not test for partisanship strength.

Fourth, other studies that have used political knowledge to explain the effects of political humour have included factual questions to determine political knowledge (e.g., Baumgartner 2007, 2008; Baumgartner and Morris 2008; Baumgartner, Morris, and Coleman 2018; Baumgartner, Morris, and Walth 2012; Young 2004, 2006, 2012). I did not specifically test for the participant's knowledge of each candidate and topic depicted in the political memes. Thus, we cannot rule out whether political knowledge explains some effects or not. Additionally, political knowledge would be important to test for, as Bittner (2010) suggested that it might affect evaluations. Since my results showed that evaluations were mostly unchanged overall and had some changes when considering specific voters, it might be important to check if factual political knowledge affects persuasion. Also, there is a need to test for political interest as some political humour studies have (e.g., Baumgartner 2007, 2008; Baumgartner and Morris 2008; Becker 2012; Becker and Haller 2014; Huntington 2017; Young 2006). Including political interest would be essential to ascertain my findings related to the ELM theory and the "motivation" to process a message. Lastly, other studies on political humour have tested variables such as cynicism, efficacy, media exposure, humour appreciation, and emotions (Appendix A), which are variables that I did not include but that other researchers could consider including in further studies.

In terms of methodology, using qualitative research designs would allow digging deeper to understand better whether the differences that are noticed are related to specific meme characteristics or potential voter characteristics. This type of research focuses on the "why" of people responding the way they do and methods include focus groups and interviews (Berdhal and Archer 2015). Thus, focus groups could be the first option to understand more about potential voters' reactions to political memes. So far, to my knowledge, no researcher has used

focus groups to study political memes aside from Milner's (2014) study on non-political memes. Baumgartner and Morris (2009) also suggested focus groups and interviews as ideas for further political humour studies. Interviews with internal marketing teams (see Giasson, Lees-Marshment, and Marland 2012, 9) within political parties could be a second option to uncover whether parties have actually created some political memes during the campaign aside from the content shared on the political parties' social media pages.

Finally, Anderson and Stephenson noted that some factors that affect voting behaviour are more important than others in the context of specific elections (2010, 281). Thus, political memes could perhaps influence the elections' outcome in other contexts. Other studies would need to be conducted to investigate the effects of political memes in future federal elections or provincial elections. More particularly, it could be examined whether political memes still mostly affect conservative voters and non-governing parties, and whether LPC partisans and the party are immune from political memes' effects, or whether the effect observed in my study was because the LPC was the governing party at the time. Thus, my study would need to be replicated in another Canadian federal election to determine whether or not the same effects would be found while considering the limitations of this study.

In terms of timing, we should also consider studying political memes' effects on a more extended period. Scholars have repeatedly suggested testing for political humour's long-term effects (Young 2008; Baumgartner and Morris 2008; Baumgartner, Morris, and Coleman 2018; LaMarre, Landerville, and Beam 2009; Becker and Waisanen 2013). This type of testing is especially important considering that political humour is said to affect the peripheral route of persuasion and that I found a similar scenario in my study. This is analogous to what other Canadian scholars have found about the media effects during campaigns being temporary

(Dobryzynska, Blais, and Nadeau 2002). Yet, we still do not know how long these short-term effects would last during the campaign, for example, whether they would last for only a couple of hours after seeing the political meme or up until the day of the election. A study over the whole campaign period would also allow testing if there were differences with pre-campaign deciders and campaign deciders by including a measure at the start of the period on whether participants have decided on who to vote for or not. As previously discussed, Canadian researchers found that there are more campaign effects on undecided voters (Cross et al. 2015; Dobryzynska, Blais, and Nadeau 2002; Fournier et al. 2004; Fournier, Cutler, and Soroka 2019, 154; see also Anderson and Stephenson 2010, 25), but I did not test for this specific observation in my study. An extended period study would be essential to determine if political memes are susceptible to affecting electoral results.

Conclusion

My study has demonstrated that political memes do affect potential voters. For example, I found negative and positive changes to vote likelihood after exposure to political memes. However, these effects were specific to some voters. My study has also shown that some political memes are more persuasive than others. My findings are no different from those on campaign effects and political humour effects as they showed that the effects relied on the voter's predispositions and the political meme's content. As Baumgartner explained, “content matters when examining media effects, and not all political humour is created equal” (2007, 333). Thus, the effects of political memes are not universal to all types of voters and content. One could even say that political memes mostly affect conservative voters and parties other than the LPC in the Canadian context. However, caution needs to be exercised when considering these findings, as

most mean differences were minimal and most relationships between message processing variables were moderate.

My findings on political memes' resonance also blur this conclusion, as there was a very low percentage of voters who said they would “like” or “share” political memes on social media. To this effect, Miltner explained, "[I]nternet memes succeed because of their 'emotional resonance' with audiences" (2018, 414; See also Miltner 2014). Thus, these low percentages are problematic considering the fact that memes need to be shared to be successful. Indeed, Tenove (2019) indicated that sharing memes is necessary for them to have a political impact: "Memes work politically if they are widely – or virally – shared." In this sense, if voters do not see political memes on social media because people are not inclined to share them, then it is likely that political memes' influence on overall electoral results will be marginal. This observation adds to the research by McKelvey et al. (2020) showing that political meme pages did not gain traction in the 2019 Canadian federal election. Also, some memes did not have effects on the majority of participants in my study. Consequently, I suggest that political meme’s overall influence on electoral results remains low even though there is evidence of effects for some potential voters.

This suggestion is closely related to the voting behaviour literature, as it has been suggested that even if a factor does not explain overall electoral results, the factor could still influence vote choice (Blais et al. 2002; Gidengil et al. 2012, 188). Thus, political memes most likely do not influence electoral results, but they could be useful to target particular voters, for example, conservatives. This suggestion brings us back to the idea that political memes appeal to specific groups (DeCook 2018; Greene 2019; Journell and Clark 2019; Miltner 2014; Tenove 2019; Wiggins 2019, 100; Woods and Hahner 2019, 125). Political meme creators should also

consider focusing on memes targeting the incumbent, parties, and depicting policy issues, as these characteristics seemed to be those that were most effective.

Regardless, this conclusion does not change the fact that political memes are a new player in Canadian political communication. More work would need to be conducted to better understand political memes' role in electoral campaigns. However, it is still to be determined if political memes will be around in the next Canadian election. Are they a "trend" in political communication (Lalancette, Raynauld, and Crandall 2019) that is ephemeral and only a characteristic of the 2019 Canadian federal election? Or are political memes a long-lasting player in Canadian campaign communication? Nonetheless, if political memes do turn out to be a long-lasting player, my thesis serves as a basis for further empirical studies on the effects of political memes on potential voters in Canada.

BIBLIOGRAPHY

Anderson, Cameron D., and Michael McGregor. 2017. "Persuasion, Partisanship and Evaluations of National Conditions and Governmental Impact: An Experimental Study." *American Review of Canadian Studies* 47 (1): 53-73. https://doi.org/10.1080/02722011.2017.1304431

Anderson, Cameron D., and Laura B. Stephenson. 2010. "The Puzzle of Elections and Voting in Canada." In *Voting Behaviour in Canada*, edited by Cameron D. Anderson and Laura B. Stephenson, 1-39. Vancouver, BC: UBC Press.

Baumgartner, Jody C. 2007. "Humor on the next Frontier: Youth, Online Political Humor, and the JibJab Effect." *Social Science Computer Review* 25 (3): 319–38. https://doi.org/10.1177/0894439306295395

Baumgartner, Jody C. 2008. " Polls and Elections : Editorial Cartoons 2.0: The Effects of Digital Political Satire on Presidential Candidate Evaluations ." *Presidential Studies Quarterly* 38 (4): 735–58. https://doi.org/10.1111/j.1741-5705.2008.02675.x

Baumgartner, Jody C. 2013. "Internet Political Ads in 2012: Can Humor Mitigate Unintended Effects of Negative Campaigning?" *Social Science Computer Review* 31 (5): 601–13. https://doi.org/10.1177/0894439313490399

Baumgartner, Jody, and Jonathan S. Morris. 2006. "The Daily Show Effect: Candidate Evaluations, Efficacy, and American Youth." *American Politics Research* 34 (3): 341–67. https://doi.org/10.1177/1532673X05280074

Baumgartner, Jody C., and Jonathan S. Morris. 2008. "One 'Nation,' under Stephen? The Effects of the Colbert Report on American Youth." *Journal of Broadcasting and Electronic Media* 52 (4): 622–43. https://doi.org/10.1080/08838150802437487

Baumgartner, Jody C., Jonathan S. Morris, and Jeffrey Michael Coleman. 2018. "Did the 'Road to the White House Run Through' Letterman? Chris Christie, Letterman, and Other-Disparaging Versus Self-Deprecating Humor." *Journal of Political Marketing* 17 (3): 282–300. https://doi.org/10.1080/15377857.2015.1074137

Baumgartner, Jody C., Jonathan S. Morris, and Natasha L. Walth. 2012. "The Fey Effect: Young Adults, Political Humor, and Perceptions of Sarah Palin in the 2008 Presidential Election Campaign." *Public Opinion Quarterly* 76 (1): 95–104. https://doi.org/10.1093/poq/nfr060

Bebić, Domagoj, and Marija Volarevic. 2018. "Do Not Mess with a Meme: The Use of Viral Content in Communicating Politics." *Communication & Society* 31 (3): 43–56. https://doi.org/10.15581/003.31.3.43-56

Becker, Amy B. 2012. “Comedy Types and Political Campaigns: The Differential Influence of Other-Directed Hostile Humor and Self-Ridicule on Candidate Evaluations.” *Mass Communication and Society* 15 (6): 791–812. https://doi.org/10.1080/15205436.2011.628431

Becker, Amy B. 2014a. “Playing With Politics: Online Political Parody, Affinity for Political Humor, Anxiety Reduction, and Implications for Political Efficacy.” *Mass Communication and Society* 17 (3): 424–45. https://doi.org/10.1080/15205436.2014.891134

Becker, Amy B. 2014b. “Humiliate My Enemies or Mock My Friends? Applying Disposition Theory of Humor to the Study of Political Parody Appreciation and Attitudes Toward Candidates.” *Human Communication Research* 40 (2): 137–60. https://doi.org/10.1111/hcre.12022

Becker, Amy B., and Beth A. Haller. 2014. “When Political Comedy Turns Personal: Humor Types, Audience Evaluations, and Attitudes.” *Howard Journal of Communications* 25 (1): 34–55. https://doi.org/10.1080/10646175.2013.835607

Becker, Amy B., and Don J. Waisanen. 2013. “From Funny Features to Entertaining Effects: Connecting Approaches to Communication Research on Political Comedy.” *Review of Communication* 13 (3): 161–83. https://doi.org/10.1080/15358593.2013.826816

Bélanger, Éric, and Laura B. Stephenson. 2010. “Parties and Partisans: The Influence of Ideology and Brokerage on the Durability of Partisanship in Canada.” In *Voting Behaviour in Canada*, edited by Cameron D. Anderson and Laura B. Stephenson, 107-136. Vancouver: UBC Press.

Berdahl, Loleen, and Keith Archer. *Explorations: Conducting Empirical Research in Canadian Political Science,* Third Edition. Don Mills: Oxford University Press, 2015.

Bittner, Amanda. 2010. “Personality Matters: The Evaluation of Party Leaders in Canadian Elections.” In *Voting Behaviour in Canada*, edited by Cameron D. Anderson and Laura B. Stephenson, 183-207.Vancouver, BC: UBC Press.

Bittner, Amanda. 2018. “Leaders Always Mattered: The Persistence of Personality in Canadian Elections.” *Electoral Studies* 54 (April): 297–302. https://doi.org/10.1016/j.electstud.2018.04.013

Blais, André, Elisabeth Gidengil, Richard Nadeau, and Neil Nevitte. 2002. *Anatomy of a Liberal Victory: Making Sense of the Vote in the 2000 Canadian Election.* Peterborough, ON: Broadview Press.

Burroughs, Benjamin. 2013. “Obama Trolling: Memes, Salutes and an Agonistic Politics in the 2012 Presidential Election.” The Fibreculture Journal: DIGITAL MEDIA + NETWORKS + TRANSDISCIPLINARY CRITIQUE, no. 22: 258–77.

http://twentytwo.fibreculturejournal.org/fcj-165-obama-trolling-memes-salutes-and-an-agonistic-politics-in-the-2012-presidential-election/

CBC News. 2019. "What we know about Justin Trudeau's blackface photos – and what happens next." *CBC.ca,* September 20, 2019. Accessed December 27, 2020. https://www.cbc.ca/news/politics/canada-votes-2019-trudeau-blackface-brownface-cbc-explains-1.5290664

Chacon, Geneviève, Andrea Lawlor, and Thierry Giasson. 2018. "Hybridity and Mobility: Media Elite Status on Political Twitter Hashtags." In *Political Elites in Canada: Power and Influence in Instantaneous Times,* edited by Alex Marland, Thierry Giasson, and Andrea Lawlor, 184-203. Vancouver, BC: UBC Press.

