## From Gender Gap to Gender Gaps: Bringing Nonbinary People into Political Behavior Research

Quinn M. Albaugh, Allison Harell, Peter John Loewen, Daniel Rubenson and Laura B. Stephenson

The "gender gap" in voting is one of the most well-documented findings in survey research across democracies. However, gender gap research has traditionally assumed that everyone is either a man or a woman, which does not account for the growing number of people who identify as nonbinary. How do nonbinary people differ from men and women in their party identification and voting behavior? We answer this question using data from the 2021 Canadian Election Study online panel, which has a large enough subsample of nonbinary respondents to identify gaps in party identification and voting behavior. Nonbinary people are much less likely to identify with and vote for the Liberal Party or Conservative Party and much more likely to identify with and vote for the social democratic New Democratic Party (NDP) than both men and women. Many of these gaps persist even when restricting the analysis to LGBTQ respondents, adjusting for demographic variables that predict nonbinary identity, and adjusting for issue attitudes. Nonbinary people's distinctiveness from men and women suggests that researchers need to add nonbinary response options to gender questions and, wherever possible, incorporate nonbinary people into analyses of gender and politics.

ender gaps" in party support are some of the most well-established findings in survey research on political behavior (Abendschön and Steinmetz 2014; Bergh 2007; Conover 1988;

Erickson and O'Neill 2002; Gidengil et al. 2005; Giger 2009; Immerzeel, Coffé, and van der Lippe 2015; Norrander 1999; Studlar, McAllister, and Hayes 1998). Analyses of the modern gender gap find that women are more

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likely to support parties of the left than men. However, scholarship on gender gaps has traditionally assumed that everyone is either a man or a woman. As an increasing number of individuals, especially in younger age cohorts, identify as neither men nor women (Ipsos 2023; Lagos 2022), this assumption has become untenable. It also puts political science research out of step with many governments around the world, which are increasingly recognizing nonbinary identities officially and measuring them in their statistics (The Economist 2022; Statistics Canada 2022). This raises an important question with respect to the role of gender on political attitudes. How do non-binary people—that is, people who are neither men nor women—compare to men and women in their political behavior?<sup>1</sup>

Conventional surveys make it difficult to study the voting behavior of nonbinary individuals. Many surveys —even surveys that include questions about transgender respondents-still ask gender questions that do not allow nonbinary individuals the opportunity to selfidentify as such.2 Among the surveys that allow nonbinary respondents to self-identify, fewer still have large enough nonbinary subsamples to allow for the study of nonbinary individuals' political attitudes and behaviors. As a result, nonbinary people are usually left out of political behavior research or, at best, relegated to a footnote. We overcome these data challenges by relying on a large-scale online survey, the 2021 Canadian Election Study (CES) online panel (N = 20,968) (Stephenson et al. 2022). Large-scale online surveys are particularly well suited for studying small populations (Stephenson et al. 2021). The 2021 CES uses a two-step approach to measuring gender, including a gender identity question with an explicit nonbinary response option and an open-ended response option, along with a transgender identity question.<sup>3</sup> We identify 99 nonbinary respondents in the sample. This subsample is large enough to illustrate that nonbinary people are distinct from men and women if the gaps between men and nonbinary people and between women and nonbinary people are relatively large.

We analyze the nonbinary people's party identification, voting behavior, and issue attitudes in comparison with men and women. We find nonbinary people are to the left of both men and women in their party identification and voting behavior. In bivariate analyses, we find that nonbinary people are less likely to identify with the center-left Liberal Party than men (by 20 percentage points) and women (by 23 percentage points), less likely to identify with the Conservative Party than men (by 27 percentage points) and women (by 18 percentage points), and more likely to identify with the social democratic New Democratic Party (NDP) than men (by 49 percentage points) and women (by 40 percentage points). We also find nonbinary people are less likely to

vote for the Liberals than men and women (both by 18 percentage points), less likely to vote for the Conservatives than men (by 32 percentage points) and women (by 23 percentage points), and more likely to vote for the NDP than men (by 59 percentage points) and women (by 45 percentage points). These gaps are large compared to the gaps between men and women. We similarly find that nonbinary people are substantially more left-leaning than both men and women on most issue attitudes. Indeed, when we construct an overall left-right scale from 13 issue attitudes, we estimate that nonbinary people are 20 percentage points more left-leaning than men and 16 percentage points more left-leaning than women.

Our analyses likewise show that some of the gender gaps in party identification and voting persist when controlling for both demographics and issue attitudes. First, we show that these gender gaps remain even when we compare nonbinary people with LGBTQ men and women, which demonstrates that the predictive power of being nonbinary is not just due to nonbinary people being part of an LGBTQ political coalition. Second, we demonstrate that "compositional effects" play a substantial role in explaining these gaps by running models that adjust for demographics on which nonbinary people tend to differ from men and women. Third, we find that issue attitudes have less predictive power than demographics in explaining these gaps. However, we find that the gaps between men and nonbinary people in Liberal, Conservative, and NDP party identification and the gaps between women and nonbinary people in Liberal party identification and voting persist even when adjusting for both demographics and issue attitudes.

