Boost or backlash? The electoral impact of the 1993 Chrétien attack ad

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Abstract

Existing studies have not clearly established the effectiveness of negative advertising as a campaign strategy. This thesis examines whether attack ads have a causal effect on political parties' electoral support; whether their impact decays over time; and whether the impact of attack ads differs depending on voters' political awareness and ambivalence. These questions are addressed by exploiting a natural experiment generated by the airing of an infamous attack ad – the face ad – during the 1993 Canadian federal election campaign. Given that the timing of the survey interviews is as-if random, the release of the face ad provides a unique opportunity to assess the causal impact of negative ads on vote intentions. The findings indicate that: (1) attack ads lead to a substantial decrease in electoral support for sponsoring parties; (2) attack ads lead to a substantial increase in support for targeted parties; (3) the effects of attack ads do not decay; and (4) the probability of voting for the sponsors of attack ads after their initial broadcast is similar regardless of voters' political awareness and whether or not they have strong predispositions, but the probability of voting for the targets of attack ads is significantly higher when voters are ambivalent.

Keywords: Negative advertising, natural experiment, party support, vote intentions, attack ads

Résumé

Les études existantes n'ont pas clairement établi si la publicité négative a un impact sur les campagnes électorales. Cette thèse examine si les annonces d'attaque ont un effet causal sur le soutien électoral des partis politiques; si leur impact diminue avec le temps; et si les annonces d'attaque diffèrent selon la conscience et l'ambivalence politiques des électeurs. Ces questions sont abordées en exploitant une expérience naturelle générée par la diffusion d'une annonce négative bien connue pendant la campagne électorale fédérale canadienne de 1993. Étant donné que le moment des entrevues du sondage est quasi aléatoire, la publication de l'annonce offre une occasion unique d'évaluer l'impact des annonces négatives sur les intentions de vote. Les résultats indiquent que: (1) les annonces d'attaque mènent à une diminution substantielle du soutien électoral pour les partis commanditaires; (2) les annonces d'attaque mènent à une augmentation substantielle du soutien électoral pour les partis ciblés; (3) les effets des annonces d'attaque ne diminuent pas; et (4) la probabilité de voter pour les commanditaires des annonces d'attaque après leur diffusion initiale est similaire quelle que soit la conscience politique des électeurs et qu'ils aient ou non de fortes prédispositions, mais la probabilité de voter pour les cibles des annonces d'attaque est significativement plus élevée lorsque les électeurs sont ambivalents.

Mots clés: Publicité négative, expérience naturelle, soutien des partis politiques, intentions de vote, annonces d'attaque

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Preface

This thesis follows the guidelines set by the Department of Political Science and the Graduate and Postdoctoral Studies Office at McGill University for Master's level thesis submission. I was responsible for conducting the research and writing the thesis. No part of this thesis has been previously published. Dr. Gidengil contributed to supervising all aspects of the thesis and providing extensive edits and feedback throughout the writing process.

Introduction

The prevalence of negative advertising in election campaigns has increased over the past several decades (Geer, 2012; Roy and Alcantara, 2020; Soroka, 2014), even though voters purport to dislike negative or attack ads. This contradiction begs an important question: how effective are negative ads in swaying voters? The existing research lacks a consensus on the effectiveness of negative advertising. Some scholars suggest that these ads can help their sponsors, while others find that they may cause a "boomerang" or "backlash" effect that achieves the opposite result (King and McConnell, 2003). Moreover, the literature is unclear as to whether negative ads are consequential for vote choice since most studies centre around candidate evaluations and voter turnout (Garramone, 1984; Marcus et al., 2000; Pinkleton, 1998). The ambiguity surrounding the effects of attack ads, combined with their growing popularity in election campaigns, indicates that more needs to be learned about these ads. However, the sheer volume of information to which voters may be exposed during election contests by political parties, media, and other societal actors makes isolating the impact of any single event on vote decisions challenging. Fortunately, recently developed experimental designs can serve to uncover if negative ads matter (Bridgman et al., 2020; Muñoz et al., 2020). The overarching research question is thus simple: do negative ads affect citizens' vote intentions?

To assess the impact of negative ads, I exploit a natural experiment generated by the airing of one of the most infamous attack ads in Canadian history – the face ad – during the 1993 Canadian federal election campaign. The Progressive Conservative Party (PCP) produced a televised attack ad, featuring still pictures of Jean Chrétien, the Liberal Party of Canada (LPC) leader, whose face was partially paralyzed from Bell's Palsy. The attack was widely portrayed as an attempt to mock Chrétien's facial disability, and brought criticism from all sides. Although the face ad has long been considered one of the greatest blunders in the use of advertising in Canadian elections and quickly featured in the campaign effects literature (Carney and Gill, 1999; Dornan, 1994; Romanow, 1999), there have been no studies

that rigorously assessed its causal impact. Instead, the impact of the face ad on vote choice has typically been taken for granted (Donaldson, 1997; Dornan, 1994; Gosselin and Soderlund, 1999). Because the face ad was an unexpected event that occurred while the 1993 Canadian Election Study's (CES) campaign-period survey (CPS) was in the field, I am able to employ the Unexpected Event during Survey Design (UESD) to estimate its causal effects (Muñoz et al., 2020). The timing of the survey is used as a source of exogenous variation, which allows for an assessment of the causal impact of the attack ad on vote intentions. By exploiting the face ad, this thesis seeks to understand whether attack ads, or more specifically *direct* attack ads, have an effect on vote intentions; whether the impact of these ads decays over time; and whether certain types of voters react more strongly to such ads.

Literature Review

Campaign Effects

Conventional wisdom contended that there were minimal effects of campaigns on voting behaviour (Brady et al., 2006). Generally, they were thought to reinforce or reactivate vote decisions based on long-standing predispositions, rather than change voters' minds (Campbell et al., 1960; Lazarsfeld et al., 1944). However, as scholars looked beyond U.S. presidential elections and outside of the American context, they began to discern a different story. For example, Bartels' (1988) research on presidential primaries found that, in an arena where party ties, and to a lesser extent, ideological values are not at play, campaigns can have substantial effects. In particular, campaign activity and the media serve to establish the viability of candidates and voters react by gravitating toward a candidate who seems more likely to win. Furthermore, Johnston et al.'s (1992) study of the 1988 Canadian election campaign demonstrated that parties' strategic choices about which of a host of possible issues to emphasize can have a direct impact on the electorate. In the 1988 election, both the LPC leader John Turner and his major opponent, the PC Brian Mulroney, decided to focus their efforts on the Canada-U.S. Free Trade Agreement (FTA), albeit on opposite sides of the issue.

Through the leaders' efforts, the FTA was at the forefront of the campaign while another issue, the Meech Lake Accord, fell by the wayside. As the campaign progressed, the FTA became the most salient issue for voters and their positions on this issue became increasingly important predictors of their vote intention.

The research by Johnston and his colleagues shed light on the importance of campaign events as well. The authors looked at the effects of a key debate during the 1988 campaign. This debate helped to make the FTA the most salient issue and it increased perceptions of the competence of John Turner, the winner of the debate. Blais et al.'s (2003) analysis of the 2000 Canadian election confirmed that leaders' debates can be critical. The English debate allowed the PCP to surge at the time and maintain its official party status. Holbrook's (1996) book on American presidential elections also found that campaign events *matter*. These events, as filtered by the media, play a decisive role in shaping public opinion and they contribute to the ultimate outcome. By studying an unexpected court ruling during the 2015 Canadian election campaign, Bridgman et al. (2020) showed that the media's response to campaign events can heighten their salience, and consequently, prime voters to change their voting behaviour. It is important to note that in Canada, unlike in the United States, brokerage politics and the multiparty system encourage voters to seek out more news and information prior to election day (Anderson and Stephenson, 2010). As such, campaign events are thought to be more important determinants of vote intentions in the Canadian context (Johnston et al., 1992).

Negative Campaign Advertising

Advertising is a major component of any modern election campaign. Accordingly, there is now a considerable body of work devoted to the effects of campaign ads. This is certainly the case for negative advertising, with most of the research looking at its impact on candidate evaluations and voter turnout. However, negative advertising has been defined and used imprecisely by many researchers (Kolovos and Harris, 2005). This has resulted in a "problematic situation where the term combines distinct types of advertisements" (p.3).

Conceptualizing negative ads in broad terms may explain why research on their effects has produced contradictory findings.

Johnson-Cartee and Copeland (1991) identified three types of negative ads: direct comparison ads, implied comparison ads, and direct attack ads (see also Cunningham, 1999). Direct comparison ads are messages that present their sponsors favourably in comparison to opposing candidates and parties. The second type, implied comparison ads, are similar to direct comparison ads except they do not directly name the opponent and leave it up to the audience to complete the message. Direct attack ads, the final type, focus entirely on opposing candidates or parties, whether explicitly or implicitly, with little or no mention of the sponsor. Newhagen and Reeves (1991) provide a similar typology, distinguishing between true negative ads, where the objective is to damage an opponent without mentioning the sponsor, and comparative ads, which target an opponent while promoting the sponsor. However, the literature disagrees on whether or not comparative ads are, in fact, a form of negative advertising (Geske, 2009; Kolovos and Harris, 2005). Accordingly, I focus on direct attack ads, defined as any attack ad that focuses *entirely* on the personal features or attributes, or the politics of an opposing candidate or party.

Attitudinal Effects

Explorations of the attitudinal effects of negative advertising are mixed. Some scholars have found that attack ads have no impact or a slightly positive impact on evaluations of the sponsoring candidates, but do lower evaluations of the targeted candidates (Gerber et al., 2011; Goldstein and Freedman, 2002; Pinkleton, 1998). Several others suggest that negative ads may trigger a "boomerang" effect, creating more negative views of the sponsoring candidates. The backfire may not be immediate. Instead, repeated exposure to the ads results in a delayed response against their sponsors (Fridkin and Kenney, 2019; Garramone, 1984). However, there is also the possibility of a "backlash" effect, where the ads immediately backfire against their sponsors (King and McConnell, 2003; Lau and Pomper, 2002). Both of these effects

tend to occur when negative advertising is perceived as "untruthful, undocumented, or in any way unjustified" by the public (King and McConnell, 2003, p.845; see also Haddock and Zanna, 1997). Such advertising may even foster more positive feelings toward the targets (Garramone, 1984).

An important aspect to consider when discussing attitudinal effects is party affiliation. The influence of attack ads on political attitudes could well depend on partisanship. Garramone and Smith (1988) found that the more a voter identifies with the sponsor of an ad, the more likely they are to view the ad as trustworthy. Similarly, De Guise (1999) showed that voters are less likely to be opposed to a negative ad if they are committed to the party that sponsored it.

Behavioural Effects

There is still much discussion within the literature regarding the potential effects of negative ads on voting behaviour (Daignault et al., 2013; Dardis et al., 2008; King and McConnell, 2003; Nesbitt-Larking, 2009). Most of the studies have examined voter turnout, again with mixed results. Ansolabehere and Iyengar (1996) were the first scholars to investigate the relationship between negative advertising and turnout, finding that negative ads decrease turnout by nearly 5 percentage points. Following the publication of their work, however, other studies found that attack ads have no substantial effect on voter turnout. For example, Finkel and Geer (1998), looking at U.S. presidential elections from 1960 to 1992, showed that exposure to negative advertising does not lower turnout. Later, Krasno and Green (2008) reported that the effect of negative ads on turnout during the 2000 presidential election was trivial. Some studies even indicate that attack ads actually mobilize the electorate (Freedman and Goldstein, 1999; Kahn and Kenney, 1999; Kaid, 1997). This has been attributed to the fact that negative ads signal to voters that something important is at stake in the election, and therefore, they feel more compelled to participate.