Chagas, Viktor, Fernanda Freire, Daniel Rios, and Dandara Magalhães. 2019. "Political Memes and the Politics of Memes: A Methodological Proposal for Content Analysis of Online Political Memes." *First Monday* 24 (2): 1. https://firstmonday.org/ojs/index.php/fm/article/view/7264/7731

Chen, Khin-Wee. 2018. "The Internet Political Meme as Remediation of the Political Cartoon." In *The Languages of Humour: Verbal, Visual, and Physical Humour,* edited by Arie Sover, 202-224. London: Bloomsbury Academic.

Clarke, Harold D., Jason Reifler, Thomas J. Scotto, and Marianne C. Stewart. 2016. "It's Spring Again! Voting in the 2015 Federal Election." In *The Canadian Federal Election* of 2015, edited by Jon H. Pammett and Christopher Dornan, 327-356. Toronto, ON: Dundurn.

Clarke, Harold D., Jane Jenson, Lawrence LeDuc, and Jon H. Pammett. 2019. *Absent Mandate: Strategies and Choices in Canadian Elections.* Toronto, ON: Toronto University Press.

Cousins, Ben. "How are memes being used to sway voters? Researchers aim to find out." *CTV News.ca,* September 26, 2019. Accessed November 12, 2019. https://election.ctvnews.ca/how-are-memes-being-used-to-sway-voters-researchers-aim-to-find-out-1.4612306

Coutu, Simon. "Les mèmes s'invitent dans la campagne." *Rad*, October 15, 2019. Accessed March 6, 2020. https://www.rad.ca/dossier/elections-2019/250/22-25-les-memes-sinvitent-dans-la-campagne

Cross, William P., Jonathan Mallow, Tamara A. Small, and Laura B. Stephenson. 2015. *Fighting for Votes: Parties, the Media, and Voters in an Ontario Election.* Vancouver: UBC Press.

Daignault, Pénélope, Stuart Soroka, and Thierry Giasson. 2013. "The Perception of Political Advertising During an Election Campaign: A Measure of Cognitive and Emotional Effects." *Canadian Journal of Communication* 38 (2): 167–86. https://doi.org/10.22230/cjc.2013v38n2a2566

DeCook, Julia R. 2018. “Memes and Symbolic Violence: #proudboys and the Use of Memes for Propaganda and the Construction of Collective Identity.” *Learning, Media and Technology* 43 (4): 485–504. https://doi.org/10.1080/17439884.2018.1544149

Denisova, Anastasia. 2019. *Internet Memes and Society*. *Internet Memes and Society*. New York, NY: Routledge, Taylor & Francis Group.

Dike, Deborah N. 2018. “Countering Political Narratives through Nairaland Meme Pictures.” *Cahier d’études Africaines* 230 (2): 493–512. https://doi.org/10.4000/etudesafricaines.22163

Dimock, Michael. “Defining generations: Where Millenials end and Generation Z begins.” *Pew Research Center*, January 17, 2019. Retrieved on April 28, 2020, https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

Dobrzynska, Agnieszka, André Blais, and Richard Nadeau. 2003. “Do the Media Have a Direct Impact on the Vote?: The Case of the 1997 Canadian Election.” *International Journal of Public Opinion Research* 15 (1): 27–43. https://doi.org/10.1093/ijpor/15.1.27

Duchscherer, Katie M., and John F. Dovidio. 2016. “When Memes Are Mean: Appraisals of and Objections to Stereotypic Memes.” *Translational Issues in Psychological Science* 2 (3): 335–45. https://doi.org/10.1037/tps0000080

Esralew, Sarah, and Dannagal Goldthwaite Young. 2012. “The Influence of Parodies on Mental Models: Exploring the Tina Fey-Sarah Palin Phenomenon.” *Communication Quarterly* 60 (3): 338–52. https://doi.org/10.1080/01463373.2012.688791

Esteves, Victoria. 2018. “I can haz rights? Online memes as digital embodiement of craft(ivism).” *The Routledge Companion to Media and Activism*, edited by Graham Meikle, 187-195. Abingdon: Routledge.

Fournier, Patrick, Richard Nadeau, André Blais, Elisabeth Gidengil, and Neil Nevitte. 2004. “Time-of-Voting Decision and Susceptibility to Campaign Effects.” *Electoral Studies* 23 (4): 661–81. https://doi.org/10.1016/j.electstud.2003.09.001

Fournier, Patrick, Fred Cutler, and Stuart Soroka. 2019. “Who Responds to Election Campaigns? The Two-Moderator Model Revisited.” In *Duty and Choice : the Evolution of the Study of Voting and Voters,* edited by Peter John Loewen and Daniel Rubenson, 129-168. Toronto, ON: Toronto University Press.

Fournier, Patrick, Stuart Soroka, and Lilach Nir. 2020. “Negativity Biases and Political Ideology: A Comparative Test across 17 Countries.” *American Political Science Review* 114 (3): 775-791. https://doi.org/10.1017/S0003055420000131

Giasson, Thierry, Jennifer Lees-Marshment, and Alex Marland. 2012. “Introducing Political Marketing.” In *Political Marketing in Canada,* edited by Alex Marland, Thierry Giasson, and Jennifer Lees-Marshment, 3-21. Vancouver: UBC Press.

Gidengil, Elisabeth, André Blais, Joanna Everitt, Patrick Fournier, and Neil Nevitte. 2006. “Back to the Future? Making Sense of the 2004 Canadian Election outside Quebec.” *Canadian Journal of Political Science* 39 (1): 1-25.

Gidengil, Elisabeth, Neil Nevitte, André Blais, Joanna Everitt, and Patrick Fournier. 2012. *Dominance and Decline: Making Sense of Recent Canadian Elections.* Toronto: University of Toronto Press.

Green, Melanie. “Why political memes - which are virtually unregulated - matter to this federal election.” *Star Vancouver*, October 5, 2019. Accessed November 12, 2019. https://www.thestar.com/vancouver/2019/10/05/why-political-memes-which-are-virtually-unregulated-matter-to-this-federal-election.html

Greene, Viveca S. 2019. “‘Deplorable’ Satire: Alt-Right Memes, White Genocide Tweets, and Redpilling Normies.” *American Humor* 5 (1): 31–69. https://doi.org/10.5325/studamerhumor.5.1.0031

Gurney, Matt. “The meme-ification of Canadian politics.” *Maclean’s*, June 28, 2019. Accessed July 30, 2019. https://www.macleans.ca/opinion/the-meme-ification-of-canadian-politics/

Haugtvedt, Curtis P., and Kaiya Liu. 2012. “Order Effects.” In *Encyclopedia of Research Design,* edited by Neil J. Salkind, 974-975. Thousand Oaks: SAGE Publications, Inc.

Heiskanen, Benita. 2017. “Meme-Ing Electoral Participation.” *European Journal of American Studies* 12 (2). https://doi.org/10.4000/ejas.12158

Holbert, R. Lance, Jay Hmielowski, Parul Jain, Julie Lather, and Alyssa Morey. 2011. “Adding Nuance to the Study of Political Humor Effects: Experimental Research on Juvenalian Satire versus Horatian Satire.” *American Behavioral Scientist* 55 (3): 187–211. https://doi.org/10.1177/0002764210392156

Howley, Kevin. 2016. “‘I Have a Drone’: Internet Memes and the Politics of Culture.” *Interactions: Studies in Communication & Culture* 7 (2): 155–75. https://doi.org/10.1386/iscc.7.2.155

Hristova, Stefka. 2014. “Visual Memes as Neutralizers of Political Dissent.” *TripleC* 12 (1): 265–76. https://doi.org/10.31269/vol12iss1pp265-276

Huntington, Heidi E. 2016. “Pepper Spray Cop and the American Dream : Using Synecdoche and Metaphor to Unlock Internet Memes ’ Visual Political Rhetoric.” *Communication Studies* 67 (1): 77–93. https://doi.org/10.1080/10510974.2015.1087414

Huntington, Heidi.E. 2017. "The Affect and Effect of Internet Memes: Assessing Perceptions and Influence of Online User-Generated Political Discourse as Media." *ProQuest Dissertations and Theses*. https://search-proquest-com.ezproxy.sibdi.ucr.ac.cr/docview/1961607036?accountid = 28692

Huntington, Heidi E. 2019. "Partisan Cues and Internet Memes: Early Evidence for Motivated Skepticism in Audience Message Processing of Spreadable Political Media." *Atlantic Journal of Communication* 0 (0): 1–15. https://doi.org/10.1080/15456870.2019.1614589

Jenkins, Richard W. 2002. "How Campaigns Matter in Canada: Priming and Learning as Explanations for the Reform Party's 1993 Campaign Success." *Canadian Journal of Political Science* 35 (2): 383–408. https://doi.org/10.1017/s0008423902778281

Journell, Wayne, and Christopher H. Clark. 2019. "Political Memes and the Limits of Media Literacy." In *Unpacking Fake News: An Educator's Guide to Navigating the Media with Students,* edited by Wayne Journell, 109-125. New York, NY: Teachers College Press.

Knobel, Michele, and Colin Lankshear. 2007. "Online Memes, Afinities, and Cultural Production." In *A New Literacies Sampler,* edited by Michele Knobel and Colin Lankshear, 199-227. New York, NY: Peter Lang.

Lalancette, Mireille, and Tamara A. Small. 2020a. " 'Justin Trudeau – I Don't Know Her': An Analysis of Leadership Memes of Justin Trudeau." *Canadian Journal of Communication* 45 (2): 305–25. https://doi.org/10.22230/cjc.2020v45n2a3445

Lalancette, Mireille, and Tamara A. Small. 2020b "Not a Leader! Theresa May's Leadership Through the Lens of Internet Memes." In *Social Media and the new Politics of Political Leadership: Case Studies in Political Communication*, edited by David Taras and Richard Davis, 202-219. New York: Routledge.

Lalancette, Mireille, Vincent Raynauld, and Erin Crandall, eds. 2019. *What's Trending in Canadian Politics? Understanding Transformations in Power, Media, and the Public Sphere*. Vancouver, BC: UBC Press.

Lalancette, Mireille, Tamara A. Small, and Maxime Pronovost. 2019. "Trolling Stephen Harper: Internet Memes as Online Activism." In *What's Trending in Canadian Politics? Understanding Transformations in Power, Media, and the Public Sphere,* edited by Mireille Lalancette, Vincent Raynauld, and Erin Crandall, 106-126. Vancouver, BC: UBC Press.

LaMarre, Heather L., Kristen D. Landreville, and Michael A. Beam. 2009. "The Irony of Satire: Political Ideology and the Motivation to See What You Want to See in the Colbert Report." *International Journal of Press/Politics* 14 (2): 212–31. https://doi.org/10.1177/1940161208330904

LaMarre, Heather L., Kristen D. Landreville, Dannagal Young, and Nathan Gilkerson. 2014. "Humor Works in Funny Ways: Examining Satirical Tone as a Key Determinant in Political Humor Message Processing." *Mass Communication and Society* 17 (3): 400–423. https://doi.org/10.1080/15205436.2014.891137

Lodge, Milton, and Charles S. Taber. "Motivated Political Reasoning," In *The Rationalizing Voter,* 149-169. New York, NY: Cambridge University Press, 2013.

Lukianova, Natalia, Maria Shteynman, and Elena Fell. 2019. "Political Memes in the 2018 Presidential Campaigns in Russia : Dialogue and Conflict" 10 (1): 71–86. https://doi.org/10.1386/ejpc.10.1.71

Marcus, George E., Michael MacKuen, and W. Russell Neuman. 2000. *Affective intelligence and political judgment.* Chicago: The University of Chicago Press.

Marland, Alex, and Susan Delacourt. 2020. "Introduction: Constantly Shopping for Votes." In *Inside the Campaign: Managing Elections in Canada,* edited by Alex Marland and Thierry Giasson, 3-27. Vancouver: UBC Press.

Marland, Alex, Thierry Giasson, and Anna Lennox Esselment, eds. 2017. *Permanent Campaigning in Canada*. Vancouver: UBC Press.

Marland, Alex, Thierry Giasson, and Andrea Lawlor, eds. 2018. *Political Elites in Canada: Power amd Influence in Instantaneous Times*. Vancouver: UBC Press.

Marland, Alex, Thierry Giasson, and Jennifer Lees-Marshment, eds. 2012. *Political Marketing in Canada*. Vancouver: UBC Press.

Marland, Alex, Thierry Giasson, and Tamara A. Small, eds. 2014a. *Political Communication in Canada: Meet the Press and Tweet the Rest.* Vancouver: UBC Press.

Marland, Alex, Thierry Giasson, and Tamara A. Small. 2014b. "Political Communication and Marketing in Canada: Challenges for Democracy." In *Political Communication in Canada: Meet the Press and Tweet the Rest,* edited by Alex Marland, Thierry Giasson, and Tamara A. Small, 229-246. Vancouver: UBC Press.

Matthews, J. Scott. 2010. "Enlightenment, Equalization, or What? Campaigns, Learning, and the Economy in Canadian Elections." In *Voting Behaviour in Canada*, edited by Cameron D. Anderson and Laura B. Stephenson, 211-241. Vancouver: UBC Press.