In this article, we make three main contributions. First, we contribute to research on gender and politics by highlighting a need for political scientists—and, indeed, the broader public—to move beyond thinking of gender differences in binary terms. Our results are a call to action to consider nonbinary gender identities as politically relevant and worthy of study. Second, we lay the groundwork for expanding on research on gender gaps in survey research by demonstrating the existence of gaps between men and nonbinary people and between women and nonbinary people using a general population survey and putting these nonbinary gender gaps through many of the early tests used by scholars of the man-woman gender gap. Our results point to a need for theories of how gender identities shape political attitudes and behavior that go beyond demographics and issue attitudes to explain nonbinary people's distinctiveness. Third, we contribute to a growing body of research that disaggregates LGBTQ people to examine differences in political attitudes and behavior across gender and sexual identity subgroups (Jones 2021; Strolovitch, Wong, and Proctor 2017). We show that nonbinary people are distinctly left-leaning,

even in comparison with other LGBTQ people. This result stands in stark contrast with past work that has concluded that transgender people—using measures that may include nonbinary people—are not as left-leaning as other LGBTQ subgroups (Jones 2021; Strolovitch, Wong, and Proctor 2017).

These findings have important implications for survey researchers inside and outside academia. Surveys should include options for nonbinary people when asking about gender, and where possible, include them in analyses. This allows survey respondents to correctly identify themselves, and also reduces the measurement error that results when nonbinary respondents are forced to either select another gender identity or drop out of surveys entirely. Furthermore, large-sample surveys of countries where nonbinary populations appear to be growing, such as the United States, Canada, and many OECD countries (Ipsos 2023), are particularly well situated to collect samples that allow for analysis of nonbinary people's attitudes and behaviors. When surveys have tens of thousands of respondents, they are likely to have large enough nonbinary subsamples to include in models of political attitudes and behaviors, as we demonstrate in this article.

# **Bringing Nonbinary People into Gender Gap Research**

Research on the modern gender gap emerged during the 1980 American presidential election. Several studies and popular pieces noted that women were less likely to support Republican presidential candidate Ronald Reagan than men (Chaney, Alvarez, and Nagler 1998; Manza and Brooks 1998; Norrander 1999). Decades of gender gap research relied on interviewer coding of perceived "sex." This practice treats "sex" as binary and objectively codable by external observers. However, transgender and nonbinary people demonstrate that perceived "sex" is not necessarily the same as gender identity—an individual's self-categorization of themselves as a man, a woman, nonbinary, and/or some other gender term.<sup>4</sup>

Recently, scholars of gender and political behavior have moved beyond simply comparing respondents across binary "sex" variables to examine variation in respondents' self-conceptions as masculine and/or feminine in order to explain political outcomes. These studies have shown that masculine and/or feminine self-conceptions offer considerable explanatory power for a range of political outcomes (Bittner and Goodyear-Grant 2017a; 2017b; Cassino 2020; Cassino and Besen-Cassino 2021; Gidengil and Stolle 2021). However, these studies—even ones that use data from online surveys—still use traditional categorical measures of "sex" that do not allow individuals to identify as nonbinary. More importantly, continuous masculinity and femininity scales do not necessarily capture nonbinary people, who may provide responses to

masculinity and femininity scales that are very different from one another.<sup>6</sup>

The continued use of a binary "sex" variable in survey research produces theoretical, substantive, methodological, and ethical problems. Theoretically, binary "sex" variables obscure the importance of gender identity, rather than "sex," as critical to understanding gender gaps. Substantively, we do not know much about how nonbinary people differ in their political attitudes and behavior. This gap is particularly important given the rising number of people who identify as nonbinary and the salience of nonbinary people in policy debates (such as debates over adding additional categories beyond "M" or "F" to identity documents). Methodologically, excluding nonbinary people introduces errors in measuring gender, estimating the relationships between gender and political outcomes, and providing generalizable results. When survey researchers ask questions that only allow respondents to identify as either male/man or female/woman, they force nonbinary people to either select binary categories that do not reflect their identities (miscategorization bias) or stop responding to the survey (nonresponse bias). The former could introduce systematic error into the measurement of gender and its relationship to political outcomes. For example, depending on how nonbinary people behave when only presented with male/female options, it could lead to an under- or overestimation of the impact of identifying as a man or woman. Nonresponse bias would limit the generalizability of the findings to the entire population, as a portion of the population would not be included in the sample. Finally, ethically, if survey researchers do not ask questions that allow nonbinary people to self-identify, they effectively erase nonbinary people from academic research (Namaste 2000). Unlike some identities, such an erasure may feel blatant because gender is regularly queried in survey research. For all these reasons, survey researchers need to ask questions that allow nonbinary people to identify themselves and subsequently incorporate them into their analyses whenever possible.<sup>7</sup>

The existence of nonbinary people means that we need to move from studying "the gender gap" to studying multiple gender (identity) gaps. We focus on three such gender gaps—between men and women (M–W), between men and nonbinary people (M–NB), and between women and nonbinary people (W–NB). This conceptual shift means that most of what we know from "gender gap" research only applies to one comparison: the M–W gap.