Beyond voter turnout, the literature has not sufficiently addressed the impact of negative

ads on vote intentions (Daignault et al., 2013). This is largely due to the fact that election campaigns are "notoriously difficult" to unravel (Bridgman et al., 2020, p.1; see also Erikson and Wlezien, 2014). The amount of information available makes it hard to identify the influence of a given event on vote choice. However, novel experimental designs are serving to overcome the density of the informational environment. Notably, scholars can evaluate the electoral impact of unexpected events by exploiting surveys that are in the field at the time of these events (Muñoz et al., 2020). Most studies have used this approach to investigate the effects of natural disasters or terrorist attacks (Achen and Bartels, 2016; Boydstun et al., 2018; Silva, 2018), but research has also analyzed the effects of other theoretically relevant events like political scandals, policy reforms, and campaign speeches (Ares and Hernández, 2017; Bridgman et al., 2020; Flores, 2018; Larsen, 2018).

Hypotheses

The Negativity Bias

The inconclusive evidence regarding attack ads suggests that further theorization and empirical study are necessary. In order to understand how negative advertising can shape voters' decisions during elections, this thesis relies on the notion of negativity bias. Broadly speaking, negativity bias means that negative information matters more than positive information. First, studies in psychology indicate that humans tend to weigh negative information more heavily when forming impressions of others (Anderson, 1965; Fiske, 1980). Also, the literature finds that people expend much more cognitive energy thinking about negative things than thinking about positive things (Abele, 1985; Fiske, 1980). This asymmetry is thought to be the product of the evolutionary process (Soroka, 2014). Scholars suggest that evolution has produced animals with attentional systems that give preference to stimuli of danger (Hunt and Campbell, 1997). Because it is harder to reverse the consequences of a harmful or fatal event than those of avoiding such an event, the process of natural selection may have hardwired humans to pay more attention to negative than to positive stimuli (Soroka,

2014). This evolutionary claim is supported by a body of work identifying a negativity bias in animals other than humans. For example, Miller (1961) found that the fear of shock is more motivating than the desire for food in rats (see also Garcia and Koelling, 1966). The evidence of negativity biases in other animals reinforces the idea that this asymmetry has a "neurological or physiological source, and that this source is in all likelihood the consequence of evolution" (Soroka, 2014, p.10).

Scholars investigating the memorability of political ads have noted that the messages conveyed in negative ads are more likely to be remembered than those conveyed in positive ads (Babbitt and Lau, 1994; Kahn and Kenney 1999). Their memorability may be reinforced by the media's tendency to focus on negative events (Patterson, 1994; Shaw, 1999; Soroka, 2014; Soroka and McAdams, 2015) and feature stories that are disproportionately sensationalistic (Harmon, 1989; Hofstetter and Dozier, 1986). This is a consequence not just of individual preferences, but of "the entire structure of the practice of journalism, as well as of the mediums themselves – newspapers, but especially television" (Soroka, 2014, p.20). An event that is negative and can be easily sensationalized should be of greater interest to the media. Drawing from Bridgman et al. (2020), media coverage of such an event may heighten its salience for voters, especially considering experimental work revealing that individuals choose to read negative rather than positive election stories (Meffert et al., 2006). If viewers are attracted by negative and dramatic content, audience-seeking media have an incentive to report on negative ads, and even more so, attack ads that are perceived as offensive, erroneous, or unjustified (Shaw, 1999). Given the memorability and overrepresentation of negative information, then, negative ads should have a substantial influence on voting behaviour.

In light of the research on negativity bias showing that humans tend to emphasize negative information over positive information, we might expect attack ads to have a substantial *negative* impact on the electoral support of targeted candidates. This research finds that humans tend to emphasize in a variety of ways negative information over positive information. However, some scholars claim that the effects of the negativity bias may be tempered by the

nature of the actors sponsoring the attack ads and their perceived intentions for doing so (Lau et al., 2007; Roy and Alcantara, 2020). Although voters might be more attentive to and be more prone to recall negative ads, their effects are likely "mitigated by the fact that they are being delivered by an opponent whose main goal is to defeat the other candidates and win office (as opposed to running for the greater good)" (Roy and Alcantara, 2020, p.23). As such, negative ads can backfire against their sponsors rather than reduce support for their targets. This potential outcome is very much consistent with research on negativity bias. Voters who punish the sponsors of negativity may be doing so because they perceive the attackers as more dangerous than their targets. If sponsors rely on attack ads to inform citizens, voters will be skeptical of their motives, especially in a campaign where the objective of political parties is to win power and influence policy. In other words, voters receiving negative information will respond negatively to the sponsoring party because of the nature of the contest and our inherent predispositions toward negativity.

The likelihood of negative ads backfiring is also higher when they are deemed inappropriate or unjustified – for example, if a sponsor targets an opponent's family, religious views, or appearance. The sponsors of such ads might appear even more threatening to voters for intentionally violating long-held democratic norms, such as fair play, civility, and mutual respect (Fridkin and Kenney, 2019). In some cases, negative advertising can foster more positive feelings toward those being attacked, which – by improving their evaluations – may increase their support (Galasso et al., 2021; Kahn and Kenney, 2004; Mattes and Redlawsk, 2014). This leads to the first two hypotheses:

H1: Attack ads lead to a decrease in electoral support for the sponsoring party.

H2: Attack ads lead to an increase in support for the targeted party.

Campaign events matter to the extent that their impact survives until election day.

However, the literature suggests that such events typically exert only a short-term influence on public opinion that may decay, "fading with the passage of time" (Erikson and Wlezien, 2014, p.3; see also Hill et al., 2013). Given that individuals tend to base their political opinions on top-of-the-head considerations, it is possible that negative ads inform vote intentions to a larger degree in the days just after their initial broadcast (Gerber et al., 2011; Zaller, 1992). This leads to the third hypothesis:

> *H3: The effects of attack ads will be stronger in the days following their release and will decay over time.*

Existing theories of attitude change suggest that voters' susceptibility to campaign information involves two key cognitive processes: (1) reception and (2) acceptance (McGuire, 1968; Zaller, 1992). The standard approach has been to argue that citizens with moderate levels of political awareness should be the most susceptible to influence – they are more likely to both receive and accept persuasive information (Fournier et al., 2019). Yet, Zaller (1992) states that attitude change does not necessarily conform to such a nonmonotonic pattern. Whether a pattern is positive, negative, or nonmonotonic depends on a person's predispositions as well as their awareness. Political predispositions are especially important during campaigns. During campaigns, the partisan content of messages may be so obvious that moderately aware voters, and even the least politically aware voters, will resist a dominant campaign message that is contrary to their partisan or ideological disposition. Thus, in a campaign context, political awareness measures only the probability of receiving messages — it misses the likelihood of acceptance.[1] According to Zaller, the probability of accepting new messages that are received is moderated by the existence of (a) partisan resistance, where, all else equal, partisans tend to resist favourable information about opposing candidates or parties and (b) inertial resistance, where individuals have a variety of considerations about

[1] Acceptance, according to Zaller (1992), refers to communications that are internalized as considerations by voters.

parties and issues that function to fend off new information that is inconsistent with their pre-existing or stored considerations.

The first cognitive process — the probability of reception — can be measured simply as a voter's level of political awareness. Zaller (1992) defines awareness as "the extent to which an individual pays attention to politics *and* understands what he or she has encountered" (p.21). It captures whether an individual is informed and comprehends political information. Awareness is a better measure than news consumption because reception is more than a question of exposure. Following Zaller, it is also a matter of comprehension. In his own words: "the greater a person's level of cognitive engagement with an issue, the more likely she or he is to be exposed to and comprehend — in a word, to receive political messages concerning that issue" (Zaller, 1992, p.42). Therefore, political awareness increases the likelihood of receiving campaign information. In the case of negative ads, the consequences of political awareness are straightforward: the greater a voter's awareness, the higher their probability of receiving such ads. All else being equal, reception should increase the influence of attack ads: if voters do not receive persuasive messages, they cannot be influenced by them.

Of course, all else is unlikely to be equal: reception does not necessarily entail acceptance. Zaller (1992) finds that both partisan and inertial resistance lower the probability that new information will be accepted, given that it is received. Following Fournier et al. (2019), the probability of acceptance — the second cognitive process — can be measured based on political ambivalence. Basically, the idea is that people who are ambivalent lack strong predispositions and are therefore more likely to accept messages. The literature defines ambivalence as the extent to which voters consider elements that simultaneously push them toward opposing positions when making a decision – in contrast to elements entirely consistent with a single choice (Fournier et al., 2019; Hillygus and Shields, 2008). To use a term coined by Lazarsfeld et al. (1944), these voters are cross-pressured. Cross-pressured or highly ambivalent voters are said to exhibit greater instability at the ballot box and to be swayed more easily by campaign information (Fournier et al., 2019; Zaller, 1992). For these voters,

the information that campaigns generate about candidates and parties is more likely to be accepted, and if so, it should be more decisive (Hillygus and Shields, 2008; Mendelsohn 1993, 1994). On the other hand, the least ambivalent voters have one-sided or entirely consistent considerations, and they are more likely to dismiss messages that oppose their initial position. Accordingly, attack ads should have a smaller impact on the vote intentions of non-ambivalent voters, as they intend to vote for a party that is closely or perfectly aligned with their prior considerations. For example, a 1993 LPC voter would be classified as non-ambivalent if they identified with the party, liked its leader, as well as shared its stance on the goods and services tax (GST) and the welfare state.

Political awareness and ambivalence provide a simple operationalization of the reception and acceptance functions, respectively, allowing me to test the potential heterogenous effects of negative ads. As described above, the influence of attack ads should be greatest when both awareness and ambivalence levels are high. Both are crucial but neither on its own is sufficient for campaign information to be received and accepted. Accordingly, this leads to the final hypothesis:

> *H4: Attack ads have the strongest impact among voters with high awareness and high ambivalence, while having the weakest impact among those with low awareness and low ambivalence.*

The Face Ad

In order to assess these four hypotheses, I analyze a direct attack ad – the face ad – which aired during the 1993 Canadian federal election campaign. A purely negative case was chosen because some scholars claim that comparative ads should not be considered negative advertising as they might not be entirely negative (Geske, 2009). The face ad also ranks as one of the greatest political blunders in Canadian history, making it an ideal case to explore

whether or not negative ads cause shifts in vote intentions.

The 1993 Canadian federal election saw the LPC achieve a landslide victory over the incumbent PCP. The LPC was led by Jean Chrétien, while Kim Campbell, Canada's first woman Prime Minister, was the leader of the Conservatives. Although the PCP headed into 1993 with high expectations, Campbell's majority government (156 seats) was reduced to fifth party status, securing only 2 seats in the election. This was a dramatic reversal of fortunes, as the PCP had been in power for nine consecutive years.

During the 1993 campaign, the PCP opted to use negative advertising, with the focus on Chrétien and the LPC. Two versions of the same attack ad, with the tag line "Think twice", aired on primetime television in English Canada on October 14th (Gosselin and Soderlund, 1999, p.33). The ads attacked Chrétien personally, and featured the same alternating photos of the LPC leader that highlighted his facial paralysis. Although there were minor differences in audio, both ads urged Canadians to reconsider voting for Chrétien; the most damaging lines of each ad were "Is this a prime minister?" and "I personally would be very embarrassed if he were to become the prime minister of Canada" (p.33). Jointly dubbed the face ad, the attack focused solely on Chrétien, with no mention of the PCP's own leader or policies, and it was not well-received by the electorate (Donaldson, 1997). The response to the face ad by media outlets and politicians was swift and overwhelmingly negative (Dornan, 1994). Though it was never intended to be viewed by Quebec voters, many of them were exposed to the attack ad by newscasts on the evening of the 14th, and it elicited the same response as it did in the rest of Canada, to the dismay of PCP strategists (Gosselin and Soderlund, 1999).

Popular NDP political commentator, Stephen Lewis, picked up the face ad on the very evening of its broadcast, and was the first to present it as an attack on Chrétien's physical appearance. The ad was denounced as mean-spirited and offensive (Frizzell et al., 1994). This perspective on the story was popular and spread quickly throughout other media outlets. By the end of the evening news on October 14th, the attack ad had "ignited a firestorm of revulsion" that displayed the PCP's poor choice of strategy (Frizzell et al., 1994, p.122). The

morning after the ad aired, Chrétien responded to the attack in a press conference, saying "They tried to make fun of the way I look" but "God gave me a physical defect [and] I've accepted that since I was a kid" (p.123).