McIntosh, Emma. 2019a "Explainer: The rise of Canada's right-wing meme pages." *Canada's National Observer*, October 17, 2019. Accessed November 12, 2019. https://www.nationalobserver.com/2019/10/17/analysis/explainer-rise-canadas-right-wing-meme-pages

McIntosh, Emma. 2019b "Did memes affect the 2019 federal election?" *Canada's National Observer*, October 28, 2019. Accessed November 12, 2019. https://www.nationalobserver.com/2019/10/28/news/did-memes-affect-2019-federal-election

McKelvey, Fenwick, Jeremy Blackburn, John F. Gray, Scott DeJong, Janna Frenzel, and Quinn Valencourt. 2020. "Memes in the 2019 Canadian Elections. That's it. That's the Headline." In *Understanding the Digital Ecosystem: Findings from the 2019 Federal Election,* edited by Elizabeth Dubois and Taylor Owen. Accessed March 6, 2020. https://www.digitalecosystem.ca/report

McKelvey, Fenwick, Marianne Côté, and Vincent Raynauld. 2018. "Scandals and Screenshots: Social Media Elites in Canadian Politics." In *Political Elites in Canada: Power and Influence in Instantaneous Times,* edited by Alex Marland, Thierry Giasson, and Andrea Lawlor, 204-222. Vancouver, BC: UBC Press.

Mendelsohn, Matthew. 1994. "The Media's Persuasive Effects: The Priming of Leadership in the 1988 Canadian Election." *Canadian Journal of Political Science* 27 (1): 81–97. https://doi.org/10.1017/S0008423900006223

Milner, Ryan M. 2016. *The World Made Meme: Public Conversations and Participatory Media*. Cambridge, MA: MIT Press.

Miltner, Kate M. 2014. "'There's No Place for Lulz on LOLCats': The Role of Genre, Gender, and Group Identity in the Interpretation and Enjoyment of an Internet Meme". *First Monday* 19 (8). https://doi.org/10.5210/fm.v19i8.5391

Miltner, Kate M. 2018. "Internet Memes." In *The SAGE handbook of Social Media*, edited by Jean Burgess, Alick Marwick and Thomas Poell. London: SAGE Publications, 412-428.

Morin-Chassé, Alexandre, and Erick Lachapelle. "Experimental Research." In Loleen Berdahl and Keith Archer, *Explorations: Conducting Empirical Research in Canadian Political Science,* Third Edition. Don Mills: Oxford University Press, 2015.

Morris, Jonathan S. 2009. "The Daily Show with Jon Stewart and Audience Attitude Change during the 2004 Party Conventions." *Political Behavior* 31 (1): 79–102. https://doi.org/10.1007/s11109-008-9064-y

Moy, Patricia, Michael A. Xenos, and Verena K. Hess. 2006. "Priming Effects of Late-Night Comedy." *International Journal of Public Opinion Research* 18 (2): 198–210. https://doi.org/10.1093/ijpor/edh092

Nabi, Robin L., Emily Moyer-Gusé, and Sahara Byrne. 2007. "All Joking aside: A Serious Investigation into the Persuasive Effect of Funny Social Issue Messages." *Communication Monographs* 74 (1): 29–54. https://doi.org/10.1080/03637750701196896

Nee, Rebecca Coates, and Mariana De Maio. 2019. "A 'Presidential Look'? An Analysis of Gender Framing in 2016 Persuasive Memes of Hillary Clinton." 63 (2): 304–21. https://doi.org/10.1080/08838151.2019.1620561

Nelson, Shannon C. "Feeling Thermometer." In *Encyclopedia of Survey Research Methods,* edited by Paul J. Lavrakas. Thousand Oaks: SAGE Publications Inc., 2011.

Petty, Richard E., and John T. Cacioppo. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York, NY: Springer New York, 1986.

Polk, Jeremy, Dannagal G. Young, and R. Lance Holbert. 2009. " Humor Complexity and Political Influence: An Elaboration Likelihood Approach to the Effects of Humor Type in The Daily Show with Jon Stewart." *Atlantic Journal of Communication* 17 (4): 202–19. https://doi.org/10.1080/15456870903210055

Public Services and Procurement Canada. "Standards and Guidelines for Sampling." *Governement of Canada*, November 19, 2014. Accessed October 3, 2020. https://www.tpsgc-pwgsc.gc.ca/rop-por/rapports-reports/comiteenligne-panelonline/page-03-eng.html

Raynauld, Vincent, Mireille Lalancette, Erin Crandall. 2019. "Introduction: Identifying and Studying Trends in Canadian Politics." In *What's Trending in Canadian Politics? Understanding Transformations in Power, Media, and the Public Sphere,* edited by Mireille Lalancette, Vincent Raynauld, and Erin Crandall, 3-21. Vancouver, BC: UBC Press.

Ross, Andrew S, and Damian J Rivers. 2017a. "Internet Memes as Polyvocal Political Participation." In *The Presidency and Social Media: Discourse, Disruption, and Digital Democracy in the 2016 Presidential Election*, edited by Dan Schill and John Allen Hendricks, 285–308. New York, NY: Routledge. https://doi.org/10.4324/9780203155080

Ross, Andrew S, and Damian J Rivers. 2017b. "Discourse , Context and Media Digital Cultures of Political Participation : Internet Memes and the Discursive Delegitimization of the 2016 U . S Presidential Candidates." *Discourse, Context and Media* 16: 1–11. https://doi.org/10.1016/j.dcm.2017.01.001

Roy, Jason, and Christopher Alcantara. 2016. "Fighting Fire with Fire: The Implications of (Not) Going Negative in a Multiparty Election Campaign." *Canadian Journal of Political Science* 49 (3): 473–97. https://doi.org/10.1017/S0008423916000548

Ruble, Racheal. "Experiments and Experimental Design." In *The SAGE Encyclopedia of Communication Research Methods*, edited by Mike Allen, 478-480. Thousand Oaks: SAGE Publications Inc., 2018.

Sci, Susan A., and David R. Dewberry. 2015. "Something Funny? The Laughing Joe Biden Meme as Digital Topi within Political Argumentation." In *Disturbing Argument*, edited by Catherine H. Palczewski, 232–237. Abingdon: Routledge, Taylor & Francis Group.

Sciarpelletti, Laura. “How memes could be the new political attack ads.” *CBC News*, July 5, 2019. Accessed July 30, 2019. https://www.cbc.ca/news/canada/british-columbia/memes-politics-ads-justin-trudeau-1.5198271

Shifman, Limor. 2014. *Memes in Digital Culture*. Cambridge, MA: MIT Press.

Small, Tamara A., Thierry Giasson, and Alex Marland. 2014. “The Triangulation of Canadian Political Communication.” In *Political Communication in Canada: Meet the Press and Tweet the Rest*, edited by Alex Marland, Thierry Giasson, and Tamara A. Small, 3-23. Vancouver: UBC Press.

Statistics Canada, 2016 Census of Population, “Census Profile, 2016 Census”, Retrieved on April 28, 2020, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang = E&Geo1 = PR&Code1 = 01&Geo2 = PR&Code2 = 01&Data = Count&SearchText = Canada&SearchType = Begins&SearchPR = 01&B1 = Visible%20minority&TABID = 1

Statistics Canada, “Population estimates, quarterly”, April 28, 2020, Retrieved on April 28, 2020, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid = 1710000901.

Statistics Canada, “Population estimates on July 1st, by age and sex”, April 28, 2020, Retrieved on April 28, 2020, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid = 1710000501

Syed, Fatima. “Memes, fake news and partisan ads.” *Canada’s National Observer*, October 21, 2019. Accessed November 12, 2019. https://www.nationalobserver.com/2019/10/21/analysis/memes-fake-news-and-partisan-ads

Tay, Geniesa. 2014. “Binders Full of LOLitics: Political Humour, Internet Memes, and Play in the 2012 US Presidential Election (and Beyond).” *European Journal of Humour Research* 2 (4): 46–73. https://doi.org/10.7592/ejhr2014.2.4.tay

Tenove, Chris. “The meme-ification of politics: Politicians & their ‘lit’ memes.” *The Conversation*, February 4, 2019. Accessed July 30, 2019. http://theconversation.com/the-meme-ification-of-politics-politicians-and-their-lit-memes-110017

Tikkanen, Stephanie. “Two-Group Pretest-Posttest Design.” In *The SAGE Encyclopedia of Communication Research Methods*, edited by Mike Allen, 1798-1799. Thousand Oaks: SAGE Publications Inc., 2018.

Weise, Richard E. 1996. “Partisan Perceptions of Political Humor.” *Humor* 9 (2): 199–207. https://doi.org/10.1515/humr.1996.9.2.199

Wettstein, Martin, and Werner Wirth. 2017. “Media Effects: How Media Influence Voters.” *New Swiss Political Science Review* 23 (3): 262-269. https://doi.org/10.1111/spsr.12263

Wiggins, Bradley E. 2019. *The Discursive Power of Memes in Digital Culture*. *The Discursive Power of Memes in Digital Culture*. New York, NY: Routledge.

Woods, Heather Suzanne, and Leslie A. Hahner. 2019. *Make America Meme Again: The Rhetoric of the Alt-Right*. New York, NY: Peter Lang.

Young, Dannagal Goldthwaite. 2004. "Late-Night Comedy in Election 2000: Its Influence on Candidate Trait Ratings and the Moderating Effects of Political Knowledge and Partisanship." *Journal of Broadcasting and Electronic Media*. https://doi.org/978-92-9059-264-8

Young, Dannagal Goldthwaite. 2006. "Late-Night Comedy and the Salience of the Candidates' Caricatured Traits in the 2000 Election." *Mass Communication and Society* 9 (3): 339–66. https://doi.org/10.1207/s15327825mcs0903_5

Young, Dannagal Goldthwaite. 2008. "The Privileged Role of the Late-Night Joke: Exploring Humor's Role in Disrupting Argument Scrutiny." *Media Psychology* 11 (1): 119–42. https://doi.org/10.1080/15213260701837073

Young, Dannagal Goldthwaite. 2012. "A Fip-Fopper and a Dumb Guy Walk into a Bar: Political Humor and Priming in the 2004 Campaign." *Humor* 25 (3): 215–31. https://doi.org/10.1515/humor-2012-0012

APPENDICES

Appendix A: Literature Review on the Effects of Political Humour

Theories
AGENDA SETTING AND PRIMING (Young 2004, 2006, 2012; Moy, Xenos and Hess 2006; Esralew and Young 2012; Baumgartner and Morris 2008; Baumgartner, Morris and Walth 2012; Baumgartner, Morris and Coleman 2018) MESSAGE PROCESSING Elaboration likelihood model - argument scrutiny (Young 2004; Polk, Young and Holbert 2009; LaMarre et al. 2014; Holbert et al. 2011; Baumgartner 2007, 2008; Baumgartner and Morris 2008; Baumgartner, Morris and Coleman 2018) Elaboration likelihood model - message processing ability and motivation (Young 2008; Polk, Young and Holbert 2009; Nabi, Moyer-Gusé, and Byrne 2007; LaMarre et al. 2014; Holbert et al. 2011) Cognitive elaboration (Young 2004, 2006, 2008) EMOTIONS Affective intelligence theory (Huntington 2017) PRECONCEPTIONS Biased information processing (LaMarre, Landreville and Beam 2009) Partisan Motivated Reasoning theory (Huntington 2017, 2019) Social and Group identity theories (LaMarre, Landreville and Beam 2009) Disposition theory of humor (Becker and Haller 2014; Becker 2012, 2014a, 2014b) Superiority theory of humor (Weise 1996) HUMOUR Affinity for political humour (Becker 2014a, 2014b) Self-directed vs Other-Disparaging Humour (Baumgartner, Morris and Coleman 2018; Becker and Haller 2014; Becker 2012; Baumgartner 2008) Gaining political knowledge through exposure to political humour and increased recall (Young 2006, 2012; Baumgartner and Morris 2006) Impact on political participation, political efficacy and trust, cynicism (Becker 2014a; Baumgartner and Morris 2006, 2008)

Humourous persuasion
(Morris 2009; Young 2004, 2008; Nabi, Moyer-Gusé, and Byrne 2007; Holbert et al. 2011; Baumgartner and Morris 2006, 2008)

Variables

DEMOGRAPHICS
Sociodemographics (i.e education, age, race, gender, income)
(Morris 2009; Moy, Xenos and Hess 2006; LaMarre, Landreville and Beam 2009; Baumgartner, Morris and Coleman 2018; Baumgartner 2007, 2008, 2013; Huntington 2017; Esralew and Young 2012; Becker and Haller 2014; Becker 2012, 2014a, 2014b; Baumgartner and Morris 2006, 2008; Baumgartner, Morris and Walth 2012)

Partisanship or Party ID
(Morris 2009; Young 2004, 2006; Weise 1996; Baumgartner, Morris and Coleman 2018; Baumgartner 2007, 2008, 2013; Esralew and Young 2012; Becker and Haller 2014; Becker 2012, 2014a, 2014b; Baumgartner and Morris 2006, 2008; Baumgartner, Morris and Walth 2012)

Political ideology
(Morris 2009; LaMarre, Landreville and Beam 2009; Holbert et al. 2011; Baumgartner, Morris and Coleman 2018; Huntington 2017, 2019; Becker 2014a, 2014b; Baumgartner 2013; Baumgartner, Morris and Walth 2012)

POLITICAL INVOLVEMENT
Political knowledge
(Young 2004, 2006, 2012; Baumgartner, Morris and Coleman 2018; Baumgartner 2007, 2008; Becker 2012; Baumgartner and Morris 2008; Baumgartner, Morris and Walth 2012)