## **Explanations of Gender Identity Gaps**

We are interested in expanding research on the role of gender "gaps" to incorporate nonbinary individuals. We seek to document what, if any, gaps exist between men and nonbinary people (M–NB) and between women and nonbinary people (W–NB), and what might explain them. We turn to both traditional gender gap research as well as

"sexuality gap" research to discern testable explanations for the M–NB and W–NB gaps. We draw on both literatures for theoretical perspectives because some explanations of the M-W gap, such as early childhood socialization into stereotypical gender roles (Gilligan 1982), do not hold up very well when we consider transgender and nonbinary people. Here, we focus on five explanations taken from these two literatures that we believe are likely relevant: movements' roles in shaping identities (Conover 1988), selection into identities not ascribed at birth (Egan 2012; 2020), "compositional effects" (Howell and Day 2000; Studlar, McAllister, and Hayes 1998), LGBTQ rights attitudes, and attitudes on non-LGBTQ-specific issues (Schaffner and Senic 2006). We focus on these explanations not because they are an exhaustive list of possibilities but because we have at least some data that relates to these explanations.

One possible explanation for gender identity gaps relates to the historical development of the LGBTQ political movement. This parallels arguments about the feminist movement and feminist identification as explanations of the M-W gap (Conover 1988). As LGBTQ political organizations have expanded their focus to include transgender people, they also have included nonbinary people within their coalitional umbrellas. LGBTQ organizations typically have ties to the political left. However, to date, most studies of LGBTQ political behavior overwhelmingly rely on data from lesbian, gay, and bisexual (LGB) individuals (Egan 2012; Grahn 2023; Guntermann and Beauvais 2022; Hertzog 1996; Schaffner and Senic 2006; Turnbull-Dugarte 2022; Wurthmann 2023) or same-sex couples (Turnbull-Dugarte 2020; 2021; Turnbull-Dugarte and Townsley 2020). These studies overwhelmingly find that LGB individuals or people in same-sex couples tend to be more left-leaning (in party identification, voting, and/or ideology) than comparable straight or heterosexual people. However, there is important variation by gender, sexual identity, and race among LGB people (Guntermann and Beauvais 2022; Jones 2021; Strolovitch, Wong, and Proctor 2017). If nonbinary people are similar to (cisgender or non-transgender) LGB people, then we might expect them to be left-leaning simply because they are part of the LGBTQ umbrella. Alternatively, we may expect nonbinary people to be more like LGB people generally because community-driven surveys suggest that nonbinary people are very unlikely to identify as straight or heterosexual (Bauer 2020; James et al. 2016).8

Another possibility is that demographic differences among men, women, and nonbinary people may explain the M–NB and W–NB gaps. One possible mechanism is *selection*. Egan (2012; 2020) suggests that differences between straight and LGB people may be attributable to factors that are conducive to developing and publicly adopting a sexual minority identity. This explanation

may likewise apply to nonbinary people. Given how entrenched the gender binary is within society, individuals almost always need to develop a nonbinary identity as teenagers—if not adults—after being ascriptively treated as male or female from birth. The process of developing a nonbinary identity may be more or less supported for different groups of people, which can in turn produce gaps in political attitudes and behaviors that correspond to those demographics, rather than gender identity itself. This explanation is difficult to test comprehensively. Few surveys have adequate questions about respondents' parents and early childhood experiences to capture this process. To our knowledge, there is no survey that asks these questions and allows nonbinary people to identify as such. However, it is possible to examine some variables that are usually related to an individual's circumstances of birth and/or early childhood, such as age, country of birth, racial and ethnic identities, or mother tongue. In Canada, nonbinary people are more likely to be young and less likely to be native speakers of French, Indigenous, or born outside Canada (Bauer 2020; see also Statistics Canada 2022). If we examine these (likely) prior demographic variables, they may account for any M-NB and W-NB gaps.

Another way demographic variables could matter is through demographic variables that may themselves be shaped by nonbinary identities. Early research on the M-W gaps focused on "compositional effects" as a possible explanation. The idea is that the M-W gap may be a product of other variables on which men and women differ in their composition, such as education or income (Howell and Day 2000; Studlar, McAllister, and Hayes 1998). These compositional effects, often referred to as structural explanations, explain in part the size of the M-W gaps (Gidengil et al. 2005). Importantly, these "posttreatment" variables may themselves be consequences of gender inequalities within society. This concern applies to the M-NB and W-NB gaps as well. Nonbinary people differ from both men and women on many demographic variables that are not clearly prior to the development of nonbinary identity. For example, community-driven surveys from Canada suggest nonbinary people are more likely to be low income and are less likely to have graduated from high school (Bauer 2020).

Issue attitudes (or values differences) are another potential explanation for gender gaps. For example, Studlar, McAllister, and Hayes (1998) examine whether several issues, including spending on poverty and defense, the death penalty, and abortion account for the M–W gender gap in Australia, Britain, and the United States. Similarly, gender gap research has identified several value dimensions that explain portions of the M–W gender gap, including views on state intervention in the economy, capitalism, law and order, traditional moral values (or feminism), and postmaterialism (Erickson and O'Neill 2002; Gidengil

et al. 2005). If nonbinary people differ from men and women in their political attitudes, then it is possible that any M–NB or W–NB gaps can be attributed to these underlying attitude differences. Within issue attitudes, in our analysis, we focus on two main explanations: LGBTQ-specific attitudes and general left–right attitudes. We disaggregate these issues because past work on women and LGB people suggests that postmaterialist or rights-based explanations may not be the sole—or even the main—drivers of their distinct political behavior (for a discussion, see Schaffner and Senic 2006).