The face ad, spreading like wildfire across newscasts, was seen as a cheap shot by even PCP supporters (Gosselin and Soderlund, 1999). The ads were pulled less than 24 hours after their release by Campbell, who had not seen them beforehand. "I think the tone is inconsistent with the message I'm trying to deliver", Campbell said to the media, later adding, "I would apologize to Jean Chrétien and anyone else who found them offensive" (Frizzell et al., 1994, pp.122-123). The negative reaction was intense to the point that Conservative members of parliament and candidates spoke out against their own party's use of negative advertising. In an interview with the *Globe and Mail*, PCP candidate Isabel Bassett distanced herself from the attack, saying "It's really not the reason I got into politics" (Bradburn, 2019). Bassett and many others then issued personal apologies to Chrétien. One MP even insisted that Campbell apologize again "for this personal injury as well as the insult to the public's intelligence and sensibilities" (Bradburn, 2019). Moe Mantha, running for the PCP in North Bay, Ontario, referred to the ad as "vicious, mean-spirited [and] insensitive" (Dornan, 1994, p.86). One of the few defenses of the attack ad came from John Tory, the PCP campaign director, who believed that it was in good taste and "had a point to make" (Bradburn, 2019). However, his stance was far from a popular one.

When the election was called, PCP support was polling at 32 percent, just behind the LPC at 36 percent (Gosselin and Soderlund, 1999). Campbell also enjoyed a 20 percent lead over Chrétien on leadership attributes. However, at the end of the election, the PCP managed to obtain a mere two seats with 16 percent of the popular vote, losing its status as an official party (Gosselin and Soderlund, 1999). While the face ad may seem like the major reason for the party's downfall, scholars have been quick to highlight the potential impact of other events, including Campbell's foolhardy comments on unemployment and deficit reduction, her poor performances in the leadership debates, the party's lack of concrete policy proposals,

and much more (Dornan, 1994; Gosselin and Soderlund, 1999). Fortunately, the selected research design allows me to isolate the effect of the face ad on electoral support.

Data and Methods

The empirical analyses draw on data from the campaign wave of the 1993 Canadian Election Study (CES), which was based on a rolling cross-section. The campaign-period survey (CPS) was conducted by telephone, beginning on September 10th – only two days after parliament was dissolved on September 8th – and concluding on the eve of the election on October 24th. A total of 3,775 Canadian citizens were interviewed during the election campaign. On average, 84 surveys were completed on each day of the CPS. The sample was designed to be representative of the adult Canadian population. It sought to capture Canadian citizens who were 18 years of age or older, spoke one of Canada's official languages, and lived in private homes in one of the ten Canadian provinces (Northrup and Oram, 1994).

Notably, the rolling cross-section is well-adapted to explore campaign dynamics. The design is similar to a standard cross-section, but with the added feature of randomizing the day on which a respondent is interviewed. If executed properly, the date on which a respondent is interviewed is as much a product of random selection as the selection of that respondent in the sample (Johnston and Brady, 2002). Because observations are temporally distributed yet closely spaced, the design can allow researchers to identify the causal effect of campaign events on public opinion. As such, the rolling cross-section design is ideal for researchers wishing to implement the Unexpected Event during Survey Design (UESD). As defined by Muñoz et al. (2020), the UESD is a research design that "exploits the occurrence of an unexpected event during the fieldwork of a public opinion survey to estimate its causal effect on a relevant outcome" (p.3). The unexpected event serves as the cutoff point for comparison between two groups: the individuals interviewed prior to the event $t_i < t_e$ (control group) and those interviewed following the event $t_i > t_e$ (treatment group).

Identifying Assumptions and Threats to Causality

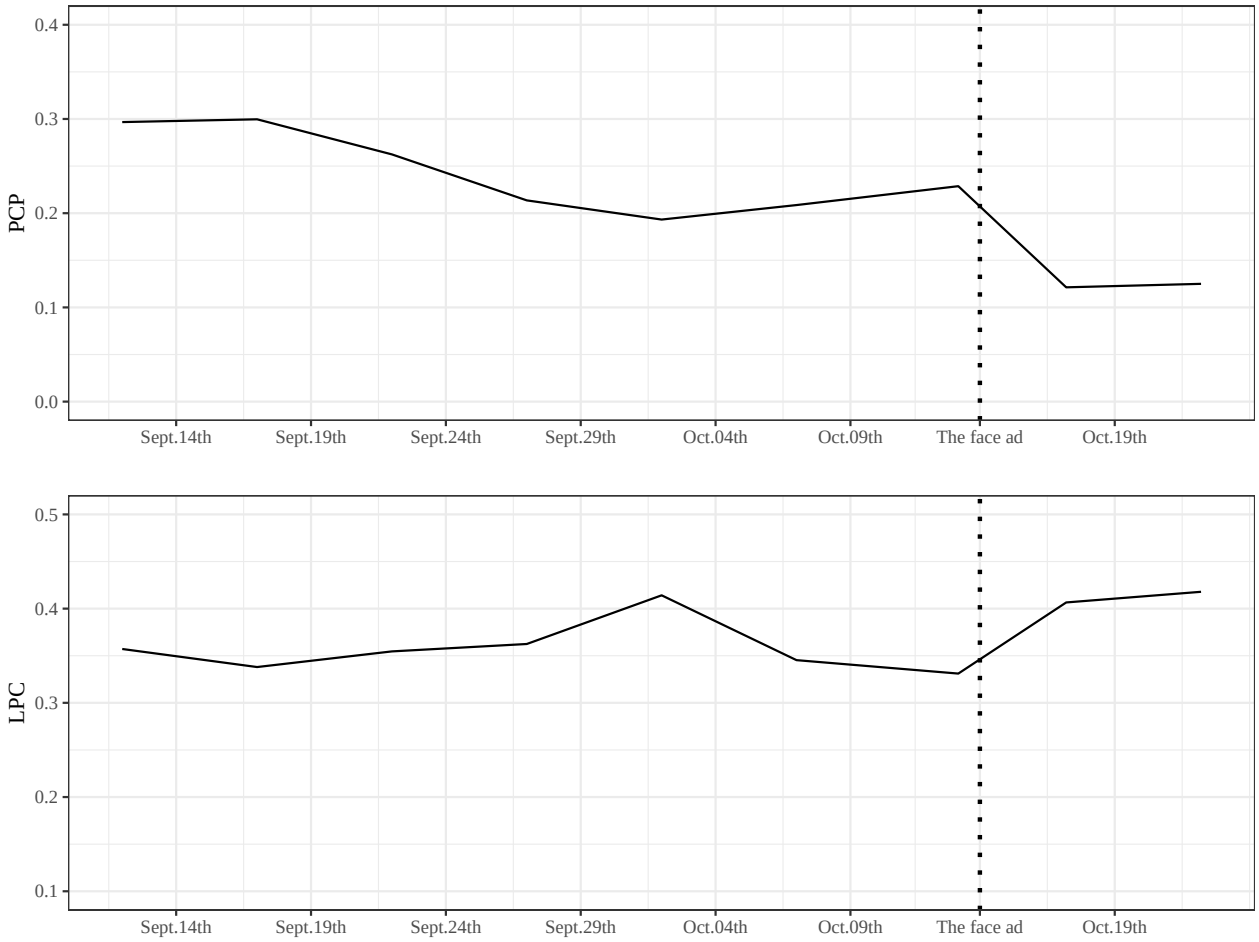
There are two primary identifying assumptions that must hold to employ the UESD: *excludability* and *ignorability*. First, excludability means that the timing of the survey interviews only affects the outcome variable(s) through the event of interest. In other words, any difference between participants interviewed before and after the event is attributable to that event (Muñoz et al., 2020). Therefore, excludability can be assumed so long as there is a precise treatment, and the reactions spawned by the unexpected event, known as collateral events, do not detract from its effect. Yet, the presence of these collateral events does not pose a problem of imprecise treatment if collateral events are *constitutive* elements of "the class of events being analyzed" (Muñoz et al., 2020, p.7). For this study, media and political scrutiny is, in fact, constitutive of negative advertising (Cunningham, 1999; Gosselin and Soderlund, 1999). The ad aired on mainstream television in English Canada on October 14th, and it was immediately spread by the media. The face ad was pulled less than 24 hours after its release, due to the intensely negative reaction and media coverage that continued beyond the original air date.

Secondly, for excludability to hold, there must not be simultaneous events. This potential problem happens when "other, unrelated, events take place at the same time" (Muñoz et al., 2020, p.8). The face ad aired eleven days prior to the election, and there were no major events that occurred between its broadcast and election day. There were two other significant moments, but they both took place well before the attack ad. On the opening day of the campaign, Kim Campbell commented that the unemployment rate would not improve until the end of the century. This event, however, had little effect on Campbell and the PCP in the polls (Gosselin and Soderlund, 1999). Additionally, weeks before the attack ad was released, on September 23rd, Campbell was misquoted by reporters as famously saying that "an election is no time to discuss serious issues" in response to a question about the party's failure to provide a concrete deficit reduction plan (Dornan, 1994; Spratt, 2019). Though there was a dip in party support for the PCP and a corresponding spike in vote intention for

the LPC following this statement, the impact was not long-lasting (Figure 1). Notably, this movement in party support began before Campbell was misquoted, perhaps the result of the LPC unveiling its comprehensive policy booklet on September 15th – popularly known as the Red Book – and the Conservatives' inability to offer an equally detailed policy document thereafter. It is also worth mentioning the influence of the televised leaders' debates, which were held on October 3rd and 4th. Although Campbell's performances were less than stellar (Dornan, 1994), the Conservatives managed to increase party support while support for Chrétien and the LPC declined after these debates (Figure 1). As Figure 1 shows, this trend lasted until the airing of the face ad on October 14th, where a rapid and sizable shift in vote intentions can be observed.

Furthermore, for the excludability assumption to hold, the timing of the event must be exogenous. Most unexpected events are *human-crafted*, meaning that individual actors often decide when events take place. If the occurrence of the event is endogenous to the outcome variable(s), the excludability assumption will be violated (Muñoz et al., 2020). In this instance, although the attack ad was strategically crafted and approved by the PCP campaign team, the timing of its disclosure was not manipulated in order to maximize damage to Chrétien's popularity (Gosselin and Soderlund, 1999). Once more, it is important to note that the attack ad was criticized by all sides, and its content was shocking to members of the PCP. The ad was not approved by the leader of the party, nor were party candidates consulted beforehand (Gosselin and Soderlund, 1999).

Figure 1: Campaign Vote Intentions, 1993 Canadian Federal Election



Note: Figure 1 summarizes the levels of vote intention for the PCP and LPC on a moving average of five days.

The second vital assumption that must hold in the UESD is ignorability: the treatment status of respondents must be independent from their potential outcomes (Muñoz et al., 2020). In this research design, however, assignment to treatment and control groups is not controlled by the researcher. Treatment assignment is determined by a combination of the unexpected event and a set of decisions related to data collection. As such, threats to the ignorability assumption often stem from the survey design employed by the fieldwork operative (Muñoz et al., 2020). Fortunately, the 1993 CES team used a rolling cross-sectional design, wherein both the presence of an individual in the sample and the time at which they were interviewed are random (Northrup and Oram, 1994).

Moreover, the ignorability assumption can be violated in the context of the UESD due to differences in *reachability* – that is, some individuals are easier to contact and more willing to participate early on in surveys than others (Brehm, 1993). This is potentially problematic, according to Muñoz et al. (2020), as different levels of reachability may lead to potential imbalances on unobservable characteristics between the treatment and control groups. The authors added that the extent to which these differences might threaten the UESD will depend on the survey design. Luckily, confounders related to reachability are not a significant cause for concern in rolling cross-sectional studies like the 1993 CES, given that their design guarantees that the day when respondents are interviewed is, in principle, random (Muñoz et al., 2020; Northrup and Oram, 1994). Of course, people may not respond on the selected day, but the propensity to respond should not vary systematically before and after the face ad.