Political participation or engagement
(Huntington 2017; Baumgartner and Morris 2008)

Political interest or attention
(Young 2006; Baumgartner 2007, 2008, 2013; Huntington 2017; Esralew and Young 2012; Becker and Haller 2014; Becker 2012; Baumgartner and Morris 2008)

Cynicism
(Young 2006; Baumgartner and Morris 2006)

Political efficacy
(Polk, Young and Holbert 2009; Becker 2014a, 2014b; Baumgartner and Morris 2006, 2008)

Political trust
(Baumgartner and Morris 2006, 2008)

EXPOSURE
Media or Political humour exposure (i.e comedy shows, news stories)
(Morris 2009; Young 2004, 2006; Moy, Xenos and Hess 2006; Baumgartner, Morris and Coleman 2018; Baumgartner 2007; Huntington 2017; Becker 2012, 2014a, 2014b; Baumgartner and Morris 2006, 2008; Baumgartner, Morris and Walth 2012)

Candidate or Campaign exposure
(Baumgartner 2013; Baumgartner, Morris and Walth 2012)

Pop culture knowledge
(Huntington 2017)

Media learning
(Becker 2012)

Media Confidence
(Baumgartner and Morris 2006)

EVALUATIONS
Candidates or Politicians
(Morris 2009; Young 2004, 2006, 2008, 2012; Moy, Xenos and Hess 2006; Holbert et al. 2011; Baumgartner, Morris and Coleman 2018; Baumgartner 2007, 2008, 2013; Esralew and Young 2012; Becker and Haller 2014; Becker 2012; Baumgartner and Morris 2006, 2008; Baumgartner, Morris and Walth 2012)

Issues
(Young 2012, 2006, 2008; Moy, Xenos and Hess 2006; Huntington 2017; Becker and Haller 2014; Baumgartner and Morris 2008)

Media representations
(Becker and Haller 2014)

MESSAGE
Argument scrutiny and counter-argumentation
(Young 2008; Polk, Young and Holbert 2009; Nabi, Moyer-Gusé, and Byrne 2007; LaMarre et al. 2014; Holbert et al. 2011; Huntington 2017, 2019)

Message discounting
(Young 2008; Nabi, Moyer-Gusé, and Byrne 2007; LaMarre et al. 2014; Huntington 2017, 2019; Becker and Haller 2014)

Humour comprehension
(Young 2008)

Message processing (i.e motivation, attention, resource allocation, perception)
(Nabi, Moyer-Gusé, and Byrne 2007; Polk, Young and Holbert 2009; LaMarre et al. 2014; LaMarre, Landreville and Beam 2009)

Persuasion
(Polk, Young and Holbert 2009; Huntington 2017, 2019)

Emotions
(Huntington 2017)

Message agreement
(LaMarre et al. 2014; Huntington 2017, 2019)

Third-person effect
(Huntington 2017)

CONTENT
Humour type (i.e satire, irony, self-disparaging, other-disparaging)
(Polk, Young and Holbert 2009; LaMarre et al. 2014; Holbert et al. 2011; Baumgartner, Morris and Coleman 2018)

Source liking or perceptions
(Nabi, Moyer-Gusé, and Byrne 2007; LaMarre, Landreville and Beam 2009)

Perceived Humour, Humour Appreciation and Humour affinity
(Young 2008; Nabi, Moyer-Gusé, and Byrne 2007; LaMarre, Landreville and Beam 2009; Holbert et al. 2011; Huntington 2017; Becker and Haller 2014; Becker 2014a, 2014b)

Humour orientation
(Becker 2014a)

Stimulus
HUMOROUS Comedy or talk shows videos (Morris 2009; LaMarre et al. 2014; LaMarre, Landreville and Beam 2009; Becker 2012; Baumgartner and Morris 2006, 2008) Non-visual Jokes (Young 2012; Young 2008; Huntington 2017, 2019) Sketch comedy (Esralew and Young 2012; Baumgartner, Morris and Walth 2012) Cartoons (Weise 1996; Baumgartner 2008) Opinon-Editorial (Holbert et al. 2011) Monologues (Nabi, Moyer-Gusé, and Byrne 2007) Videos on political issues (LaMarre et al. 2014) Videos on politicians and non-politicians (Baumgartner, Morris and Coleman 2018; Becker and Haller 2014) Parody videos (Becker 2014a, 2014b; Baumgartner 2007) Political Memes (Huntington 2017, 2019) Non-political memes (Huntington 2017, 2019) Advertisements (Baumgartner 2013) NON-HUMOROUS Traditional news (Morris 2009; Becker and Haller 2014; Becker 2012; Baumgartner and Morris 2006, 008) Interview (Esralew and Young 2012) Written political messages (Young 2008, 2012) Music videos (Becker 2014a, 2014b) Attack ads (Becker 2012)

Methods
Survey (Morris 2009; Young 2004, 2006; Moy, Xenos and Hess 2006; LaMarre, Landreville and Beam 2009; Baumgartner, Morris and Walth 2012) Online experiment (Young 2008, 2012; LaMarre et al. 2014; Baumgartner, Morris and Coleman 2018; Baumgartner 2007; Huntington 2017, 2019; Esralew and Young 2012; Becker 2014a, 2014b; Baumgartner 2008, 2013) Experiment (Weise 1996; Polk, Young and Holbert 2009; Nabi, Moyer-Gusé, and Byrne 2007; Holbert et al. 2011; Becker and Haller 2014; Becker 2012; Baumgartner and Morris 2006, 2008)

Appendix B: Online Experiment Survey Questionnaire

1. In what year were you born?

2. Do you self-identify as:
   Woman
   Man
   Other (please specify)
   Prefer not to say

3. Which of the following best represents your racial or ethnic heritage? Choose all that apply
   - White or European
   - Black, African, or Afro-Caribbean
   - Latino or Hispanic
   - East Asian
   - South Asian or Indian
   - Middle Eastern or Arab
   - First Nations, Metis, Indigenous or Inuit
   - Other (please specify)
   - Prefer not to say

4. Which province or territory do you live in?
   Alberta
   British Columbia
   Saskatchewan
   Manitoba
   New Brunswick
   Newfoundland and Labrador
   Northwest Territories
   Nova Scotia
   Nunavut
   Ontario
   Prince Edward Island
   Québec
   Yukon

5. Which of the following labels best describes you?
   a. I am a progressive
   b. I am a conservative
   c. I am a moderate

d. I am an independent
e. I am not political

6. When it comes to political parties, you generally identify as a...
    - Liberal
    - Conservative
    - New Democrat
    - Green
    - People's Party
    - Bloc Québécois
    - Other (please specify)
    - None of the above

7. What is the highest level of school you have completed or the highest degree you have received?
   Less than high school diploma
   High school diploma or equivalency
   Trade or Apprenticeship certificate
   College or CEGEP diploma
   Bachelor degree
   Graduate degree

8. How long have you lived in Canada?
   Less than a year
   1-5 years
   6-10 years
   More than 10 years
   All my life

9. During the 2019 Canadian Federal Election campaign, have you done any of the following? Check all that apply.
- Supported a local candidate or party campaign (i.e. made a donation, volunteered, attended a rally, displayed a lawn sign)
- Followed parties, candidates or leaders' pages on social media
- Posted comments or shared content about the campaign online or on social media (i.e. on candidates, platform promises, parties, leaders, government)
- Talked about the campaign with friends and family
- Followed political news coverage (i.e. debate, speeches, election results)
- None of the above

10. If you voted in the 2019 Canadian federal election, which party did you vote for?
    - Liberal Party of Canada
    - Conservative Party of Canada
    - New Democratic Party (NDP)
    - Green Party of Canada
    - People's Party of Canada
    - Bloc Québécois
    - Other (please specify)
    - I did not vote

11. On a scale of 1 to 7 (1 = strongly agree; 7 = strongly disagree), generally, do you agree or disagree that in our society…
    a) We should focus more on protecting freedom of expression instead of protecting people's feelings.
    b) When it comes to race, too many people are easily offended.
    c) People like me cannot express our views on certain groups if we are not a part of that group.

12. On a scale of 1 to 7 (1 = strongly agree; 7 = strongly disagree), generally, do you agree or disagree that governments should…
    a. Put a price on carbon
    b. Ban single-use plastics
    c. Phase out non-renewable energy (i.e. coal, oil, gas)
    d. Plant trees
    e. Protect natrual lands and oceans

13. On a scale of 0 to 100 (0 = very unfavorable; 100 = very favorable; don't know option), how do you feel right now about each of the following <u>parties</u>:
    - Liberal Party of Canada
    - Conservative Party of Canada
    - New Democratic Party (NDP)
    - Green Party of Canada
    - People's Party of Canada
    - Bloc Québécois

14. On a scale of 0 to 100 (0 = very unfavorable; 100 = very favorable; don't know option), how do you feel right now about each of the following <u>politicians:</u>
    - Justin Trudeau
    - Andrew Scheer
    - Jagmeet Singh

- Elizabeth May
- Maxime Bernier
- Yves-François Blanchet

15. On a scale of 0 to 10 (0 = not at all likely; 10 = very likely; don't know option), if a federal election was held today, what is the likelihood you would vote for each of the following party:
    - Liberal Party of Canada
    - Conservative Party of Canada
    - New Democratic Party (NDP)
    - Green Party of Canada
    - People's Party of Canada
    - Bloc Québécois

INSTRUCTIONS: In this next section, you will be shown four images. Please look at them closely.

Note: **Once the participants have clicked next, they will be shown four images according to one of the two groups they have been randomly assigned to.**

Group 1
Insert images in order
- Meme 1 – Justin Trudeau/Blackface Scandal
- Meme 2 – Andrew Scheer/Blackface Scandal
- Meme 3 – Justin Trudeau/Climate Change Issue
- Meme 4 – Andrew Scheer/Climate Change Issue

Group 2
Insert images in order
- Meme 5 – Liberal Party/Blackface Scandal
- Meme 6 – Conservative Party/Blackface Scandal
- Meme 7 – Liberal Party/Climate Change Issue
- Meme 8 – Conservative Party/Climate Change Issue

INSTRUCTIONS: You will now be asked to answer questions about the images you just saw.

16. Taking no more than one minute to do so, explain your first thoughts after seeing these images.

17. On a scale of 0 to 100 (0 = very unfavorable; 100 = very favorable; don't know option), how do you feel right now about each of the following parties:
    - Liberal Party of Canada
    - Conservative Party of Canada
    - New Democratic Party (NDP)
    - Green Party of Canada
    - People's Party of Canada
    - Bloc Québécois

18. On a scale of 0 to 100 (0 = very unfavorable; 100 = very favorable; don't know option), how do you feel right now about each of the following politicians:
    - Justin Trudeau
    - Andrew Scheer
    - Jagmeet Singh
    - Elizabeth May
    - Maxime Bernier
    - Yves-François Blanchet

19. On a scale of 0 to 10 (0 = not likely at all; 10 = very likely; don't know option), if a federal election was held today, what is the likelihood you would vote for each of the following party?
    Liberal Party of Canada
    Conservative Party of Canada
    New Democratic Party (NDP)
    Green Party of Canada
    People's Party of Canada
    Bloc Québécois

INSTRUCTION: *For this next section, you will be presented with all the images you have seen earlier, and asked to answer a series of questions on each.*

Group 1

1. Insert image - Meme 1 – Justin Trudeau/Blackface Scandal

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.

This image is negative.
This image is accurate.
This image is only a joke.
The image's message is weak.
I agree with the image's message.
I know about the topic this image is refering to.

If you would see this image on social media would you "like" it?

Yes
No
I don't know

If you would see this image on social media would you "share" it?

Yes
No
I don't know

Did you see this image during the 2019 Canadian federal election campaign?

Yes
No
I don't remember

2. Insert image - Meme 2 – Andrew Scheer/Blackface Scandal

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.
This image is negative.
This image is accurate.
Thisimage is only a joke.
The image's message is weak.
I agree with the image's message.
I know about the topic this image is refering to.

If you would see this image on social media would you "like" it?

Yes
No
I don't know

If you would see this image on social media would you “share” it?

Yes
No
I don’t know

Did you see this image during the 2019 Canadian federal election campaign?

Yes
No
I don’t remember

3. Insert image – Meme 3 - Justin Trudeau/Climate Change Issue

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.
This image is negative.
This image is accurate.
This image is only a joke.
The image’s message is weak.
I agree with the image’s message.
I know about the topic this image is refering to.

If you would see this image on social media would you “like” it?

Yes
No
I don’t know

If you would see this image on social media would you “share” it?

Yes
No
I don’t know

Did you see this image during the 2019 Canadian federal election campaign?

Yes
No
I don’t remember

4. Insert image - Meme 4 – Andrew Scheer/Climate Change Issue

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.
This image is negative.
Thisimage is accurate.
This image is only a joke.
The image's message is weak.
I agree with the image's message.
I know about the topic this image is refering to.

If you would see this image on social media would you "like" it?

Yes
No
I don't know

If you would see this image on social media would you "share" it?

Yes
No
I don't know

Did you see this image during the 2019 Canadian federal election campaign?

Yes
No
I don't remember

Group 2

1. Insert image - Meme 5 – Liberal Party/Blackface Scandal

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.
This image is negative.
This image is accurate.
This image is only a joke.