### The Canadian Case

We focus our study on Canada, which is a useful starting point for examining nonbinary political behavior. Most importantly, Canada is one of the only countries where a large-sample general population survey that includes a gender question designed to identify nonbinary respondents is publicly available. However, Canada has also gone further (comparatively speaking) than most other countries in state recognition of nonbinary gender identities. The 2021 Census of Canada was the first census worldwide to identify transgender and nonbinary people. The federal government has allowed nonbinary people to select an "X" gender marker on their passports since 2019. Several provincial and territorial governments have also allowed "X" gender markers on birth certificates, driver's licenses, health cards, and other government-issued identification, while others have removed gender markers entirely or started issuing identification without gender markers upon request. As nonbinary identities become more salient in other countries, they may start to look more like Canada.

The Canadian case usefully generalizes to other Western democracies because it has a multiparty system. Canada has five parties that regularly win seats in Parliament—the Liberals (center-left), the Conservatives (center-right), the NDP (social democratic), the Bloc Québécois, and the Greens. The Liberals and the Conservatives are the only parties to have formed a government federally. These parties have historically had different relationships with LGBTQ people and movements. The NDP has traditionally had the strongest ties to the LGBTQ movement (DeGagne 2019). NDP MPs, including Bill Siksay and Randall Garrison, attempted to add gender identity protections to human rights legislation for about a decade before the Liberal government under Justin Trudeau passed similar legislation in 2016. Although some scholars have argued that the Conservative Party has abandoned anti-LGBTQ policy positions on issues such as same-sex marriage and joined a pro-LGBTQ policy consensus (Guntermann and Beauvais 2022), the party remains to the right of other parties on LGBTQ issues. For example, many—if not most—Conservative MPs have voted against LGBTQ rights legislation since the early 2000s (Baisley 2023).9 Even though the

Conservative Party often drops its opposition to LGBTQ rights as LGBTQ rights become more popular and may sometimes take more pro-LGBTQ positions, we might expect nonbinary people to be more likely to support the NDP and less likely to support the Conservatives on policy grounds.

## **Data and Methodology**

We draw on data from the 2021 CES online panel (N =20,968), which draws on Leger Opinion's online panel (Stephenson et al. 2022). The data and documentation are available online through the Harvard Dataverse, and the documentation includes a full description of the questionnaire, informed consent, and compensation for respondents. The replication syntax is available on the Perspectives on Politics Dataverse (Albaugh et al. 2024). The 2021 CES has quota targets stratified by region (Atlantic [Newfoundland and Labrador, New Brunswick, Nova Scotia, and Prince Edward Island], Quebec, Ontario, and West [Manitoba, Saskatchewan, Alberta, and British Columbia]), and balanced on gender and age within each region.<sup>10</sup> Finally, targets were used for language (within Quebec, within Atlantic Canada, and overall). The 2021 CES dataset incorporates several dataquality controls, including removing incomplete responses, speeders, "straightliners," duplicate responses to previous respondents, respondents who provided mismatched information on different questions, and respondents who failed an attention-check question.

The 2021 CES uses a two-step approach to identify transgender and nonbinary respondents. The first step is a gender identity question:

Are you ...?

- 1. A man
- 2. A woman
- 3. Nonbinary
- 4. Another gender, please specify:

The second step is a transgender identity question:

Are you transgender?

- 1. Yes
- 2. No
- 3. Don't know/Prefer not to say

The transgender identity question appears immediately after the gender identity question on the same page of the online survey. All respondents, including the nonbinary respondents, receive the transgender identity question. In the 2021 CES, 35% of nonbinary people responded "yes," 46% responded "no," and 18% responded "don't know" to the transgender identity question.

A major concern when studying small groups is that there may be measurement error in identifying those groups. A small amount of measurement error within the entire sample can produce a large amount of measurement error within a small subsample, such as nonbinary people. Indeed, a skeptic may argue that nonbinary respondents' answers to the transgender identity question suggest that the "don't know"-or perhaps even the "no"—respondents do not actually identify as nonbinary but actually selected the nonbinary or "another gender" response options by mistake. We do not see much evidence to support this critique. The gender identity question uses straightforward language and appears early in the survey, before fatigue might become a concern. Even if respondents are not familiar with the term "nonbinary," they certainly would be familiar with the terms "man" and "woman." It is also unlikely that nonbinary people would be unfamiliar with what "transgender" usually means in society. A more likely explanation for the "don't know" responses is that nonbinary people interpret this question differently from how some researchers would and are expressing ambivalence or reluctance to take on "transgender" as a social identity. Nonbinary people are often ambivalent about describing themselves as transgender, if not opposed to using the term for themselves (Darwin 2017; 2020). This reluctance to identify as transgender often comes from associating the term with trans men and women-and especially with medical transition, which many nonbinary people do not pursue. Our data fit this explanation better than the skeptics' position as well. If the "don't know" or "no" respondents were generally men or women who erroneously selected "nonbinary" or another gender as a response, we would expect them to look more like men and women on vote intention and party identification than nonbinary people. supplementary materials, we present several checks for measurement error. First, we present cross-tabulations of transgender identity with vote intention and party identification. We find no evidence that nonbinary respondents who select "don't know" or "no" are likely to be men or women erroneously selecting the nonbinary response option. We show that support for the NDP is consistently high across nonbinary respondents, regardless of how they answer the transgender identity question (see section 3.3 in the supplementary materials). Second, we compare nonbinary people with the entire sample in additional data-quality checks, such as time spent taking the survey. If anything, nonbinary respondents are of a higher quality than men and women respondents (see section 3.1 in the supplementary materials). Third, we replicate our results by dropping low-quality respondents not previously removed from the data, such as respondents who took over an hour to complete a survey questionnaire, as another check on the quality of the data.