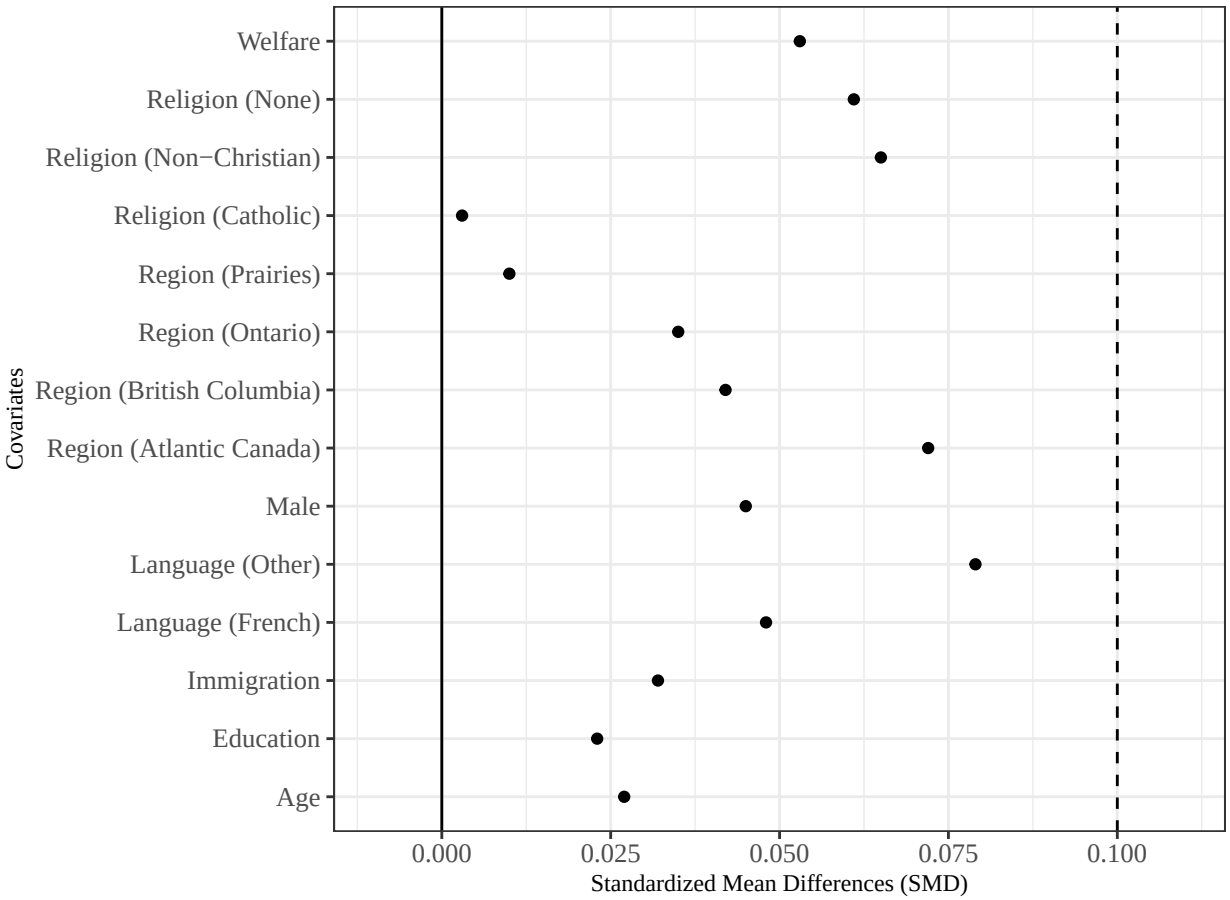
With all that in mind, this research is grounded in the assumption that the timing of interviews during the completion of the CPS is as-if random, so that the news of the attack ad provides an exogenous source of variation. The sample is split so that those who were interviewed before the PCs' ad aired are assigned to the pre-treatment group and those who were interviewed after the news broke are assigned to the post-treatment group. The treatment variable Ad_i (the attack ad) is operationalized as follows:

$$Ad_i = \{Ad_i = 0(pre - treatment), Ad_i = 1(post - treatment)\}$$

where the pre-treatment group consists of respondents who were interviewed before October 14th (2798 respondents) and the post-treatment group consists of those who were interviewed between October 16th and October 24th (832 respondents). I omit the day of treatment, as well as the day following treatment to allow for the news of the event to have sufficiently spread throughout the country.[2]

[2]As a robustness check, I analyze the impact of the face ad when the day following treatment is included. Separately, I narrow the window of pre-treatment observations used to the month of October alone – generally, voters interviewed immediately before an unexpected event are better counterfactuals than those interviewed at an earlier date. Furthermore, given that the face ad was not broadcast in Quebec, I test how its effects change once the province's respondents are excluded.

Figure 2: Sample Balance



Given that this study operates as an unexpected, as-if random experiment, the pre- and post-treatment samples should be balanced. To measure balance, the standardized mean differences between the pre- and post-treatment groups were examined (Figure 2). As a general rule of thumb, values of less than 0.1 are acceptable, while values of greater than 0.1 indicate meaningful imbalance that may affect the results (Austin, 2009; Bridgman et al., 2020). I find that across demographic and attitudinal measures, the sample is balanced with none of the variables crossing the 0.1 threshold. This strengthens the assumption that the broadcast of the face ad behaves like a natural experiment.

Data Analysis Strategy

To test the impact of the 1993 face ad on vote intention, I run several linear probability models (LPMs), with vote intention as the dichotomous dependent variable. Over the last three decades, research has illustrated the problematic aspects of nonlinear probability models and, in particular, the difficulties of interpretation (Breen et al., 2018). The major advantage of the linear probability model, on the other hand, is its interpretability. With the LPM, if a point estimate is equal to 0.1, that means that a one-unit increase in X is associated with a 10-percentage point increase in the probability of Y being 1. The logistic model is not as straightforward since the log-odds scale is much more difficult to interpret (Breen et al., 2018; Hellevik, 2007). Moreover, it is problematic to interpret log-odds ratios or odd ratios as substantive effects, within and across models as well as samples, due to unobserved heterogeneity (Mood, 2010). Unobserved heterogeneity refers to the variation in the dependent variable that is caused by unobservables, regardless of whether unobservables are correlated with the independent variables or not.[3] A common reason to avoid the linear option is when the probabilities being modeled are extreme, which could produce predicted probabilities that exceed the boundaries of 0 and 1. But the linear model fits just as well as the logistic model when the probabilities are within these bounds (Hellevik, 2007; Long, 1997).

LPMs are employed for two of the main party groupings in 1993 – the PCP and LPC. As aforementioned, the LPC won under the leadership of Jean Chrétien; while the PCP, led by Kim Campbell, fell into the fifth spot. The measures for party support, the outcome variables of interest, are taken from the CPS, as are the control variables. For all the models, the outcome variables are coded as one, if the respondent intended to vote for a given party, or zero, if they intended to vote for any other party (e.g., PCP vote: yes = 1, no = 0). To recapitulate, the treatment variable Ad_i is coded as one, if the respondents were interviewed after the 15th of October, or zero, if they were interviewed before the 14th of October.

[3]Despite its limitations, I test to see if the results are robust to logistic regression.

The vector of controls that are used in this study were drawn from previous analyses of campaign effects in Canada (Bridgman et al., 2020; Gidengil et al., 2013): age (continuous), male (yes = 1), education (categorical variable with four levels of educational attainment: high school diploma, bachelor's degree, and post-bachelor's degree, with no high school as the reference category), language (dummy variables for French and other language, with English as the reference category), religious affiliation (dummy variables for non-Christian, no religion, and Catholic, with Protestant serving as the reference category), region (dummy variables for Atlantic Canada, Ontario, British Columbia, and Prairies, with Quebec as the reference category), views about welfare (ordinal variable with three levels: cut a lot of spending, cut some spending, and cut no amount of spending) and immigration (ordinal variable with three levels: admit fewer immigrants, same amount, and more immigrants), and party identification (binary variable where a party identifier is given a score of one, while any other party identifier or non-identifier receives a score of zero – party leaners are not included).[4] The individual analyses of PCP and LPC voting employ the variables of Conservative and Liberal identification, respectively.

In order to test the third hypothesis, I estimate two separate series of regression models (one for each party) in which I progressively expand the treatment group by three days, while the control group remains the same size (those interviewed before October 14th). For the first models, the treatment group consists only of those interviewed in the three days after the 15th of October (October 16th-18th). For the second models, I also include respondents interviewed in the three days following the 18th of October (October 16th-21st). The final models add the last three days of the CPS, and thus, return the treatment group to its original sample size (October 16th-24th). As detailed by Ares and Hernández (2017), this analysis allows me to determine if the treatment effects decayed as individuals interviewed further away from the release of the face ad were incorporated into the treatment group. The

[4]The welfare and immigration variables account for left-right political orientation in Canada, which has operated along both economic and social dimensions. For a discussion on the meaning of left-right in Canadian politics, see Cochrane (2010, 2015), Collette and Petry (2014), Lambert et al. (1986), and Zipp (1978).

coefficients are graphically compared with a trend line to display any significant decay over time. The models within each set are specified with the same covariates.

Treatment Effect Heterogeneity

The final hypothesis requires the construction of two variables: awareness and ambivalence. Typically, political awareness is measured by an additive index of correct answers to factual political knowledge questions (Delli Carpini and Keeter, 1993; Hansen, 2009). Correct answers are coded as one and incorrect and "don't knows" are coded as zero. An index is built from questions asking respondents to identify which federal party promised to eliminate the deficit in three years, which party supported the goods and services tax (GST), and which party promised to do away with the GST.[5] The index ranges on a scale from zero to three.[6] From a validity perspective, a good index must be able to differentiate across different levels of political knowledge. In order to do so, the level of difficulty of the questions needs to vary. Hence, it has been suggested that the level of difficulty vary from about 30 percent to 70 percent correct answers on the items included in the index (Delli Carpini and Keeter, 1993). The above-mentioned questions vary between 41 percent and 62 percent, which is reasonably close to the range recommended by Delli Carpini and Keeter (1993). Cronbach's Alpha is a way to measure the internal consistency of a scale. The statistic ranges between 0 and 1, with higher values of alpha indicating that the scale is reliable. Most scholars agree that a critical value for alpha of 0.70 is required to achieve acceptable internal consistency (Lavrakas, 2008). The value of alpha is 0.76 among the set of items used for the awareness index, meaning that the internal consistency is acceptable. Following Fournier et al. (2019), I classify zero or one correct answers on the index as low awareness (0) and two or three correct answers on the

[5]The Reform Party promised to reduce the deficit to zero in three years, the PCP supported the GST, and all opposition parties pledged to repeal the GST.

[6]It should be noted that the awareness measure relies on questions about campaign knowledge as opposed to more general knowledge questions. While the lack of such questions in the 1993 CES may limit the measure, there is an extensive literature finding that general political knowledge and campaign knowledge are very closely linked: people with a good deal of general political knowledge tend to also be more knowledgeable about campaigns. For a discussion on the link between the two concepts, see Nadeau et al. (2008), Price and Zaller (1993), and White (2010).

index as high awareness (1).