The image's message is weak.
I agree with the image's message.
I know about the topic this image is refering to.

If you would see this image on social media would you "like" it?

Yes
No
I don't know

If you would see this image on social media would you "share" it?

Yes
No
I don't know

Did you see this image during the 2019 Canadian federal election campaign?

Yes
No
I don't remember

2. Insert image - Meme 6 – Conservative Party/Blackface Scandal

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.
This image is negative.
This image is accurate.
This image is only a joke.
This image's message is weak.
I agree with the image's message.
I know about the topic this image is refering to.

If you would see this image on social media would you "like" it?

Yes
No
I don't know

If you would see this image on social media would you “share” it?

Yes
No
I don’t know

Did you see this image during the 2019 Canadian federal election campaign?

Yes
No
I don’t remember

3. Insert image - Meme 7 – Liberal Party/Climate Change Issue

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.
This image is negative.
This image is accurate.
This image is only a joke.
The image’s message is weak.
I agree with the image’s message.
I know about the topic this image is refering to.

If you would see this image on social media would you “like” it?

Yes
No
I don’t know

If you would see this image on social media would you “share” it?

Yes
No
I don’t know

Did you see this image during the 2019 Canadian federal election campaign?

Yes
No
I don’t remember

4. Insert image - Meme 8 – Conservative Party/Climate Change Issue

On a scale of 1 to 7(1 = strongly disagree, 7 = strongly agree), do you agree or disagree with each of these statements:

This image is persuasive.
This image is funny.
This image is negative.
This image is accurate.
This image is only a joke.
The image's message is weak.
I agree with the image's message.
I know about the topic this image is refering to.

If you would see this image on social media would you "like" it?

Yes
No
I don't know

If you would see this image on social media would you "share" it?

Yes
No
I don't know

Did you see this image during the 2019 Canadian federal election campaign?

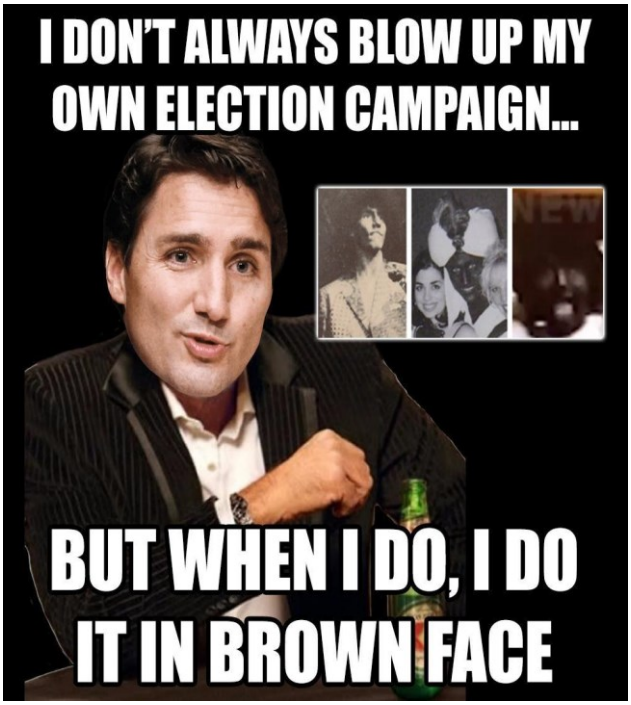
Yes
No
I don't remember

Appendix C: Political Memes Used as Stimuli

Meme 1: Justin Trudeau/Blackface Scandal

Meme type: Image Macro, The Most Interesting Man in the World
(see Know Your Meme entry, https://knowyourmeme.com/memes/the-most-interesting-man-in-the-world)

Captions : “I don’t always blow up my own election campaign… but when I do, I do it in brown face”

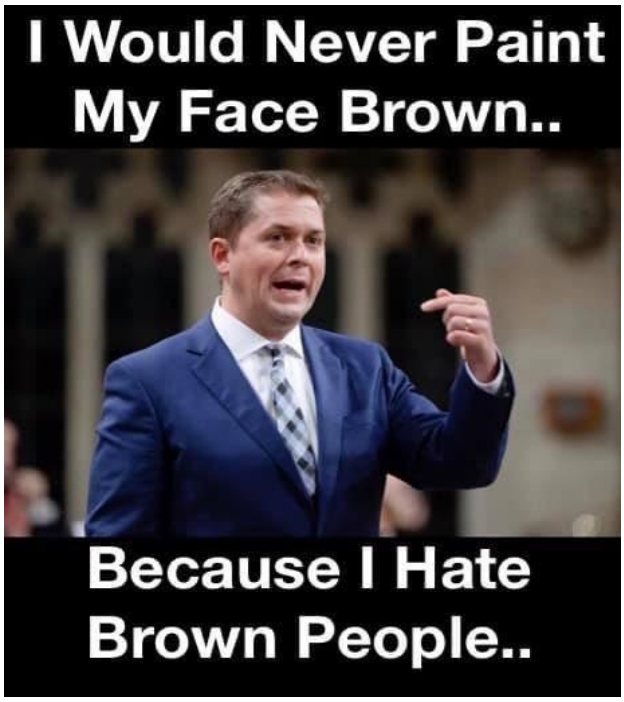


Source: Twitter, Canada Proud, @WeAreCanProud, September 19, 2019.
https://twitter.com/WeAreCanProud/status/1174720134008713217?s = 20

Meme 2: Andrew Scheer/Blackface Scandal

Meme type: Image Macro, (see Know Your Meme entry, https://knowyourmeme.com/memes/image-macros)

Captions : “I Would Never Paint My Face Brown.. Because I Hate Brown People..”



Source: Twitter, @Xheaudoil, September 21, 2019. https://twitter.com/Xheaudoil/status/1175402349935964160?s = 20

Meme 3: Justin Trudeau/Climate Change Issue

Meme type: Image Macro, Comparison (see Know Your Meme entry, https://knowyourmeme.com/memes/image-macros)

Captions : “We’re destroying the planet. Pollution shouldn’t be free. That’s better. Nowe we’re saving the world.”

Source: Twitter, @Arc_Light, October 1, 2019. https://twitter.com/Arc_Light/status/1179250464774393858?s = 20

Meme 4: Andrew Scheer/Climate Change Issue

Meme type: Object labeling, I think I Forgot Something, Two and Half Men (see Know Your Meme entry, https://knowyourmeme.com/memes/i-think-i-forgot-something)

Captions : Labeled from left to right. “Andrew Scheer: I think I forgot something. Stephen Harper: If you forgot, then it wasn’t important. Andrew Scheer: Yeah, you’re right. Climate policy.”

Source: Facebook, National Meme Board of Canada, September 30, 2019. https://www.facebook.com/national.meme.board/photos/a.692489357749386/997534767244842

Meme 5: Liberal Party/Blackface Scandal

Meme type: And Just Like That, Forest Gump (see imgflip meme generator, https://imgflip.com/meme/And-Just-Like-That)

Captions : “And just like that, Liberal supporters don’t think blackface is racist.”

Source: Twitter, @ZansForCans, September 22, 2019.
https://twitter.com/ZansForCans/status/1175939539350818816?s = 20

Meme 6: Conservative Party/Blackface Scandal

Meme type: Comic, Daily Struggle (see Know Your Meme entry, https://knowyourmeme.com/memes/daily-struggle)

Captions: “People should be forgiven for past mistakes. Even for racism. Trudeau did brownface!!” Superimposed Conservative party logo.

Source: Twitter, @Tim_Chan_, September 19, 2019. https://twitter.com/Tim_Chan_/status/1174683621652860928?s = 20

Meme 7: Liberal Party/Climate Change Issue

Meme type: Object labeling, Three-Headed Dragon (see Know Your Meme entry, https://knowyourmeme.com/memes/three-headed-dragon)

Captions: Labeled from left to right. “Green climate plan. Ndp climate plan. Liberal climate plan.”

Source: Facebook, Leftist Memes for New Democrat Teens, October 6, 2019. https://www.facebook.com/photo.php?fbid = 1275482462631929&set = gm.1347402578744831&type = 3&theater&ifg = 1

Meme 8: Conservative Party/Climate Change Issue

Meme type: Ralph Wiggum, The Simpsons (see Know Your Meme entry, https://knowyourmeme.com/memes/subcultures/the-simpsons)

Captions : Conservative logo on drawing. “I have a carbon plan.”

Source: Facebook, National Meme Board of Canada, September 22, 2019.
https://www.facebook.com/national.meme.board/photos/a.692489354416053/992187787779540/?type = 3&theater

Appendix D: Sample Overview

Variable	Categories	Overall n = 550	Treatment Group 1 n = 273	Treatment Group 2 n = 277
Gender	Woman	57.5%	57.1%	57.8%
	Man	42.2%	42.5%	41.9%
	Other	0.2%	0%	0.4%
	Prefer not to say	0.2%	0.4%	0.4%
Ethnicity/Race	*Number of participants*	*526*	*263*	*263*
	White or Mixed	78.9%	79.8%	77.9%
	Other ethnicities and races	21.1%	20.2%	22.1%
Region	West (AB, BC, SK, MB)	31.9%	32.6%	31%
	Ontario	39.1%	40.3%	37.9%
	Québec	22.5%	21.2%	23.8%
	Maritimes (NB, NL, NS, PEI)	6.5%	5.9%	7.2%
Ideology	Progressive	20.4%	20.9%	19.9%
	Conservative	26%	23.9%	28.2%
	Moderate	28.5%	29.3%	27.8%
	Independent	10.7%	10.6%	10.8%
	Not political	14.4%	15.4%	13.4%
Party Identification	Liberal	30%	30.4%	29.6%
	Conservative	30%	29.7%	30.3%
	Other (NDP, Green, PPC, BQ, other)	27.2%	26.8%	27.8%
	None	12.7%	13.2%	12.3%
Education level	High School or less	28.9%	27.1%	30.7%
	Trade/Apprenticeship or College	32.6%	35.2%	30%
	University	38.5%	37.8%	39.3%
Time in Canada	Part of their lives	25.1%	24.5%	25.6%
	All their lives	74.9%	75.5%	74.4%
Age	*Number of participants*	*541*	*270*	*271*
	Born in 1980 or earlier (Silent Generation, Baby Boomers, Gen X)	53%	54.8%	51.3%
	Born in 1981 or later (Millenials, GenZ)	46.9%	45.2%	48.7%
Political correctness issue (index)	*Number of participants*	*545*	*273*	*272*
	High critical political correctness	9.9%	9.5%	10.3%
	Moderate critical political correctness	40.2%	41%	39.3%
	Low critical political correctness	49.9%	49.5%	50.4%

Environment issue (index)	*Number of participants*	*545*	*272*	*273*
	Very supportive	6.1%	5.9%	6.2%
	Supportive	15.6%	16.2%	15%
	Moderate	19.8%	16.5%	23.1%
	Unsupportive	29.5%	31.6%	27.5%
	Very Unsupportive	29%	29.8%	28.2%
Campaign engagement (index)	Not engaged	20.7%	20.1%	21.3%
	Engaged	54.2%	54.2%	54.2%
	Very engaged	14.4%	15.8%	13%
	Extremely engaged	10.7%	9.9%	11.6%
2019 Canadian federal election vote	Liberal Party of Canada (LPC)	29.8%	31.5%	28.2%
	Conservative Party of Canada (CPC)	27.1%	26%	28.2%
	Other (NDP, Green, PPC, BQ, other)	28.1%	28.2%	28.2%
	I did not vote	14.9%	14.3%	15.5%
Liberal Party feeling	*Number of participants*	*492*	*249*	*243*
	Very Unfavourable	31.7%	31.7%	31.7%
	Unfavourable	15%	12.4%	17.7%
	Neutral	1.4%	2.4%	0.4%
	Favourable	29.5%	30.5%	28.4%
	Very Favourable	22.4%	22.9%	21.8%
Conservative Party feeling	*Number of participants*	*482*	*245*	*237*
	Very Unfavourable	37.1%	38.4%	35.9%
	Unfavourable	16%	16.3%	15.6%
	Neutral	2.1%	2.4%	1.7%
	Favourable	26.6%	28.6%	24.5%
	Very Favourable	18.3%	14.3%	22.4%
Justin Trudeau feeling	*Number of participants*	*514*	*259*	*255*
	Very Unfavourable	36.6%	37.1%	36.1%
	Unfavourable	13.8%	12.4%	15.3%
	Neutral	0.8%	0.4%	1.2%
	Favourable	28.2%	30.1%	26.3%
	Very Favourable	20.6%	20.1%	21.2%
Andrew Scheer feeling	*Number of participants*	*485*	*247*	*238*
	Very Unfavourable	40.8%	42.9%	38.7%
	Unfavourable	20.6%	20.2%	21%
	Neutral	0.6%	0.8%	0.4%
	Favourable	25.8%	24.3%	27.3%
	Very Favourable	12.2%	11.7%	12.6%

Appendix E: Vote Likelihood Paired Sample Means

Table 1: Party Identification

Group	**Party identification**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	Liberal	7.6	7.58	2.68	2.64	4.96	5.39
	Conservative	1.79	1.76	**8.11***	**7.81***	2.64	2.54
	Other	4.16	4.1	2.09	1.89	6.02	5.86
	None	3.96	4.17	2.33	2.42	4.04	4.26
Party Meme	Liberal	8	7.91	2.5	2.46	4.58	4.45
	Conservative	1.54	1.7	**8.49****	**8.1****	**2.91***	**2.51***
	Other	3.2	3.29	2.14	2.03	5.9	5.73
	None	3.4	2.8	3.25	3.25	4.23	4.38