We also run a series of simulations to examine how sensitive our results are to mismeasuring nonbinary identity and find that most of them hold up to dropping varying numbers of nonbinary respondents and replacing them with cisgender men and women (that is, recoding those respondents as nonbinary) as if they had mistakenly selected the nonbinary response option, and to simply dropping nonbinary respondents (see section 3.5 of the supplemental materials). In general, the simulations where we drop nonbinary respondents and replace them with cisgender men and women selecting nonbinary response options by mistake indicate that the results would shrink substantially and become nonsignificant very quickly if large numbers of the nonbinary respondents were indeed mistaken cisgender men and women. By contrast, the estimates of the gaps generally remain stable when nonbinary respondents are dropped and not replaced. We find that the M-NB and W-NB gaps in Liberal party identification generally remain stable and significant when dropping up to 30 nonbinary respondents without replacing them, but the M-NB gap in Conservative party identification, the M-NB gap in NDP party identification, and the W-NB gap in Liberal voting can be sensitive to dropping smaller numbers of respondents (starting to become nonsignificant when more than one, five, and seven are dropped, respectively). We also run simulations dropping and replacing, or just dropping, the nonbinary respondents who selected "don't know" on the transgender identity question ("nonbinary-DK respondents"). These simulations generally show similar patterns—the estimate gaps shrink substantially when replacing nonbinary-DK respondents with cisgender men and women, but they do not when simply dropping nonbinary-DK respondents. However, our results vary in how sensitive they are to simply dropping nonbinary-DK respondents. The W-NB gaps in Liberal party identification and voting are generally robust to dropping up to 18 nonbinary-DK respondents, but the M-NB gaps in Liberal, Conservative, and NDP party identification can be fragile to dropping more than one, one, or four nonbinary-DK respondents, respectively. Overall, we believe that these simulations suggest that the nonbinary respondents are actually nonbinary rather than cisgender men or women mistakenly selecting the nonbinary response option, but the simulations based on simply dropping nonbinary respondents suggest that, apart from the very robust gaps in Liberal party identification, a relatively small amount of measurement error within the whole sample could make the results nonsignificant. We strongly encourage future researchers to replicate our results in other samples to see if the leftwing orientation of nonbinary respondents holds up over repeated studies.11

Table 1 displays the number, unweighted percentage, and weighted percentage of results from the 2021 CES. The 2021 CES includes raked weights to the 2016 Census on age, gender, education, and province. <sup>12</sup> Since the 2016

Table 1 Number of Respondents and Share of Sample, by Gender Identity, 2021 CES Online Panel

Category	N	Percentage (unweighted)	Percentage (weighted)
Men	9,480	45.73	48.43
Women	11,378	53.80	51.29
Nonbinary people	99	0.48	0.25
Missing	11	0.05	0.03

Census relies on binary sex categories, the nonbinary respondents are not weighted on gender. Instead, their weights are based on age, education, and province, but not gender. The 2021 CES weights produce a sample that has a larger percentage of nonbinary people (0.25%) than the 2021 Census (0.14%) (Statistics Canada 2022). However, we do not find this overly concerning because the 2021 Census may undercount nonbinary people since it is based on a household questionnaire. Nonbinary people may be more willing to identify as such in an online survey than in a questionnaire that is visible to other members of the household.

The 2021 CES transgender and nonbinary subsamples vary considerably in data quality. The transgender men subsample (N = 77) differs substantially on demographic variables (such as province of residence) from past estimates of transgender and nonbinary people (Bauer 2020; Statistics Canada 2022). The transgender women subsample (N = 21) is small enough that the uncertainty around the estimates is too wide for simple bivariate comparisons. Past research using communitydriven samples also suggests that the CES overrepresents transgender men relative to transgender women (Bauer 2020; James et al. 2016). However, the 2021 CES nonbinary respondents look similar to other data on nonbinary people in Canada (see the supplementary materials). 13 As a result, we are confident in the data quality of the nonbinary subsample but not in the transgender men and women subsamples. For this reason, we do not compare nonbinary people with transgender men and women directly in this paper, even though we would encourage researchers to make such comparisons when able in order to more fully investigate the full range of gender gaps.