For the ambivalence index, respondents are ordered on a five-point additive scale, where their political considerations are coded as being consistent or inconsistent with their vote intention. Similar to Hillygus and Shields (2008), I consider that internal conflict may exist as a result of the various types of reasons that can lead an individual to vote for one party over another. To identify relevant considerations, I used correlates of the decision (Fournier et al., 2019) – in addition to the number of valid responses.[7] The items most strongly associated with vote intention were retained as relevant considerations: party identification, party leader evaluations, and attitudes toward the GST and the welfare state. Therefore, a person scores low on the scale if they identified with a party other than the party that they intended to vote for, unfavourably rated the leader of the party they intended to vote for, were at odds with the GST position of the party that they intended to vote for, and held a different view on welfare spending than the party they intended to vote for.[8] Each party's stance on the GST and the welfare state were determined by analyzing their respective manifestos electronically (POLTEXT, 2020). Respondents who score a three or four on the additive scale are coded as having low ambivalence (0), while those who score from zero to two are coded as highly ambivalent (1). Finally, I create dummy variables for the different combinations of awareness and ambivalence: (1) low awareness/low ambivalence, (2) low awareness/high ambivalence, (3) high awareness/high ambivalence, with high awareness/low ambivalence serving as the reference category.[9] It is worth noting that strategic voters are classified by this method as ambivalent. However, given that the rates of strategic voting are very low in Canada, this issue is less of a concern (Blais, 2002).

[7]If a survey item had fewer than 1,500 valid responses, the political consideration was removed from contention.

[8]Following the 1993 CES, party leader ratings between 0 and 49 mean that voters rated the candidate unfavourably, while ratings between 51 and 100 mean that they rated the candidate favourably. Ratings of 50 mean that voters were indifferent about the candidate.

[9]In measuring the balance on the awareness and ambivalence variables, I find that the sample is well-balanced with neither of the measures crossing the 0.1 threshold – the awareness and ambivalence scores are 0.044 and 0.010, respectively. It is plausible that if the face ad was controversial enough, it could have led more ambivalent people for instance to tune into the campaign and want to answer questions about it, ultimately changing the composition of the sample. Fortunately, this is not the case here.

To test the moderating effects of awareness and ambivalence, the dummy variables are interacted with the treatment variable Ad_i for both the PCP and LPC. These models are specified with the vector of controls described earlier. For ease of interpretation, predicted probabilities are estimated based on the regression results and displayed graphically. All analyses are based on weighted data.[10]

Results

The Effects of (Direct) Attack Ads (H1 and H2)

Table 1 summarizes the effects of the face ad on vote intention. The negative coefficient on the treatment variable in model 1 shows that voters interviewed after the release of the attack ad were less likely to support the PCP, on average, than those interviewed before the attack. The difference is 12.3 percentage points and statistically significant. Model 2 incorporates the control variables. The difference in the probability of voting PCP between those who may have been exposed to the attack ad and those who were not decreases to 9 percentage points but remains statistically significant. These differences are larger than the average gap in the popular vote between election winners and losers in both Canada (8 percentage points since 1867, with an average gap of 5.4 percentage points between 2000-2021) and the United States (8.8 percentage points since 1824, with the average gap of 4.1 percentage points between 1988-2020) (Heard, 2020; Statista, 2021). Therefore, in line with the first hypothesis, these models demonstrate that negative ads can have a substantial negative effect on the support of sponsoring parties.

While the face ad reduced support for the PCP, it had a positive and statistically significant impact (5.8 percentage points), on average, on LPC support among voters who were interviewed after its release (see model 3). When control variables are added (see model

[10]Because some provinces were deliberately over-sampled and others deliberately under-sampled in order to ensure sufficient subsample sizes in provinces with smaller populations, the data must be weighted by province before national estimates are derived (Northrup and Oram, 1994). The weights also correct for differences in the probability of selection based on household size.

4), the estimated impact barely changes (5.3 percentage points). Only five times in either Canadian or American history have winners of national elections lost the popular vote. In Canada, no party has ever lost an election while winning the popular vote by more than 4.2 percentage points (Heard, 2020). Thus, even in tightly contested multiparty elections, the support that targeted parties garner from attack ads could be enough to sway their outcomes. Though Canadian elections are not a zero-sum game in that one party's losses are automatically the gains of another (Romanow and Soderlund, 1999), it is clear that the face ad pushed a significant number of voters to support the party of the target of the attack, Jean Chrétien. This finding supports the idea that attack ads can substantially increase vote intentions for targeted parties.[11]

[11]The results for H1 and H2 are robust to the alternative sample specifications mentioned earlier (see Appendices Tables A1 to A3). As another robustness check, I analyzed the treatment effects when the sample includes voters leaning toward a given party. The effect sizes decrease, but they are not considerably different (see Appendix Table A4). Lastly, placebo treatments constructed at different points left of the cutoff point ($t_p < t_e$) were analyzed to reveal any pre-existing time trends (see Appendix Table A5). The tests show that the changes in PCP and LPC vote intentions were small and/or not statistically significant before the face ad – the estimate is significant for PCP vote intentions when the placebo treatment point is set to September 29th, but it is less than half the size of the model 2 estimate (Table 1).

Table 1: The Effects of the Face Ad on Vote Intention

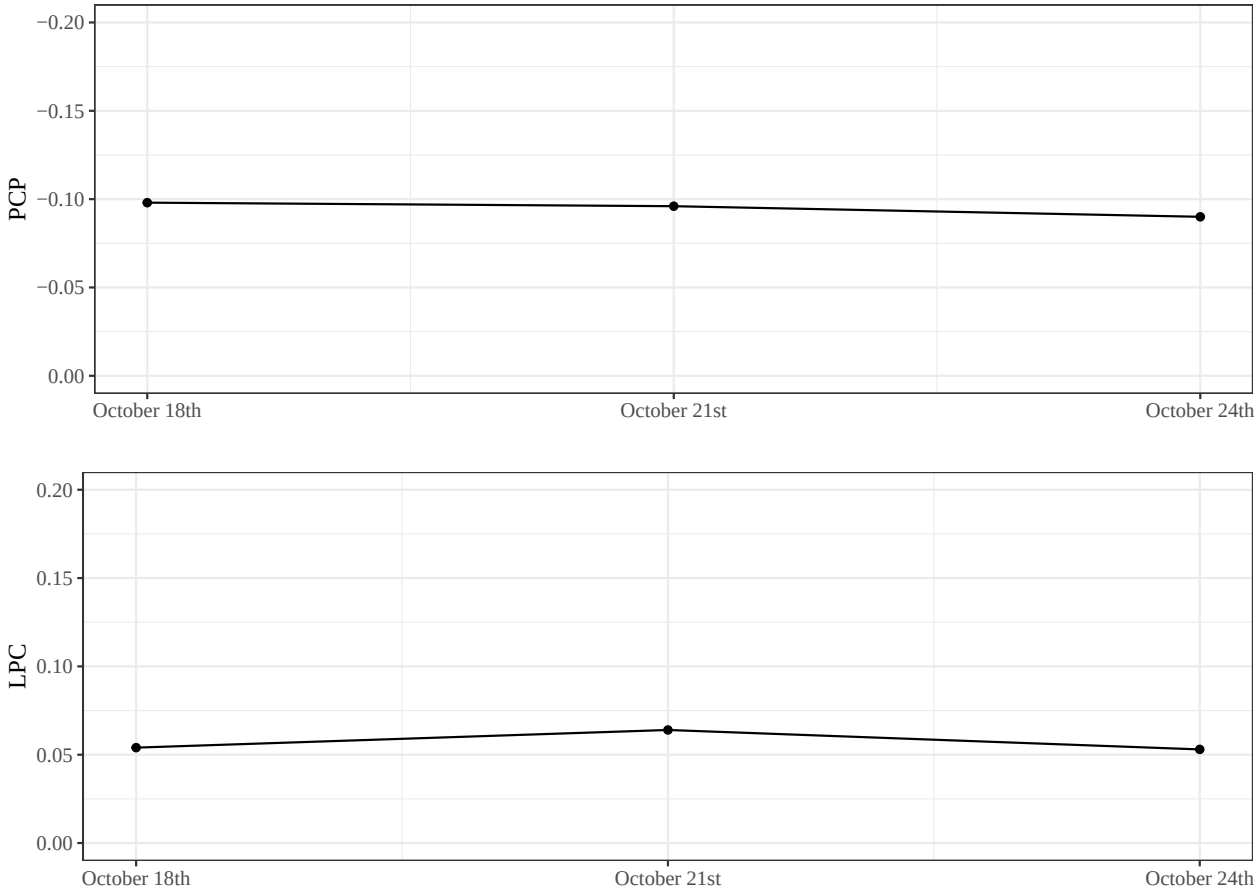
	PCP Vote Intention		LPC Vote Intention	
	(1)	(2)	(3)	(4)
Treatment	−0.123***	−0.090***	0.058*	0.053**
	(0.019)	(0.015)	(0.023)	(0.018)
Age		0.012		−0.012
		(0.018)		(0.021)
Male		−0.045***		0.009
		(0.013)		(0.015)
Education		0.012		−0.008
		(0.009)		(0.010)
Language (French)		0.049*		−0.127***
		(0.024)		(0.027)
Language (Other)		0.005		0.071**
		(0.021)		(0.024)
Religion (Non-Christian)		−0.019		0.048
		(0.029)		(0.033)
Religion (None)		0.039		−0.027
		(0.031)		(0.036)
Religion (Catholic)		−0.024		0.060**
		(0.018)		(0.021)
Region (Atlantic Canada)		0.073*		0.119***
		(0.030)		(0.034)
Region (British Columbia)		0.046		0.008
		(0.029)		(0.033)
Region (Ontario)		0.052*		0.091***
		(0.023)		(0.027)
Region (Prairies)		0.021		0.016
		(0.027)		(0.030)
Welfare		−0.007		0.025*
		(0.009)		(0.011)
Immigration		−0.002		0.013
		(0.009)		(0.010)
Party Id		0.595***		0.629***
		(0.016)		(0.017)
Constant	0.239***	0.045	0.365***	0.132
	(0.009)	(0.073)	(0.011)	(0.084)
Observations	2,421	2,421	2,421	2,421
R^2	0.017	0.383	0.003	0.430
Adjusted R^2	0.016	0.379	0.002	0.426

*p<0.05; **p<0.01; ***p<0.001

Decay in the Treatment Effects Over Time (H3)

Figure 3 displays how the estimates for the treatment variable change as respondents interviewed further away from the airing of the face ad are incorporated into the treatment group. The trend line for the PCP indicates a very slight decay of the treatment effect over time. When the treatment group is restricted to those interviewed within three days of the attack ad, the difference in the probability of voting PCP between those who may have been exposed to the ad and those who were not is minus 9.8 percentage points. As I incorporate into the treatment group respondents interviewed in the three days following the 18th of October, the size of the coefficient only decreases by 0.2 percentage points to 9.6 percentage points. Finally, when those interviewed until October 24th are added to the treatment group, the effect only diminishes to 9 percentage points.

Figure 3: Change in the Treatment Effects Over Time



The trend line for the LPC demonstrates no clear sign of decay in the treatment effect over time. When the treatment group is restricted to those interviewed between October 16th and 18th, the difference in the probability of voting LPC is 5.4 percentage points and statistically significant. If respondents interviewed in the three following days are included in the sample, the size of the coefficient increases by 1 percentage point to 6.4 percentage points. When the sample is returned to its original size, the effect only shrinks to 5.3 percentage points. The results for both PCP and LPC voting do not support the idea that negative ads inform vote intentions much more in the days just after their broadcast.[12] It is always possible that the effects of the face ad would have substantially decreased if it was released earlier. The ad aired only eleven days before the election.

Awareness and Ambivalence (H4)

Are some voters more susceptible to being influenced by negative ads than others, as a result of their ability to receive and accept persuasive information? Figure 4 shows the predicted probabilities of voting PCP and LPC based on the models presented in Table 1, but with the addition of interactions between the treatment and dummy variables corresponding to the four groups defined by the awareness and ambivalence measures: (1) Low awareness/low ambivalence, (2) Low awareness/high ambivalence, (3) High awareness/low ambivalence, and (4) High awareness/high ambivalence (see Appendix Table A6).