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 2: 2019 Vote Choice

Group	**2019 Canadian federal election vote**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	LPC	8.1	8.01	2.44	2.44	4.89	5.25
	CPC	1.53	1.5	**8.24****	**7.91****	2.29	2.2
	Other	3.82	3.88	**2.22***	**2.04***	5.91	6.05
	None	3.48	3.69	3.52	3.48	5.2	4.8
Party Meme	LPC	8.04	8.01	2.63	2.57	4.65	4.46
	CPC	1.63	1.67	8.62	8.34	**3.09****	**2.61****
	Other	3.1	3.15	1.9	1.66	5.73	5.73
	None	3.71	3.64	3.96	3.6	3.8	3.63

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 3: Ideology

Group	**Ideology**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	Progressive	6.34	6.48	1.89	1.89	6.51	6.73
	Conservative	1.83	1.57	**8.37***	**7.84***	2.65	2.69
	Moderate	5.28	5.28	2.86	2.88	4.31	4.23
	Independent	4.16	4.64	3.88	4.08	4.38	5.21
	Not political	5.21	5.1	2.96	2.63	4.76	4.4
Party Meme	Progressive	6.71	6.73	1.94	1.87	6	5.6
	Conservative	1.85	2.07	8.28	8.07	**2.92***	**2.56***
	Moderate	5.24	5.16	3.13	2.89	5	4.8
	Independent	4.33	4.26	3.38	3	3.83	3.67
	Not political	3.13	2.79	3.18	2.86	4.32	5

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 4: Political Correctness Opinion

Group	**Political correctness opinion**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	High critic	3.96	4.04	4.88	4.54	3.09	2.91
	Moderate critic	4.61	4.74	3.33	3.33	4.8	4.8
	Low critic	4.56	4.44	4.68	4.45	4.41	4.61
Party Meme	High critic	3.88	4.08	4.73	4.38	3.92	3.46
	Moderate critic	4.65	4.41	3.95	3.93	**5.32***	**4.95***
	Low critic	3.95	4.1	**4.83***	**4.5***	4.04	3.94

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 5: Environmental Measures Opinion

Group	**Environmental measures opinion**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	Very Supportive	8.07	8.13	1.33	1.33	4.93	5
	Supportive	4.39	4.37	3.33	3.18	4.97	4.95
	Moderate	2.55	2.73	5.6	5.74	2.95	3.18
	Unsupportive	4.45	4.37	4.97	4.76	4.14	4.19
	Very Unsupportive	5.15	5.14	3.46	3.18	5.25	5.35
Party Meme	Very Supportive	4.53	4.4	1.56	1.31	6.47	6.4
	Supportive	3.95	3.98	4.77	4.46	4.57	4.19
	Moderate	3.04	3.25	5.67	5.27	3.5	3.4
	Unsupportive	4.06	4	5.18	5.02	4.09	3.71
	Very Unsupportive	5.37	5.28	3.57	3.5	4.92	4.81

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 6: Campaign Engagement

Group	**Campaign engagement**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	Not engaged	4.44	4.53	4.57	4.6	4.63	4.79
	Engaged	4.52	4.45	3.74	3.26	**4.37***	**4.68***
	Very engaged	6	6.07	3.19	3.22	4.54	4.31
	Extremely engaged	N/A	N/A	N/A	N/A	N/A	N/A
Party Meme	Not engaged	4.46	4.44	**4.47***	**4.19***	4.42	4.2
	Engaged	3.12	3	4.85	4.68	4.29	4.2
	Very engaged	4.23	4.45	4.88	4.59	4.59	4.47
	Extremely engaged	N/A	N/A	N/A	N/A	N/A	N/A

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 7: Party Evaluations

Group	**LPC feeling**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	Very Unfavourable	0.64	0.68	5.43	5.21	2.44	2.41
	Unfavourable	3.3	3.33	4.58	4.52	4.93	5.03
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	6.01	6.14	3.81	3.74	4.84	4.9
	Very Favourable	8.55	8.4	2.91	2.6	6.23	6.65
Party Meme	Very Unfavourable	0.3	0.47	**6.01***	**5.76***	2.59	2.5
	Unfavourable	2.66	2.73	5.05	4.83	**4.67***	**3.97***
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	6.31	6.28	3.19	3	5.46	5.31
	Very Favourable	8.9	8.82	2.83	2.74	5.55	5.34
	CPC feeling						
Leader Meme	Very Unfavourable	5.34	5.49	**0.82****	**0.58****	5.24	5.34
	Unfavourable	5.36	5.51	3.51	3.38	4.64	4.67
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	3.94	3.82	6.5	6.53	3.57	3.87
	Very Favourable	2.3	2.09	**9.12***	**8.71***	3.5	3.35
Party Meme	Very Unfavourable	**5***	**4.79***	0.63	0.63	5.11	4.98
	Unfavourable	5.89	5.75	**3.66***	**3.2***	5.03	4.85
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	3.95	4.19	**6.54***	**6.15***	**4.11***	**3.66***
	Very Favourable	1.96	2.1	9.18	8.96	3.13	2.84

**Paired samples t-tests: statistically significant ($p < 0.05$)*

***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 8: Leader Evaluations

Group	**Justin Trudeau feeling**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Meme	Very Unfavourable	0.86	0.76	**5.73****	**5.38****	2.55	2.42
	Unfavourable	4.47	4.5	4.06	4.32	5.86	5.93
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	**6.18****	**6.44****	3.41	3.39	5.08	5.31
	Very Favourable	8.84	8.61	2.54	2.31	6.24	6.5
Party Meme	Very Unfavourable	0.53	0.46	6.16	5.98	2.66	2.46
	Unfavourable	3.06	3.69	4.65	4.19	4.79	4.64
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	6.29	6.1	3.07	2.91	5.74	5.48
	Very Favourable	8.75	8.77	3.15	3.17	5.54	5.28
	Andrew Scheer feeling						
Leader Meme	Very Unfavourable	4.94	4.99	**1.3****	**0.95****	5.08	5.09
	Unfavourable	5.1	5.38	4.38	4.42	4.87	4.85
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	3.96	3.79	6.54	6.67	3.48	3.84
	Very Favourable	3.31	2.86	9.24	8.93	3.59	3.72
Party Meme	Very Unfavourable	**5.26***	**5.05***	**0.86****	**0.68****	5.26	5.08
	Unfavourable	3.77	4.07	4.64	4.45	3.91	3.66
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	3.29	3.4	7.12	6.88	3.95	3.6
	Very Favourable	3.45	3.14	9.17	9.17	3.59	3.33

**Paired samples t-tests: statistically significant ($p < 0.05$)*

***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 9: Demographics – Party Memes Only

Variable	**Categories**	**Vote Likelihood**					
		LPC		CPC		NDP	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Age - Generations	Silent/ Baby Boomers/ Gen X	4.1	4.21	3.73	3.57	**4.01***	**3.78***
	Millenials/ Gen Z	4.37	4.25	**5.15***	**4.87***	4.88	4.7
Gender	Women	3.65	3.67	**4.76***	**4.5***	4.68	4.59
	Men	4.94	4.98	4.1	3.91	**4.13***	**3.82***
	Other	N/A	N/A	N/A	N/A	N/A	N/A
	Prefer not to say	N/A	N/A	N/A	N/A	N/A	N/A
Regions	West	3.29	3.09	**6.26***	**6.04***	**3.76***	**3.41***
	Ontario	4.8	4.98	3.82	3.55	5.37	5.22
	Quebec	4.41	4.53	2.85	2.67	4.29	4.2
	Maritimes	N/A	N/A	N/A	N/A	N/A	N/A
Education Level	High School	3.63	3.61	4.7	4.53	4.07	3.97
	Trade or College	3.93	4.12	4.97	4.67	**4.28***	**3.91***
	University	4.89	4.77	3.9	3.71	4.83	4.66
Time in Canada	Part of their lives	5.27	5.47	5.05	4.81	**4.61****	**4.17****
	All their lives	3.86	3.8	**4.28****	**4.07****	4.4	4.26
Ethnicity/Race	White or Mixed	3.68	3.61	**4.43****	**4.21****	**4.19***	**3.97***
	Other ethnicities and races	5.88	6.08	4.81	4.68	5.38	5.24

**Paired samples t-tests: statistically significant ($p < 0.05$)*

***Paired samples t-tests: statistically significant ($p < 0.01$)*

Appendix F: Evaluations Paired Sample Means

Table 1: Party Identification

Group	**Party identification**	**Evaluation**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Liberal	71.69	69.74	26.35	26.04	57.15	59.32
	Conservative	17.76	18.6	60.9	62.2	31.84	29.04
	Other	43.45	41.54	22.97	21.75	60.22	59
	None	36.93	38.68	21.32	20.4	56.33	52.13
		LPC		CPC		NDP	
Party Meme	Liberal	74.4	74.44	29.07	26.07	50.18	46.37
	Conservative	21.61	20.44	73.66	72.74	33.87	32.07
	Other	38.35	36.59	23.93	23.59	56.98	57.09
	None	38.57	37.93	35.79	34.57	41.23	37.31

Table 2: 2019 Vote Choice

Group	**2019 Canadian federal election vote**	**Evaluation**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	LPC	73.98	72.4	26.44	25.13	**56.24***	**59.03***
	CPC	17.67	17.47	62.61	64.31	**30.03***	**26.87***
	Other	37.39	37.37	21.61	20.89	61.06	59.6
	None	36.29	35.48	29.13	29.38	**56.63***	**51.5***
		LPC		CPC		NDP	
Party Meme	LPC	76.11	76.13	30.89	26.68	52.7	48.41
	CPC	20.26	19.46	75.26	76.45	34.38	31.94
	Other	37.1	35.28	22.37	20.1	54.17	55.71
	None	42.59	41.14	37.19	37.48	44.09	40.28

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 3: Ideology

Group	**Ideology**	**Evaluation**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Progressive	63.33	64.15	21.87	20.09	65.98	67.51
	Conservative	20.14	17.64	60.09	61.57	31.97	29.06
	Moderate	49.06	48.03	29.75	29.68	48.71	48.84
	Independent	41	44	37.84	34.36	54.28	51.92
	Not political	45.53	43.92	21.64	24.07	59.96	53.5
		LPC		CPC		NDP	
Party Meme	Progressive	65.62	64.42	21.75	19.81	58.1	56.48
	Conservative	25.96	26.01	73.68	72.76	33.03	30.48
	Moderate	52.27	50.84	34	32.34	53.1	53.32
	Independent	46.44	43	31.79	31.71	43.92	36.33
	Not political	31.09	32.14	32.65	30.45	46.5	46.5

Table 4: Political Correctness Opinion

Group	**Political correctness opinion**	**Evaluation**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	High critic	38.72	37.68	30.3	30.83	39.61	34.04
	Moderate critic	45.06	44.19	31.19	33.4	56.54	55.15
	Low critic	43.21	42.79	40.34	38.35	46.46	46.61
		LPC		CPC		NDP	
Party Meme	High critic	39.68	39.56	40.81	46.65	43.63	43.13
	Moderate critic	49.27	48.42	40.35	38.4	53.92	51.32
	Low critic	42.09	40.74	46.72	44.33	42.82	41.11

Table 5: Environmental Measures Opinion

Group	**Environmental measures opinion**	**Evaluation**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Very Supportive	68.56	71.44	16.75	15.25	55.06	52.44
	Supportive	37.76	37.81	26.26	29.28	60.65	59.91
	Moderate	25.77	25.86	**41.1***	**44.08***	33.69	31.67
	Unsupportive	44.54	43.33	43.04	43.35	46.95	46.6
	Very Unsupportive	51.35	49.38	**34.44****	**30.69****	55.47	54.5
		LPC		CPC		NDP	
Party Meme	Very Supportive	45.63	44.88	11.69	13.13	64.92	64.77
	Supportive	41.82	41.84	43.43	42.46	46.54	44.43
	Moderate	35.82	31.88	51.04	53.42	40.72	41.17
	Unsupportive	41.86	41.08	49.81	47.09	40.2	36.33
	Very Unsupportive	54.66	55.26	41.13	37.35	53.54	50.86

**Paired samples t-tests: statistically significant ($p < 0.05$)*

***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 6: Feelings Toward Parties

Group	**LPC feeling**	**Evaluations**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Very Unfavourable	9.15	8.32	42.21	43.23	**29.74***	**27.01***
	Unfavourable	32.9	35.32	**34.74****	**40.61****	52.55	52.32
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	57.86	57.96	36.94	35.28	56.28	55.03
	Very Favourable	79.64	76.27	**28.91***	**25.67***	64.63	66.8
		LPC		CPC		NDP	
Party Meme	Very Unfavourable	4.62	5.97	52.45	50.75	24.32	24.56
	Unfavourable	35.37	32.7	46.02	47.52	51.46	48.77
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	62.74	61.65	**36.83***	**33.35***	56.76	56.59
	Very Favourable	**88.23***	**85.56***	35.29	31.69	58.94	53.37
	CPC Feeling	Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Very Unfavourable	51.42	51.87	8.45	7.8	58.47	56.95
	Unfavourable	51.18	52.65	33.58	31.8	49.46	50.51
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	38.71	36.55	51.77	53.17	41.02	41.03
	Very Favourable	23.26	21.03	75.23	76.94	39.6	35.54
		LPC		CPC		NDP	
Party Meme	Very Unfavourable	48.34	46.76	6.37	8.31	51.01	51.25
	Unfavourable	57.59	57.62	37.32	36.51	49.37	47.83
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	46.91	44.75	60.96	57.23	**46.58***	**41.16***
	Very Favourable	24.69	25.73	**89.21***	**84.48***	38.11	34.89