We focus on two main outcome variables: party identification and voting behavior. In most of our analyses, we use vote intention (from the campaign period wave) over vote choice (from the postelection wave). We do this to avoid problems of survey attrition, as reducing the small number of nonbinary respondents in the campaign wave further would make it more difficult to identify the M–NB and W–NB gaps, and there is

disproportionately high attrition in the CES nonbinary subsample between survey waves (50% of nonbinary people dropped out versus 27% of men and 29% of women). However, we use vote choice in our examination of compositional effects and issue attitudes, and many issue-attitude questions, including an item on LGBTQ+ rights (a conversion therapy ban), are only available in the postelection wave. We only present results for the three largest parties—the Liberals, the Conservatives, and the NDP—because the nonbinary subsamples are too small to find meaningful differences in support for smaller parties (though results are available in the supplementary materials).

We also examine whether the M–NB and W–NB gender gaps in party identification and voting persist when restricting respondents only to LGBTQ people. We define LGBTQ people as anyone who identifies as (1) nonbinary, (2) transgender, (3) not straight/heterosexual, and/or (4) as Two-Spirit (an Indigenous gender/sexual identity term). <sup>14</sup>

We address theoretical expectations about these gaps, including selection, compositional effects, and issue attitudes, by running models of the gender gaps in party identification and vote choice that adjust for likely prior demographic variables (age, country of birth, visible minority identity, Indigenous identity, and mother tongue), ambiguously time-ordered demographic variables (education, income, sexual identity, and province of residence), and 13 issue-attitude questions. We provide question wording and variable coding for all variables in the supplementary materials. We run into two missingdata challenges. First, we encounter some missing data due to nonresponse on demographic questions. Second, we run into some survey attrition because 11 of 13 issue items come from the postelection survey. We use multiple imputation with chained equations to handle missing data due to nonresponse or attrition. Given the small nonbinary subsample, it would be difficult to examine the compositional effects or issue-attitudes explanations without multiple imputation. We include a detailed description of the multiple imputation model in the supplementary materials.

# **Bivariate Estimates of the Gender Identity Gaps**

We begin with bivariate estimates of the percentage identifying with and intending to vote for each party by gender identity. Since we present percentages for each variable, we use Wilson confidence intervals rather than the standard Wald confidence intervals. Wilson confidence intervals are not symmetric and allow more uncertainty on the side closer to 50%. Wilson confidence intervals perform better than Wald confidence intervals for percentages, particularly for values close to zero or

100% (Newcombe 1998; Vollset 1993; Wilson 1927). We present weighted results in the article and unweighted results in the supplementary materials. The unweighted results are generally similar, but the weighted results show somewhat larger gaps for the Conservatives and the NDP because the weights are higher for young respondents and respondents without a high school diploma. These factors tend to predict support for these parties, which may explain the increased M–NB and W–NB gaps in the weighted results.

Figure 1 shows the weighted percent identifying with each party by gender identity with 90% and 95% Wilson confidence intervals. 15 Figure 1 recovers the traditional M-W gap in Canada, in which women are more likely to identify with the NDP and less likely to identify with the Conservatives than men (Gidengil et al. 2005). However, these differences are small compared to the M-NB and W-NB gaps. Figure 1 shows that nonbinary people are less likely to identify as Liberals than men (by 20 percentage points) and women (by 23 percentage points), less likely to identify with the Conservatives than men (by 27 percentage points) and women (by 18 percentage points), and much more likely to identify with the NDP than both men (by 49 percentage points) and women (by 40 percentage points). These gaps are large enough to detect differences despite the small nonbinary subsample.

Figure 2 shows a similar pattern for vote intention. Nonbinary people are less likely to vote for the Liberals than men (by 18 percentage points) and women

(by 18 percentage points), and they are less likely to vote for the Conservatives than men (by 32 percentage points) and women (by 23 percentage points). Conversely, non-binary people are more likely to vote for the NDP than men (by 59 percentage points) and women (by 45 percentage points).

Our results demonstrate substantial M–NB and W–NB gaps in both party identification and vote intention. Nonbinary people are much less likely to support the Liberals and the Conservatives and much more likely to support the NDP. The M–NB and W–NB gaps are consistently larger than the M–W gaps. Based on these results, we posit that there is not just one "gender gap" in party support but (at least) three gender identity gaps. Nonbinary people are different from men and women in their party identification and voting behavior. In the next sections, we turn to testing potential explanations for these gender gaps.

# Comparing Nonbinary People with LGBTQ Men and Women

One possible explanation for the observed gaps could be that nonbinary people are part of the broader LGBTQ coalition. After all, LGBTQ people tend to be more likely to identify with and vote for left parties than straight cisgender people. We address this possibility by rerunning the analysis on a subsample of LGBTQ respondents.