Contrary to expectations, the predicted probabilities of voting PCP following the release of the face ad show no substantial differences across the four groups of voters (see Figure 4). There is little to suggest that the impact was weakest for the low awareness/low ambivalence group (11.9 percent) and greatest for the high awareness/high ambiguity group (15.5 percent). The differences, such as they are, fall well short of conventional levels of statistical significance. Indeed, the predicted probabilities are similarly low across the board (15.3 percent for the high awareness/low ambivalence group and 16.1 percent for the low awareness/high ambivalence

[12]The results are robust to alternative sample specifications (see Appendices Figures A1 to A3).

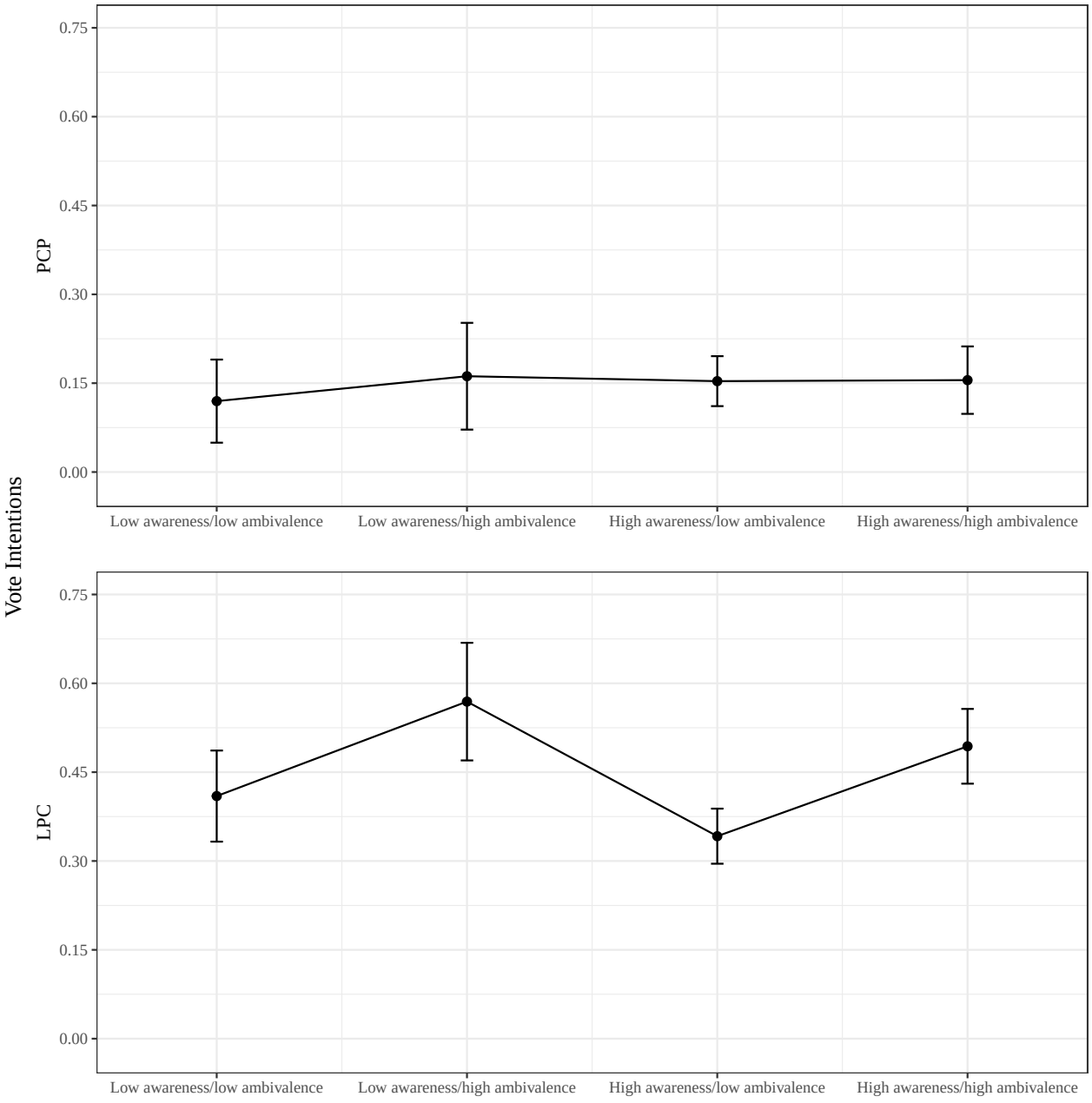
group).

For the LPC model, there are some significant – and substantial – differences across certain groups; however, the results do not match H4. The estimated impact is not smallest for the low awareness/low ambivalence group (40.9 percent) nor is it greatest for the high awareness/high ambivalence group (49.3 percent). The predicted probability of voting LPC is just 34.1 percent for the high awareness/low ambivalence group, and it reaches 56.9 percent for the low awareness/high ambivalence group. Additionally, the differences are only statistically significant between the high ambivalence groups and the high awareness/low ambivalence group, which was not predicted by H4.[13]

Contrary to H4 then, attack ads do not have the strongest impact among voters with high awareness/high ambivalence, and the weakest impact among voters with low awareness/low ambivalence. In fact, the probability of voting PCP after the broadcast of the face ad is similar across the four groups. Although the estimated impact is largest for the low awareness/low ambivalence group and smallest for the low awareness/high ambivalence group, the differences are not significant. The probabilities of voting LPC indicate that the face ad had a greater impact, on average, among voters with high ambivalence than among those with high awareness/low ambivalence. While this finding does not confirm H4, it lends some support to the idea that in the absence of strong predispositions, voters are more likely to be informed by campaign information. Since voters in the high ambivalence groups were not committed to any particular party, the event persuaded them to vote for the LPC at higher rates. As a whole, the results suggest that attack ads cause even those who are predisposed to vote a certain way to punish their sponsors; Yet, these groups are not equally willing to reward the targets of attack ads.

[13]The results for H4 are robust to several alternative tests, although the difference between the high awareness/high ambivalence group and the high awareness/low ambivalence group becomes borderline significant using logistic regression (see Appendices Figures A4 to A7).

Figure 4: Predicted Probabilities of Vote Intentions Across the Awareness and Ambivalence Groups



Discussion and Conclusion

Overview of the Findings and Implications

The unexpected event exploited in this thesis provided a unique opportunity to assess the causal impact of attack ads on vote intentions. In line with the research on negativity bias, the findings indicate that attack ads substantially reduce electoral support for sponsoring

parties and increase support for targeted parties. These findings also converge with studies on attitudinal effects showing that attack ads tend to backfire against their sponsors (Fridkin and Kenney, 2019; Garramone, 1984; King and McConnell, 2003).

This research design also made it possible to analyze whether the impact of attack ads decays over time. The results indicate that their effects do not decay, as the influence of the face ad was relatively constant following its disclosure. The effects of attack ads may weaken over longer periods of time, but they do not fade away within a couple of weeks.

Finally, the results indicate that the probability of voting for the sponsors of attack ads is similar regardless of voters' levels of awareness and ambivalence: even voters with strong predispositions will punish their sponsors. However, voters with strong predispositions are less likely to support the targets of attack ads. The probability of voting for the targets is significantly higher when voters are ambivalent.

This thesis has demonstrated that researchers can credibly estimate the causal effects of negative ads with a great degree of internal validity. In the case of UESD studies, exogenous assignment to treatment and control groups serves to increase internal validity, as this can protect against bias related to unobserved confounders. To the extent that it minimizes artificiality, the research design provides a high level of external validity because it relies on naturally occurring events unlike in a controlled experiment. It must be noted that the face ad served as a most-likely case for finding strong effects, given just how much of a personal attack it represented. This may limit the generalizability of the findings to personally-focused, trait-based negative ads. This thesis has shown as well that a wealth of information can be extracted from older datasets. Researchers may look to answer their questions by reaching into the past and applying new and innovative methodologies.

Attack Ads in the Modern Media Market

How relevant are the findings to modern political campaigns? It may be that the use of direct attack ads has changed or diminished post-1993. However, studies find that there has

been a steady increase in negative advertising in the United States since the 1980s (Fowler et al., 2016; Geer, 2012; Soroka, 2014). For example, over 50 percent of political advertising in the 2016 presidential election was negative, an increase of roughly 5 percentage points since 2008 and 25 points since 2000 (Fowler et al., 2016). In 2016, the Clinton campaign sought to disqualify the Republican Party leader, Donald Trump, by attacking his characteristics and personality. Attack ads like "What He Believes" and "Role Models" featured some of Trump's most controversial statements on television. To this day, many politicians and strategists are convinced that attack ads work. By discrediting the opposition, the hope is that voters will shift their support to sponsors, thereby increasing their chances of winning (Roy and Alcantara, 2020). As long as some believe attack ads to be effective in changing voters' minds, political parties will continue to use them.

Given the close and prolonged relationship between Canada and the United States, it is only natural for the former to have adopted most of its neighbour's political advertising techniques (Nesbitt-Larking and Rose, 2004). Practices developed in the United States have often been replicated in Canada after a short lag period. Unsurprisingly then, attack ads have been commonplace since the late 1980s (Nesbitt-Larking and Rose, 2004). In 1988, the LPC launched attack ads that focused on the character of their main opponent, the PCP leader Brian Mulroney. The ads seemed to accuse Mulroney of treason and of selling out Canada to the United States through the FTA. In 2015, the Conservative Party of Canada (CPC) produced a negative ad that saw a group of actors judge the LPC candidate, Justin Trudeau, as "just not ready" to become Prime Minister, stressing his youth and inexperience. This ad was followed by another one during the 2019 election campaign. This time, the same actors who concluded that Trudeau was "not ready" in 2015, proclaimed him "never ready". Even more recently, the CPC released a "Willy Wonka"-themed attack ad, which featured Trudeau's face pasted on top of a bratty character from the classic children's novel. It goes without saying that attack ads remain a major component of modern election campaigns.

Conclusion

Despite the prevalence of negative advertising in election campaigns, the literature does not provide a definitive answer as to whether attack ads win or lose votes. The reason for this is twofold. First, many studies have used the term imprecisely, failing to distinguish between direct attack ads and contrast ads that mention both the sponsor and an opponent. Second, the dynamics of electoral contests are very difficult to unravel. Because voters receive so much information from political parties, media, and their social media over a short period of time, it has been challenging to isolate the effect of any single event on vote intentions. Luckily, novel experimental designs like the one employed in this thesis can overcome the density of the informational environment. By overcoming these issues, this thesis concludes that going negative is not an effective campaign strategy and can even backfire.

This is not to claim that the use of attack ads will always cost sponsoring parties and benefit targeted parties, irrespective of the context. As Muñoz et al. (2020) stated, the presence of other salient events may change the impact of an unexpected event on an outcome of interest. For instance, if targeted parties react to a negative ad by engaging in the same tactic, this could offset the effects of the original ad and lead researchers to identify only modest or null effects. Under such circumstances, it would also be impossible to interpret the effects as a consequence of the first event alone. Because the face ad occurred at a time when there were no other salient events that could confound its effects, the ad was an ideal case to study.

It may be interesting to analyze whether the tone of advertising hides important differences. There could be a difference between personal-based and policy-based attack ads. While there is some mention of policy in the face ad, it would be interesting to see if the results hold when analyzing a negative ad that focuses on a candidate's or party's politics. If voters view personal attacks as a more serious violation of democratic norms, they may also perceive their sponsors as more threatening, and therefore, such attacks could trigger a stronger backlash.

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Appendices

Table A1: The Effects of the Face Ad on Vote Intention (Alternative Sample Specifications)

	PCP Vote Intention		LPC Vote Intention	
	(1)	(2)	(3)	(4)
Treatment (October 15th Included)	−0.083***		0.052**	
	(0.015)		(0.017)	
Treatment (October Sample)		−0.067***		0.054**
		(0.017)		(0.021)
Constant	0.053	0.109	0.153	0.216
	(0.073)	(0.100)	(0.083)	(0.119)
Observations	2,472	1,384	2,472	1,384
R^2	0.382	0.291	0.431	0.410
Adjusted R^2	0.378	0.282	0.428	0.403

*p<0.05; **p<0.01; ***p<0.001

Note: These models are specified with the vector of controls described earlier.