**Paired samples t-tests: statistically significant ($p < 0.05$)*

***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 7: Feelings Toward Leaders

Group	**Justin Trudeau feeling**	**Evaluations**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Very Unfavourable	5.36	7.23	41.8	42.3	**32.66****	**28.89****
	Unfavourable	37.38	36.84	36.35	40.48	57.21	56.66
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	63.88	63.16	35.4	33.71	59.31	59.97
	Very Favourable	**89.9***	**84.43***	26.4	24.85	64.3	65.37
		LPC		CPC		NDP	
Party Meme	Very Unfavourable	**9.85***	**6.91***	53.73	52.94	26.61	26.1
	Unfavourable	36.89	37	45.17	42.89	53.93	50.73
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	61.81	61.8	31.49	31.84	59.48	59.3
	Very Favourable	85.71	86.37	37.1	33.86	57.94	52.57
	Andrew Scheer Feeling	Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Very Unfavourable	47.41	47.71	**4.89***	**7.61***	52.29	50.8
	Unfavourable	48.08	46.37	36.9	35.8	53.4	54.87
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	39.34	38.78	62.4	60.21	43.41	42.2
	Very Favourable	30.79	38.69	**90.76***	**86.31***	43.66	39.97
		LPC		CPC		NDP	
Party Meme	Very Unfavourable	50.93	50	**12.53***	**9.44***	51.05	51.09
	Unfavourable	43.33	42.8	48.19	44.65	**45.12***	**39.37***
	Neutral	N/A	N/A	N/A	N/A	N/A	N/A
	Favourable	38.56	36.02	63.72	65.7	43.21	41.6
	Very Favourable	32.54	32.32	88	88.9	40.15	36.11

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 8: Campaign Engagement

Group	**Environmental measures opinion**	**Evaluation**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Leader Meme	Not engaged	41.16	41.74	39.63	39.24	50.68	50.36
	Engaged	45.84	45.28	33.35	33.7	49.95	51.67
	Very engaged	57.48	57.78	28.23	28.31	51.04	47
	Extremely engaged	N/A	N/A	N/A	N/A	N/A	N/A
		LPC		CPC		NDP	
Party Meme	Not engaged	47.84	45.87	44.86	42.8	47.55	45.48
	Engaged	31.52	31.52	47.74	47.32	45.53	44.63
	Very engaged	42.31	42.16	41.25	42.84	43.45	44.13
	Extremely engaged	N/A	N/A	N/A	N/A	N/A	N/A

**Paired samples t-tests: statistically significant ($p < 0.05$)*
***Paired samples t-tests: statistically significant ($p < 0.01$)*

Table 9: Demographics – Only Statistically Significant Variables

Variable	**Categories**	**Evaluation**					
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Leader Memes							
		Justin Trudeau		Andrew Scheer		Jagmeet Singh	
Regions	West	31.01	30.71	44.64	45.79	**47.12***	**44.17***
	Ontario	48.16	47.5	34.48	34.1	52.08	52.19
	Quebec	53.1	50.6	30.69	29.61	46.75	45.17
	Maritimes	N/A	N/A	N/A	N/A	N/A	N/A
Party Memes							
		LPC		CPC		NDP	
Gender	Women	39.92	38.34	**46***	**43.05***	48.88	47.54
	Men	50.62	50.55	40.86	40.9	44.09	42.06
	Other	N/A	N/A	N/A	N/A	N/A	N/A
	Prefer not to say	N/A	N/A	N/A	N/A	N/A	N/A

Appendix G: Correlation Tables

Table 1: Persuasiveness

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Agreement X Persuasiveness	0.441***	0.529***	0.563***	0.557***	0.482***	0.513***	0.605***	0.595***
Funniness X Persuasiveness	0.363***	0.388***	0.345***	0.430***	0.489***	0.487***	0.514***	0.582***
Negativity X Persuasiveness	-0.108	-0.166**	-0.062	0.032	-0.106	0.028	-0.010	-0.024
Weakness X Persuasiveness	-0.055	-0.055	-0.077	-0.077	-0.087	-0.038	-0.066	-0.130*
Accuracy X Persuasiveness	0.421***	0.504***	0.532***	0.505***	0.420***	0.528***	0.633***	0.575***
Discounting X Persuasiveness	0.069	0.186***	0.155**	0.136*	0.118*	0.199***	0.163**	0.163**
Reference X Persuasiveness	0.025	0.135*	0.262***	0.195***	0.031	0.179***	0.258***	0.251***
Gender (without other & prefer not to say) X Persuasiveness	0.198	0.127	0.112	0.182	0.088	0.187	0.196	0.132
Regions X Persuasiveness	0.173	0.102	0.146	0.126	0.118	0.154	0.151	0.156
Ethnicity/Race X Persuasiveness	0.247*	0.212	0.221*	0.245*	0146	0.172	0.220	0.156
Age X Persuasiveness	0.165***	0.146**	0.176***	0.213***	0.095	0.132*	0.113*	0.139**
Ideology X Persuasiveness	0.181	0.173	0.197*	0.222***	0.185*	0.143	0.138	0.152

Party ID X Persuasiveness	0.170	0.203*	0.161	0.138	0.154	0.140	0.167	0.175
Time in Canada X Persuasiveness	-0.218***	-0.134*	-0.165***	-0.082	-0.014	-0.101*	-0.017	-0.097
Education X Persuasiveness	0.205***	0.213***	0.104*	0.053	-0.011	0.062	0.006	-0.005
2019 Federal Vote X Persuasiveness	0.182	0.202*	0.141	0.141	0.166	0.179	0.146	0.172
Campaign engagement X Persuasiveness	-0.012	0.058	0.062	0.030	-0.060	0.053	0.005	0.002
Political correctness issue X Persuasiveness	0.056	-0.005	N/A	N/A	0.123*	0.175***	N/A	N/A
Environment issue x Persuasiveness	N/A	N/A	-0.043	-0.007	N/A	N/A	0.094	0.093
Justin Trudeau feelings X Persuasiveness	0.043	0.098	0.025	0.126	0.072	0.101	-0.007	0.146**
LPC feelings X Persuasiveness	0.017	0.125*	0.051	0.105	0.030	0.052	-0.037	0.133*
Andrew Scheer feelings X Persuasiveness	0.172**	0.063	0.224***	0.057	0.273***	0.240***	0.161**	0.130*
CPC feelings X Persuasiveness	0.216***	0.049	0.181***	0.056	0.228***	0.219***	0.102	0.112*

P value < 0.05*; 0.01**; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation. For the measures that do not have an order (Nominal), Cramer's V is used to calculate the correlation.

Table 2: Negativity

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Age X Negativity	-0.099	-0.114*	-0.117*	-0.128*	-0.010	-0.036	-0.118*	0.036
Gender (without other & prefer not to say) X Negativity	0.101	0.170	0.145	0.165	0.174	0.166	0.173	0.216*
Regions X Negativity	0.136	0.141	0.139	0.171	0.122	0.159	0.130	0.137
Education X Negativity	-0.021	-0.132**	0.054	-0.004	0.094	0.023	0.073	0.125**
Time in Canada X Negativity	0.065	0.089	-0.023	0.047	0.006	0.044	0.033	-0.033
Ethnicity/Race X Negativity	0.212	0.247*	0.268**	0.268**	0.060	0.178	0.078	0.182
Party ID X Negativity	0.158	0.156	0.127	0.158	0.161	0.135	0.187	0.190*
2019 Federal Vote X Negativity	0.202*	0.149	0.169	0.191*	0.162	0.190*	0.176	0.197*
Ideology X Negativity	0.177	0.150	0.171	0.170	0.177	0.111	0.143	0.154
Campaign engagement X Negativity	0.006	0.135*	0.088	0.117*	0.024	0.008	-0.031	0.009
Political correctness issue X Negativity	0.056	-0.005	N/A	N/A	0.123	0.175	N/A	N/A
Environment issue X Negativity	N/A	N/A	-0.103*	-0.004	N/A	N/A	0.029	0.090

LPC feelings X Negativity	-0.039	-0.001	-0.001	0.048	0.187***	0.077	0.177***	0.212***
CPC feelings X Negativity	-0.133*	-0.189***	-0.125*	-0.165**	-0.047	0.021	-0.043	-0.101
Justin Trudeau feelings X Negativity	-0.005	0.030	0.033	0.069	0.187***	0.110*	0.235***	0.263***
Andrew Scheer feelings X Negativity	-0.117*	-0.140*	-0.040	-0.080	-0.047	-0.020	-0.073	-0.056

P value < 0.05*; 0.01**; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation. For the measures that do not have an order (Nominal), Cramer's V is used to calculate the correlation.

Table 3: Discounting

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Age X Discounting	0.182***	0.246***	0.299***	0.196***	0.062	0.042	0.036	-0.012
Gender (without other & prefer not to say) X Discounting	0.128	0.151	0.177	0.159	0.073	0.181	0.189	0.193
Regions X Discounting	0.159	0.152	0.145	0.171	0.128	0.161	0.147	0.122
Education X Discounting	0.018	0.029	0.047	-0.003	-0.058	-0.032	-0.002	0.004
Time in Canada X Discounting	-0.033	-0.087	-0.108*	-0.104*	-0.024	0.012	-0.023	-0.004
Ethnicity/Race X Discounting	0.158	0.187	0.230*	0.212	0.128	0.191	0.107	0.098
Party ID X Discounting	0.143	0.200*	0.145	0.182	0.128	0.165	0.162	0.177
2019 Federal Vote X Discounting	0.168	0.183	0.147	0.171	0.096	0.160	0.147	0.163
Ideology X Discounting	0.166	0.172	0.149	0.154	0.156	0.155	0.142	0.141
Campaign engagement X Discounting	-0.032	-0.005	-0.040	-0.032	-0.013	-0.068	-0.055	-0.021
Political correctness issue X Discounting	-0.038	-0.008	N/A	N/A	0.145**	0.134*	N/A	N/A
Environment issue X Discounting	N/A	N/A	-0.041	-0.061	N/A	N/A	0.113*	0.138**

LPC feelings X Discounting	0.056	-0.089	0.049	-0.011	0.060	0.078	0.014	0.113*
CPC feelings X Discounting	0.084	0.218***	0.142**	0.184***	0.063	0.039	0.054	0.061
Justin Trudeau feelings X Discounting	0.026	-0.108*	0.041	-0.033	0.058	0.082	0.067	0.116*
Andrew Scheer feelings X Discounting	0.119*	0.200***	0.175**	0.186***	0.097	0.085	0.046	0.047

P value < 0.05*; 0.01**; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation. For the measures that do not have an order (Nominal), Cramer's V is used to calculate the correlation.

Table 4: Weakness

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Age X Weakness	-0.024	-0.008	-0.095	-0.079	-0.033	-0.103	-0.098	-0.096
Gender (without other & prefer not to say) X Weakness	0.077	0.141	0.196	0.147	0.145	0.225*	0.217*	0.161
Regions X Weakness	0.137	0.145	0.157	0.128	0.166	0.154	0.156	0.138
Education X Weakness	-0.013	-0.003	0.049	-0.037	0.106*	0.104*	-0.006	0.038
Time in Canada X Weakness	-0.001	-0.051	-0.049	0.007	-0.064	0.012	-0.005	0.005
Ethnicity/Race X Weakness	0.263**	0.214	0.231*	0.217	0.106	0.140	0.154	0.152
Party ID X Weakness	0.154	0.145	0.139	0.153	0.177	0.162	0.129	0.159
2019 Federal Vote X Weakness	0.182	0.140	0.129	0.206*	0.189*	0.167	0.200*	0.150
Ideology X Weakness	0.182	0.145	0.136	0.202**	0.188*	0.180	0.119	0.153
Campaign engagement X Weakness	-0.004	-0.015	0.005	0.013	-0.003	0.128**	0.081	0.071
Political correctness issue X Weakness	-0.042	-0.013	N/A	N/A	0.103*	-0.006	N/A	N/A
Environment issue X Weakness	N/A	N/A	0.043	-0.005	N/A	N/A	0.163***	0.019

LPC feelings X Weakness	0.097	-0.057	0.102	-0.048	0.218***	0.098	0.108	-0.007
CPC feelings X Weakness	-0.045	-0.002	-0.058	0.023	0.002	0.003	0.042	0.058
Justin Trudeau feelings X Weakness	0.070	-0.058	0.105	0.004	0.243***	0.135*	0.163**	0.008
Andrew Scheer feelings X Weakness	0.048	0.024	0.023	0.050	-0.030	-0.046	0.027	0.037

P value < 0.05*; 0.01**; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation. For the measures that do not have an order (Nominal), Cramer's V is used to calculate the correlation.