Figure 3 shows the gender identity gaps in party identification among LGBTQ respondents. Figure 3

Figure 1
Weighted Estimated Percentage of Men, Women, and Nonbinary People Identifying with Each Political Party, with 90% and 95% Wilson Confidence Intervals

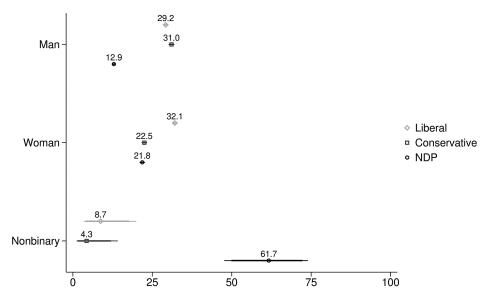


Figure 2
Weighted Estimated Percentage of Men, Women, and Nonbinary People Intending to Vote for Each Political Party, with 90% and 95% Wilson Confidence Intervals

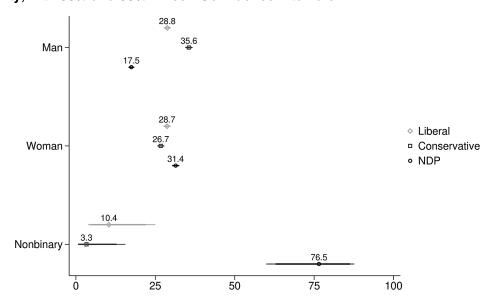
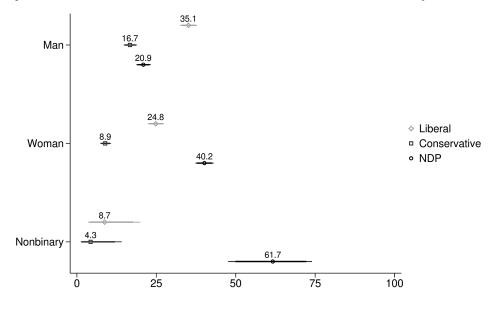


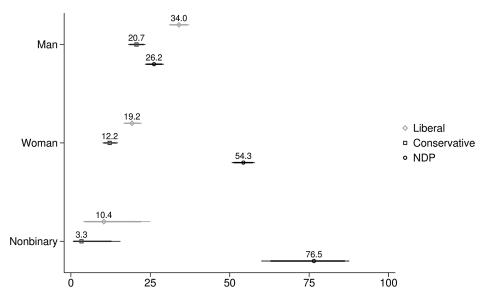
Figure 3
Weighted Estimated Percentage of Men, Women, and Nonbinary People Identifying with Each Political Party, with 90% and 95% Wilson Confidence Intervals, LGBTQ Respondents Only



recovers the M–W gap among LGBTQ people identified in previous work (Perrella, Brown, and Kay 2012; 2019), in which LGBTQ men are more likely to support the Liberals, while LGBTQ women are more likely to support the NDP. However, it also shows the

distinctiveness of nonbinary people. Nonbinary people are less likely to identify as Liberals than LGBTQ men (by 26 percentage points) and LGBTQ women (by 16 percentage points). Nonbinary people are less likely to identify as Conservatives than LGBTQ men

Figure 4 Weighted Estimated Percentage of Men, Women, and Nonbinary People Intending to Vote for Each Political Party, with 90% and 95% Wilson Confidence Intervals, LGBTQ Respondents Only



(by 12 percentage points) and LGBTQ women (by 5 percentage points), though the gap between nonbinary people and LGBTQ women is nonsignificant. Nonbinary people are more likely to identify with the NDP than LGBTQ men (by 41 percentage points) and LGBTQ women (by 22 percentage points).

Figure 4 shows a similar gender identity pattern for vote intention among LGBTQ respondents, though the gaps are generally larger for vote intention than party identification. Nonbinary people are less likely to vote Liberal than LGBTQ men (by 24 percentage points) and LGBTQ women (by 9 percentage points), though the gap between LGBTQ women and nonbinary people is not significant. They are also less likely to vote Conservative than LGBTQ men (by 17 percentage points) and LGBTQ women (by 9 percentage points), although again the gap between LGBTQ women and nonbinary people is not significant. Nonbinary people are much more likely to vote NDP than LGBTQ men (by 50 percentage points) and LGBTQ women (by 22 percentage points).

These results reveal that restricting the analysis to LGBTQ respondents accounts for some (but not all) the gaps in party identification and vote intention. LGBTQ women come closest to nonbinary people in vote intentions. However, nonbinary people's support for the NDP is distinct even among LGBTQ respondents. As a result, the gaps between men and nonbinary people and between women and nonbinary people cannot be attributed to

nonbinary people being more left-wing because they are LGBTQ.

### Selection, Compositional Effects, and **Issue Attitudes**

So far, we have shown that the gaps between men and nonbinary people and between women and nonbinary people found in the bivariate analysis persist even when restricting the sample to LGBTQ people. We turn to three further explanations that we can test with our data. The first is selection. The second is compositional effects: men, women, and nonbinary people have different values on other variables, such as age, education, income, sexual identity, and so forth, and these other variables actually explain the observed gender identity gaps. Put differently, if men, women, and nonbinary people were demographically the same—even on variables that are not clearly prior to nonbinary identity—the gender identity gaps would not exist. The third is issue attitudes: if nonbinary people are simply more left-wing in their attitudes-either on LGBTQ rights issues or overall—this may explain why they vote for more left-wing parties.