Table A2: The Effects of the Face Ad on Vote Intention (No Quebec Respondents)

	PCP Vote Intention		LPC Vote Intention	
	(1)	(2)	(3)	(4)
Treatment	−0.133***	−0.106***	0.054	0.056*
	(0.024)	(0.019)	(0.028)	(0.022)
Constant	0.266***	0.122	0.394***	0.192
	(0.011)	(0.091)	(0.013)	(0.104)
Observations	1,765	1,765	1,765	1,765
R^2	0.018	0.385	0.002	0.393
Adjusted R^2	0.017	0.380	0.002	0.387

*p<0.05; **p<0.01; ***p<0.001

Note: The treatment variable in model 3 is statistically significant at least at $p < 0.10$. Models 2 and 4 contain the control variables.

Table A3: The Effects of the Face Ad on Vote Intention (Logistic Regression)

	PCP Vote Intention		LPC Vote Intention	
	(1)	(2)	(3)	(4)
Treatment	−0.790***	−1.013***	0.209*	0.386**
	(0.139)	(0.172)	(0.098)	(0.127)
Constant	−1.164***	−2.922***	−0.574***	−2.040***
	(0.054)	(0.727)	(0.048)	(0.619)
Observations	2,421	2,421	2,421	2,421
Log Likelihood	−1,230.617	−794.259	−1,595.334	−1,013.554
Akaike Inf. Crit.	2,465.234	1,622.517	3,194.668	2,061.109

*p<0.05; **p<0.01; ***p<0.001
Note: Models 2 and 4 contain the control variables.

Table A4: The Effects of the Face Ad on Vote Intention (Party Leaners Included)

	PCP Vote Intention		LPC Vote Intention	
	(1)	(2)	(3)	(4)
Treatment	−0.086***	−0.065***	0.049*	0.042**
	(0.016)	(0.014)	(0.019)	(0.016)
Constant	0.211***	0.064	0.326***	0.130
	(0.008)	(0.064)	(0.009)	(0.074)
Observations	3,327	3,327	3,327	3,327
R^2	0.008	0.308	0.002	0.362
Adjusted R^2	0.008	0.305	0.002	0.359

*p<0.05; **p<0.01; ***p<0.001
Note: Models 2 and 4 contain the control variables.

Table A5: Placebo Treatments. Dependent variable: Vote Intentions

	PCP Vote Intention			LPC Vote Intention		
	(1)	(2)	(3)	(4)	(5)	(6)
Placebo Treatment (Sept. 19th)	−0.035			0.020		
	(0.019)			(0.020)		
Placebo Treatment (Sept. 29th)		−0.037*			−0.006	
		(0.016)			(0.017)	
Placebo Treatment (Oct. 09th)			−0.011			−0.042
			(0.023)			(0.025)
Constant	0.049	0.022	0.038	0.051	0.077	0.083
	(0.087)	(0.086)	(0.086)	(0.096)	(0.095)	(0.094)
Observations	1,798	1,804	1,802	1,798	1,804	1,802
R^2	0.406	0.421	0.416	0.439	0.432	0.438
Adjusted R^2	0.400	0.416	0.411	0.434	0.427	0.433

*p<0.05; **p<0.01; ***p<0.001
Note: These models are specified with the control variables.

To assess pre-existing trends, I estimate the effects of placebo treatments at the left of the cutoff point or unexpected event ($t_p < t_e$). September 29th was chosen as an arbitrary date near the median of the control group (Muñoz et al., 2020). Two other dates were selected, both ten days apart from the initial placebo treatment point. The results summarized in Table A5 reveal no major changes in vote intentions during the pre-event period.

Figure A1: Change in the Treatment Effects Over Time (October Sample)

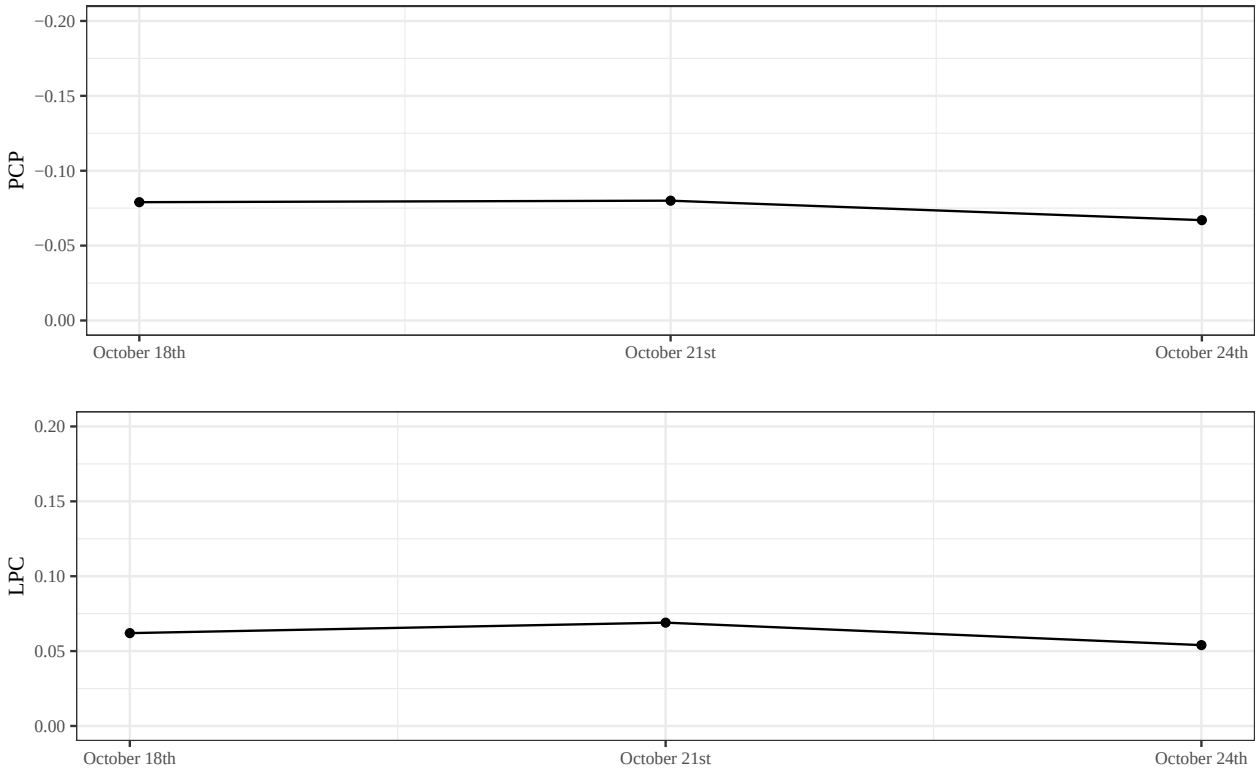


Figure A2: Change in the Treatment Effects Over Time (No Quebec Respondents)

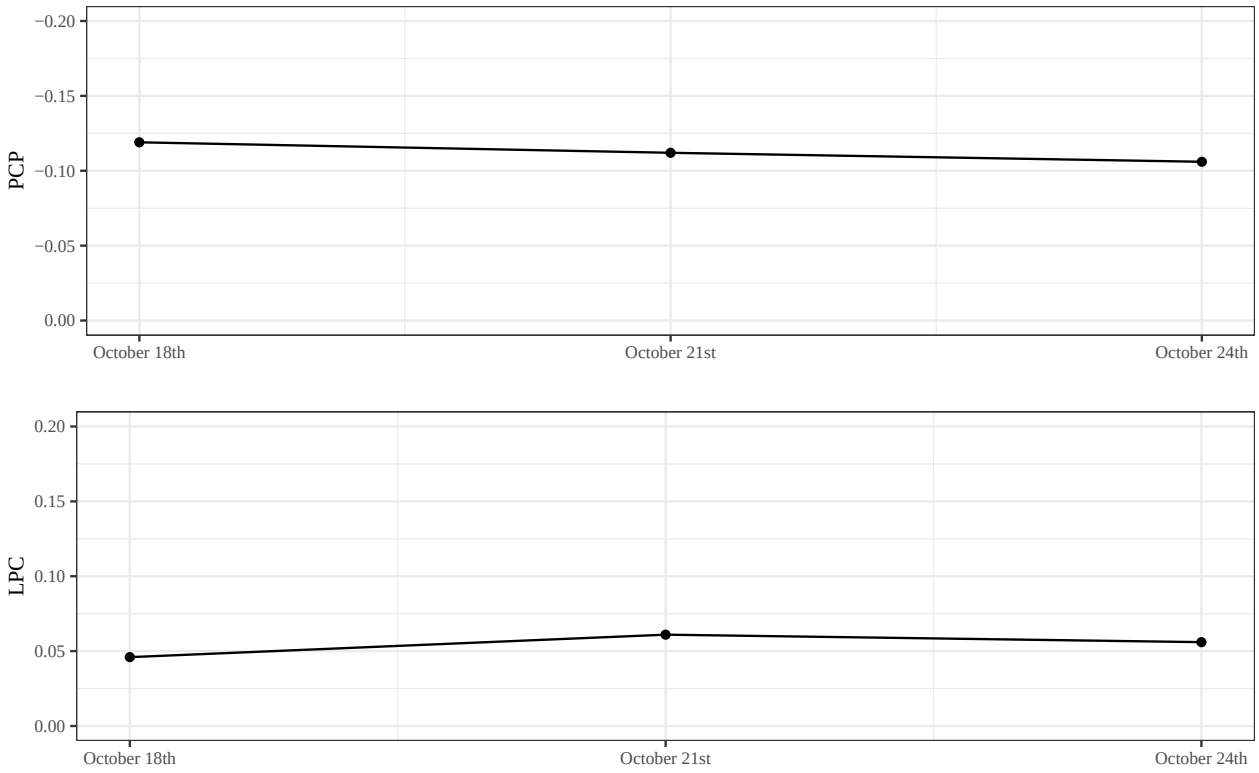
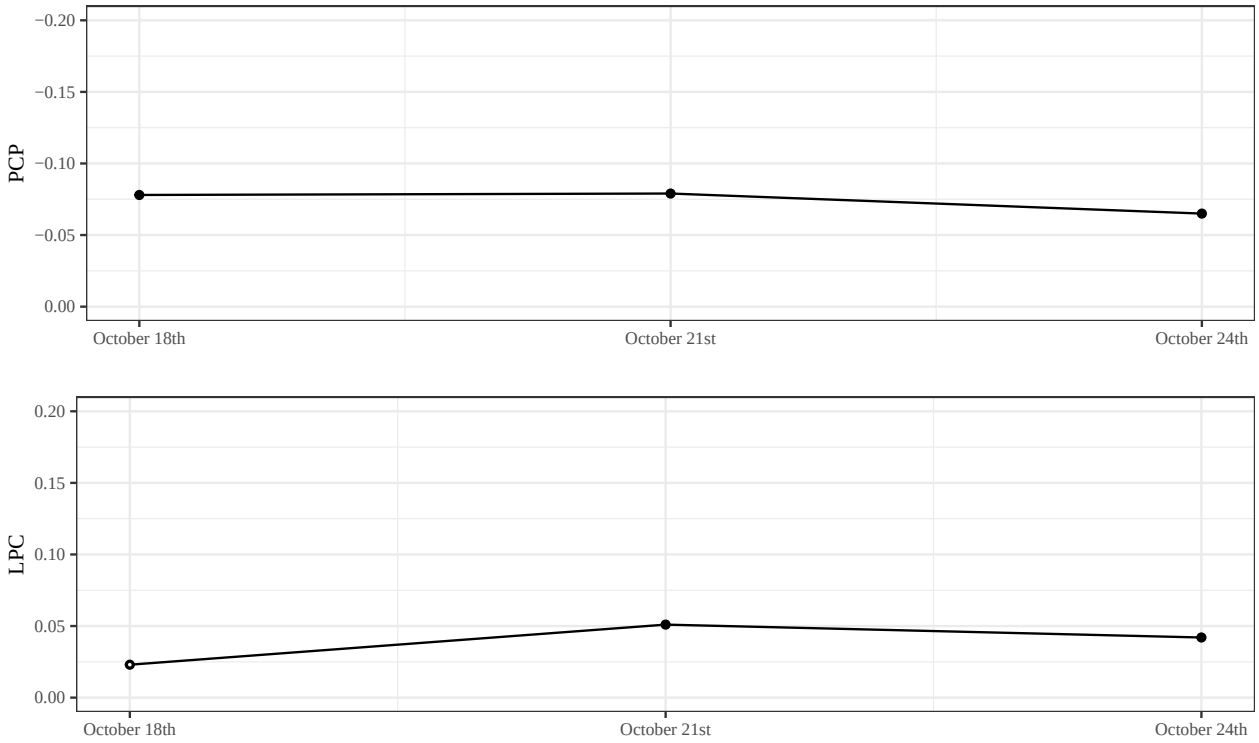


Figure A3: Change in the Treatment Effects Over Time (Party Leaners Included)



Note: The round marker without filling represents an estimate that is not statistically significant at least at $p < 0.05$.