Table 5: Accuracy

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Age X Accuracy	0.206***	0.135*	0.189***	0.155**	0.101	0.156**	0.176***	0.115*
Gender (without other & prefer not to say) X Accuracy	0.120	0.154	0.141	0.155	0.138	0.152	0.149	0.193
Regions X Accuracy	0.160	0.144	0.181	0.183	0.182	0.139	0.183	0.166
Education X Accuracy	0.096	0.130**	0.039	0.021	-0.015	-0.002	-0.030	0.003
Time in Canada X Accuracy	-0.103*	-0.118*	-0.046	-0.020	0.012	-0.003	0.001	-0.105*
Ethnicity/Race X Accuracy	0.238*	0.189	0.196	0.211	0.088	0.166	0.122	0.216
Party ID X Accuracy	0.241***	0.239***	0.212**	0.194*	0.219**	0.157	0.204*	0.188*
2019 Federal Vote X Accuracy	0.248***	0.257***	0.189*	0.213**	0.211**	0.142	0.182	0.194*
Ideology X Accuracy	0.201**	0.221***	0.249***	0.176	0.184*	0.157	0.156	0.158
Campaign engagement X Accuracy	-0.011	-0.028	0.106*	-0.014	0.119*	0.051	0.048	0.085
Political correctness issue X Accuracy	0.003	0.014	N/A	N/A	0.158**	0.135*	N/A	N/A
Environment issue X Accuracy	N/A	N/A	-0.087	0.026	N/A	N/A	0.088	0.109*

LPC feelings X Accuracy	-0.160**	0.185***	-0.132*	0.154**	-0.220***	-0.033	-0.181***	0.034
CPC feelings X Accuracy	0.230***	-0.123*	0.255***	-0.091	0.227***	0.179***	0.125*	0.100
Justin Trudeau feelings X Accuracy	-0.260***	0.156**	-0.134*	0.099	-0.153**	-0.026	-0.133*	0.058
Andrew Scheer feelings X Accuracy	0.254***	-0.050	0.203***	-0.042	0.215***	0.203***	0.184***	0.120*

P value < 0.05* ; 0.01** ; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation. For the measures that do not have an order (Nominal), Cramer's V is used to calculate the correlation.

Table 6: Funniness

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Persuasiveness X Funniness	0.363***	0.388***	0.345***	0.430***	0.489***	0.487***	0.514***	0.582***
Agreement X Funniness	0.502***	0.372***	0.367***	0.470***	0.439***	0.438***	0.500***	0.539***
Negativity X Funniness	-0.239***	-0.183***	-0.160**	-0.099	-0.201***	-0.120*	-0.130*	-0.051
Weakness X Funniness	-0.006	0.089	-0.027	-0.070	-0.132*	-0.113	-0.108	-0.185***
Accuracy X Funniness	0.431***	0.353***	0.384***	0.439***	0.380***	0.486***	0.513***	0.577***
Discounting X Funniness	0.300***	0.469***	0.469***	0.489***	0.364***	0.375***	0.362***	0.306***
Reference X Funniness	0.106*	0.104	0.137*	0.178**	0.078	0.130*	0.214***	0.245***
Age X Funniness	0.284***	0.277***	0.343***	0.274***	0.179***	0.196***	0.140**	0.154**
Gender (without other & prefer not to say) X Funniness	0.049	0.174	0.066	0.116	0.127	0.156	0.193	0.121
Regions X Funniness	0.154	0.152	0.145	0.166	0.162	0.135	0.086	0.183
Education X Funniness	0.085	0.056	0.051	0.048	-0.045	-0.053	-0.026	-0.002
Time in Canada X Funniness	-0.152**	-0.075	-0.120*	-0.129**	-0.003	-0.057	-0.066	-0.079
Ethnicity/Race X Funniness	0.280**	0.144	0.253*	0.263**	0.183	0.198	0.165	0.275**
Party ID X Funniness	0.149	0.104	0.197*	0.143	0.157	0.163	0.128	0.163

2019 Federal Vote X Funniness	0.161	0.135	0.191*	0.183	0.118	0.134	0.158	0.135
Ideology X Funniness	0.150	0.133	0.198*	0.148	0.186*	0.160	0.134	0.144
Campaign engagement X Funniness	-0.006	-0.016	-0.020	-0.037	0.026	-0.021	-0.002	-0.020
Political correctness issue X Funniness	-0.010	-0.020	N/A	N/A	0.187***	0.196***	N/A	N/A
Environment issue X Funniness	N/A	N/A	-0.061	-0.041	N/A	N/A	0.095	0.094
LPC feelings X Funniness	-0.038	0.022	-0.023	0.063	-0.037	-0.038	-0.038	0.084
CPC feelings X Funniness	0.251***	0.137*	0.188***	0.151**	0.100	0.098	0.040	0.060
Justin Trudeau feelings X Funniness	-0.118*	-0.028	-0.056	0.003	-0.009	0.015	-0.016	0.091
Andrew Scheer feelings X Funniness	0.223***	0.144**	0.196***	0.186***	0.162**	0.152**	0.109	0.123*

P value < 0.05*; 0.01**; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation. For the measures that do not have an order (Nominal), Cramer's V is used to calculate the correlation.

Table 7: Agreement

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Persuasiveness X Agreement	0.441***	0.529***	0.563***	0.557***	0.482***	0.513***	0.605***	0.595***
Funniness X Agreement	0.502***	0.372***	0.367***	0.470***	0.439***	0.438***	0.500***	0.539***
Negativity X Agreement	-0.165**	-0.256***	-0.172**	-0.042	-0.214***	-0.131*	-0.170**	-0.044
Accuracy X Agreement	0.649***	0.589***	0.657***	0.609***	0.665***	0.649***	0.718***	0.661***
Discounting X Agreement	0.080	0.197***	0.203***	0.187**	0.105	0.210***	0.160**	0.166**
Weakness X Agreement	-0.160**	-0.077	-0.126*	-0.182**	-0.126*	-0.120*	-0.042	-0.076
Reference X Agreement	0.090	0.099	0.307***	0.334***	0.151**	0.151**	0.323***	0.331***
Age X Agreement	0.215***	0.217***	0.219***	0.224***	0.075	0.090	0.143**	0.039
Gender (without other & prefer not to say) X Agreement	0.100	0.209	0.074	0.157	0.126	0.103	0.182	0.183
Regions X Agreement	0.192*	0.128	0.166	0.141	0.172	0.145	0.151	0.129
Education X Agreement	0.082	0.130**	0.057	0.048	-0.038	-0.020	-0.047	0.047
Time in Canada X Agreement	0.220*	-0.239***	-0.085	-0.056	-0.036	-0.075	-0.048	-0.107*
Ethnicity/Race X Agreement	0.229*	0.296***	0.167	0.233*	0.126	0.215	0.167	0.176
Party ID X Agreement	0.194*	0.161	0.207**	0.176	0.249***	0.170	0.191	0.194*

2019 Federal Vote X Agreement	0.191*	0.199*	0.180	0.238***	0.230***	0.180	0.191	0.182
Ideology X Agreement	0.168	0.172	0.192*	0.179	0.180	0.140	0.133	0.153
Campaign engagement X Agreement	-0.047	-0.027	0.030	0.029	0.071	0.009	0.058	0.064
Political correctness issue X Agreement	0.049	0.057	N/A	N/A	0.131*	0.140**	N/A	N/A
Environment issue X Agreement	N/A	N/A	-0.046	0.047	N/A	N/A	0.090	0.110*
LPC feelings X Agreement	-0.151**	0.055	-0.065	0.177***	-0.250***	-0.074	-0.108*	0.087
CPC feelings X Agreement	0.286***	0.040	0.214***	0.015	0.209***	0.219***	0.150**	0.065
Justin Trudeau feelings X Agreement	-0.210***	0.037	-0.068	0.107*	-0.191***	-0.064	-0.093	0.056
Andrew Scheer feelings X Agreement	0.269***	0.047	0.184***	0.030	0.213***	0.194***	0.208***	0.085

P value < 0.05*; 0.01**; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation. For the measures that do not have an order (Nominal), Cramer's V is used to calculate the correlation.

Table 8: Reference

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Persuasiveness X Reference	0.025	0.135*	0.262***	0.195***	0.031	0.179***	0.258***	0.251***
Funniness X Reference	0.106*	0.104	0.137*	0.178**	0.078	0.130*	0.214***	0.245***
Negativity X Reference	0.182***	0.118*	0.077	0.114*	0.079	0.169***	0.119*	0.119*
Accuracy X Reference	0.135**	0.132*	0.360***	0.340***	0.081	0.265***	0.339***	0.375***
Discounting X Reference	0.029	0.009	-0.071	0.030	-0.040	0.029	0.011	0.052
Weakness X Reference	-0.006	0.104	-0.035	0.024	-0.058	0.110	0.046	0.012
Agreement X Reference	0.090	0.099	0.307***	0.334***	0.151**	0.151**	0.323***	0.331***

P value < 0.05*; 0.01**; 0.001***
Because the measures are that are on a scale of 1 to 7 and have an order (Ordinal), tau-b is used to calculate the correlation.

Table 9: Resonance

	Group 1				Group 2			
	Meme 1	Meme 2	Meme 3	Meme 4	Meme 5	Meme 6	Meme 7	Meme 8
Liking x Agreement	0.464***	0.419***	0.372***	0.395***	0.436***	0.471***	0.440***	0.421***
Sharing x Agreement	0.373***	0.314***	0.284***	0.306***	0.394***	0.393***	0.441***	0.321***
Liking X Age	0.208**	0.172*	0.208**	0.119	0.136	0.290***	0.100	0.183*
Sharing X Age	0.134	0.128	0.096	0.094	0.033	0.078	0.144	0.081
Liking X Gender	0.123	0.133	0.171*	0.100	0.128	0.104	0.125	0.207**
Sharing X Gender	0.048	0.088	0.150*	0.096	0.120	0.124	0.122	0.165*
Liking X Regions	0.081	0.108	0.119	0.123	0.166*	0.078	0.081	0.080
Sharing X Regions	0.068	0.145	0.143	0.110	0.130	0.085	0.106	0.078
Liking X Ethnicity/Race	0.081	0.128	0.132	0.041	0.153*	0.188**	0.098	0.143
Sharing X Ethnicity/Race	0.138	0.115	0.097	0.112	0.228***	0.261***	0.132	0.153*
Liking X Education	0.059	0.040	0.066	0.065	0.134*	0.105	0.094	0.069
Sharing X Education	0.046	0.043	0.107	0.087	0.106	0.123	0.107	0.068
Liking X Time in Canada	0.085	0.144	0.206**	0.076	0.095	0.106	0.055	0.061
Sharing X Time in Canada	0.154*	0.160*	0.165*	0.073	0.105	0.137	0.038	0.055
Liking X Ideology	0.079	0.163	0.201**	0.157	0.206**	0.104	0.107	0.085
Sharing X Ideology	0.186*	0.199**	0.256***	0.157	0.213**	0.100	0.115	0.092
Liking X Party	0.089	0.101	0.102	0.140	0.225***	0.198***	0.226***	0.172*

ID								
Sharing X Party ID	0.193**	0.131	0.160*	0.081	0.139	0.163*	0.169*	0.124
Liking X 2019 vote choice	0.086	0.096	0.162*	0.107	0.156*	0.132	0.173*	0.139
Sharing X 2019 vote choice	0.144	0.143	0.191**	0.088	0.116	0.087	0.153*	0.089
Liking X Campaign engagement	0.124	0.116	0.166*	0.148	0.141	0.077	0.139	0.116
Sharing X Campaign engagement	0.051	0.119	0.183**	0.110	0.144	0.142	0.159*	0.098
Liking X LPC feelings	0.136	0.156	0.233***	0.166	0.224**	0.098	0.186*	0.076
Sharing X LPC feelings	0.136	0.143	0.199*	0.129	0.171	0.154	0.134	0.121
Liking X Justin Trudeau feelings	0.143	0.109	0.174*	0.149	0.185*	0.087	0.168	0.120
Sharing X Justin Trudeau feelings	0.140	0.104	0.134	0.098	0.126	0.119	0.121	0.096
Liking X CPC feelings	0.155	0.147	0.193*	0.104	0.228**	0.195*	0.143	0.214**
Sharing X CPC feelings	0.222**	0.168	0.226**	0.123	0.121	0.172	0.119	0.172
Liking X Andrew feelings	0.147	0.169	0.166	0.124	0.212**	0.214**	0.155	0.145
Sharing X Andrew Scheer feelings	0.220**	0.133	0.234***	0.110	0.136	0.190*	0.135	0.156
Political correctness x Liking	0.123	0.094	N/A	N/A	0.151*	0.165**	N/A	N/A

Political correctness x Sharing	0.131	0.098	N/A	N/A	0.093	0.119	N/A	N/A
Environment x Liking	N/A	N/A	0.133	0.177*	N/A	N/A	0.175*	0.137
Environment x Sharing	N/A	N/A	0.148	0.132	N/A	N/A	0.176*	0.129

P value < 0.05*; 0.01**; 0.001***
Cramer's V was used for this analysis because the question on social media liking and sharing was categorical and therefore had no order.