Table A6: The Effects of the Face Ad, Moderated by Awareness and Ambivalence

	PCP Vote Intention	LPC Vote Intention
	(1)	(2)
Treatment	−0.081***	−0.0001
	(0.025)	(0.027)
LALA	−0.021	0.027
	(0.024)	(0.026)
LAHA	0.098***	0.078*
	(0.028)	(0.031)
HAHA	0.006	0.114***
	(0.024)	(0.026)
Treatment:LALA	−0.012	0.041
	(0.047)	(0.052)
Treatment:LAHA	−0.090	0.150*
	(0.057)	(0.063)
Treatment:HAHA	−0.005	0.038
	(0.042)	(0.046)
Constant	0.020	0.192*
	(0.087)	(0.096)
Observations	1,910	1,910
R^2	0.413	0.491
Adjusted R^2	0.406	0.485

*p<0.05; **p<0.01; ***p<0.001

Note: These models are specified with the control variables.

Figure A4: Predicted Probabilities of Vote Intentions Across the Awareness and Ambivalence Groups (October 15th Included)

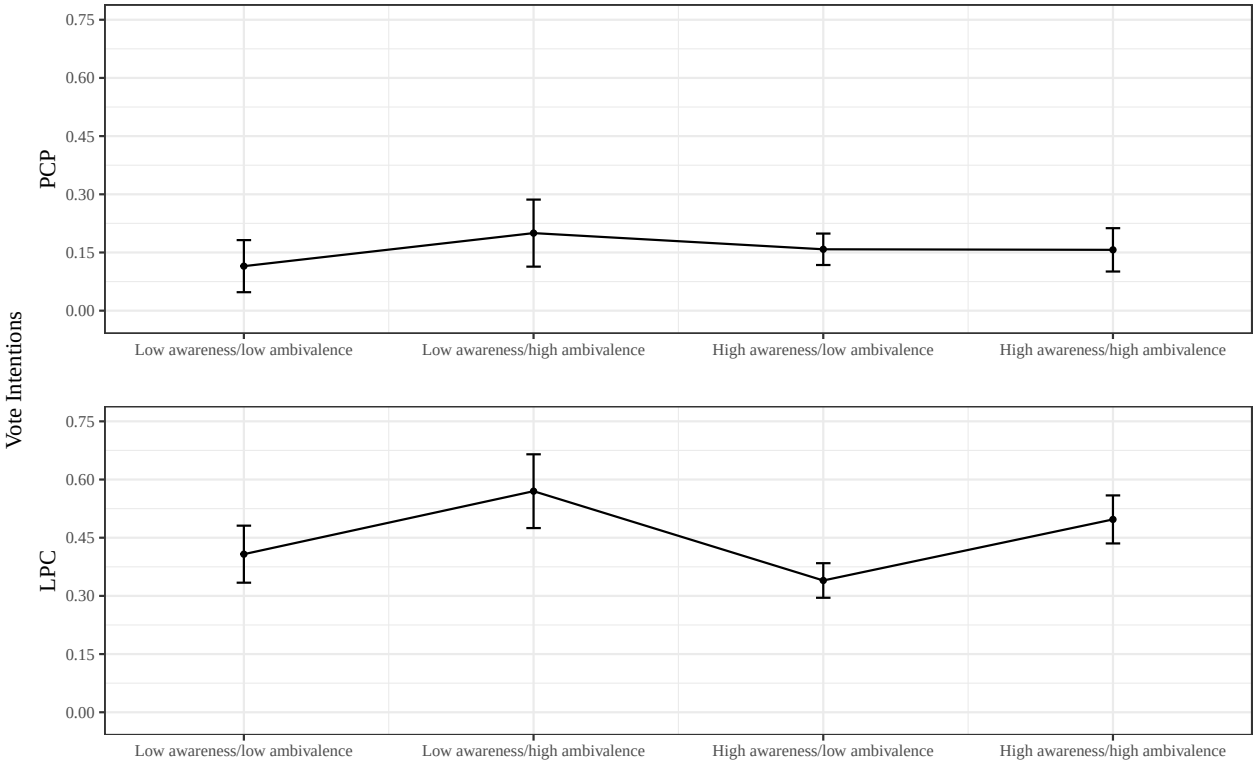


Figure A5: Predicted Probabilities of Vote Intentions Across the Awareness and Ambivalence Groups (October Sample)

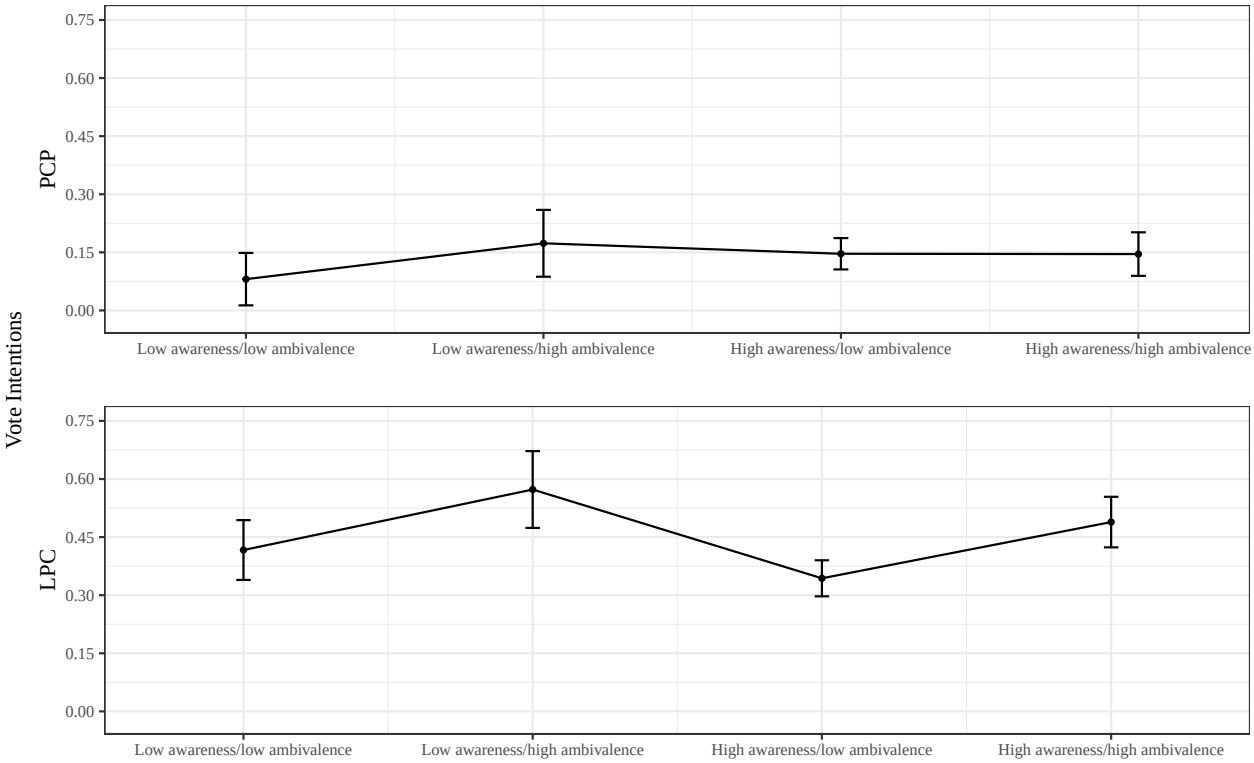


Figure A6: Predicted Probabilities of Vote Intentions Across the Awareness and Ambivalence Groups (Logistic Regression)

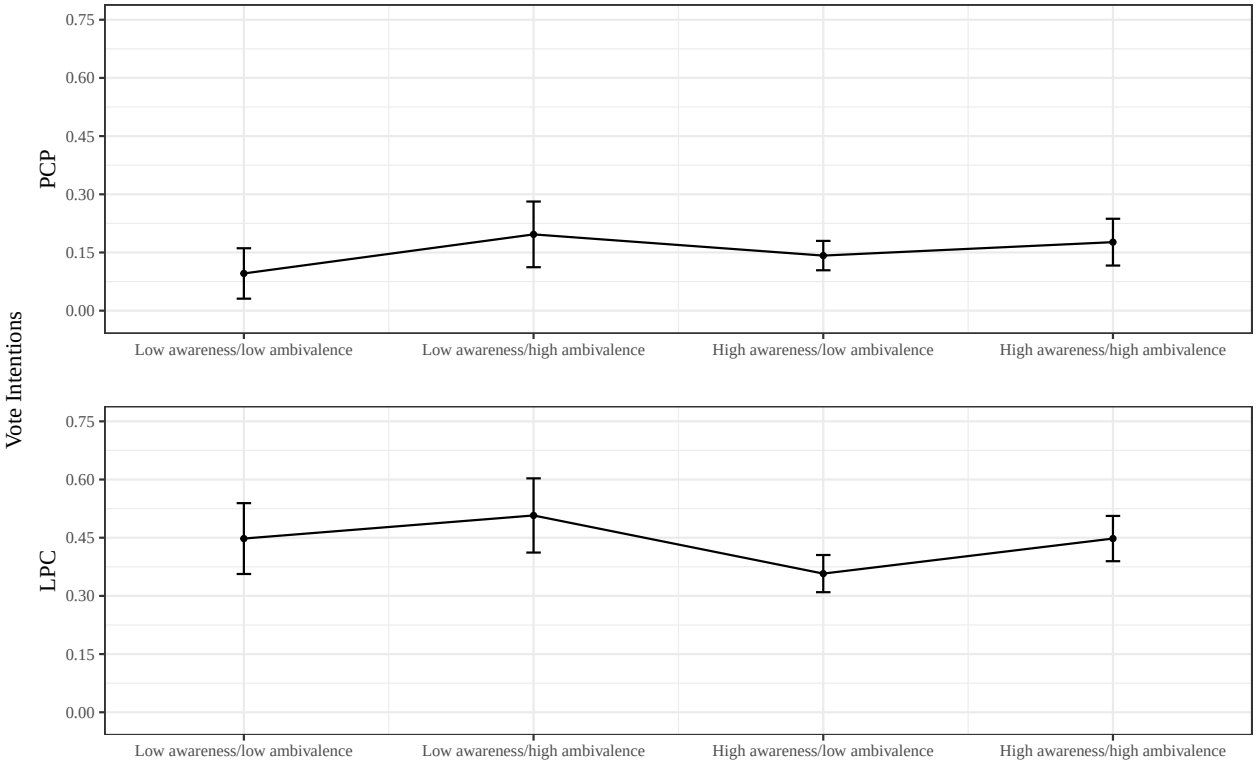


Figure A7: Predicted Probabilities of Vote Intentions Across the Awareness and Ambivalence Groups (No Quebec Respondents)