For demographics, we examine age, education, income, sexual identity, country of birth, Indigenous identity, visible minority (nonwhite and non-Indigenous) identity, mother tongue, and province or territory of residence. We take age, country of birth, Indigenous identity, visible minority identity, and mother tongue as the most unambiguously prior variables to nonbinary identity, and education, income, sexual identity, and province or territory of residence as ambiguous in time order relative to nonbinary identity. All nine demographic variables include ones known to distinguish nonbinary people from men and women (Bauer 2020; Statistics Canada 2022). For issue attitudes, we draw on 13 items from the campaign period and the postelection waves, including items on banning conversion therapy (one item), abortion (one item), equal rights (one item), family values (one item), bilingualism (one item), the environment (one item), government intervention in the economy (one time), economic inequality (two items), and immigration (four items). We take attitudes toward banning conversion practices as an LGBTQ rights measure, which may be especially important for explaining nonbinary people's party identification or voting behavior. The other items include several issues or scales traditionally used to explain gaps between men and women (Gidengil et al. 2005; Studlar, McAllister, and Hayes 1998). We construct a general left–right scale from these 13 items ( $\alpha = 0.84$ ). The exact question wording and coding for all variables are available in the supplementary materials. Given that we rely on some demographic variables with missing data and issue items from the postelection wave, all the results we present here use multiple imputation to address missing data (such as nonresponse or attrition).

We begin to examine the issue-attitudes explanation by presenting the bivariate estimates of the M-NB and W-NB gaps on issue attitudes. Table 2 displays the estimated percentage-point gaps on issue attitudes and scales for women versus men, nonbinary people versus men, and nonbinary people versus women using weighted ordinary least squares. As table 2 shows, women are more left-wing than men on most issue items. The exceptions are two of the four immigration items. However, nonbinary people are more left-wing than men on every issue item, and these gaps are significant for every issue other than government intervention in the economy, which falls just short of statistical significance. Nonbinary people are more leftwing than women on every issue item, though the W-NB gaps on income inequality, the wealth gap, abortion, and government intervention in the economy are nonsignificant. Notably, the W-NB gap is larger than the M-W gap on nearly every issue item or scale. The exceptions are income inequality, government intervention in the economy, and the economic redistribution scale, for which these gaps are approximately the same size. Table 2 makes it clear that issue attitudes are a plausible explanation for the M-NB and W-NB gaps.

We estimate how demographics and issue attitudes (separately and together) condition the gender gaps using a series of five weighted logistic regressions separately for each party. Model 1 ("no controls") includes only gender identity as a predictor. This bivariate model serves as a baseline comparison for the other seven models. Model

Table 2
Weighted Bivariate Estimates of Percentage
Point Differences in Average Position on
Issue-Attitude Items and the Left-Right
Scale, Women vs. Men, Nonbinary People vs.
Men, and Nonbinary People vs. Women

	M–W (women – men)	M-NB (nonbinary people - men)	W-NB (nonbinary people – women)
Conversion therapy	3*	16*	12*
Immigration levels	-4	19*	23*
Refugee migration levels	0	25*	25*
Immigrant integration	5*	28*	23*
Immigrants take jobs	-3	15*	18*
Income inequality	8*	16*	8
Wealth gap	5*	12*	7
Family values	7*	30*	23*
Equal rights	9*	24*	15*
Jobs vs. environment	4*	27*	24*
Bilingualism	4*	18*	14*
Abortion	4*	12*	8
Government intervention	6*	13	6
Left-right scale	4*	20*	16*

*Notes*: \* indicates a difference that is significant to p < 0.05 estimated using weighted ordinary least squares regression. All items are scaled 0–100, where 0 is the most right-wing position and 100 is the most left-wing position. Positive values indicate that women (column 2) or nonbinary people (column 3) are the more left-wing group.

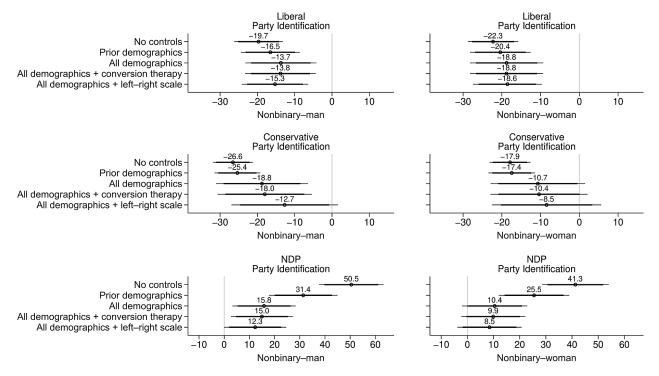
2 ("prior demographics") includes gender identity and the five likely prior demographic controls. This model shows, as best we can, the differences attributable to variables that may affect selection into nonbinary identity.<sup>16</sup> Model 3 ("all demographics") includes all nine demographics on which nonbinary people have been found to differ from men and women in past work. This model captures concerns about compositional effects, and includes not only "prior" demographics but also demographics potentially shaped by gender identities, such as income. Model 4 ("all demographics + conversion therapy") includes gender identity, all demographics, and attitudes toward banning conversion practices. Model 5 ("all demographics + left-right scale") includes gender identity, all demographics, and a single left-right scale. Together, models 4 and 5 provide a more direct test of whether issue attitudes specific to LGBTQ rights or a general left-right orientation account for nonbinary people's distinctiveness from men and women. Importantly, we note that models 3-5 all potentially include "posttreatment variables" that is, variables that could be shaped by nonbinary

identity. As a result, we urge caution in interpreting these results because they do not provide estimates of the "total effect" of nonbinary identity, only the "controlled direct effect" (the portion of the "total effect" that does not work through variables shaped by nonbinary identity). The regression tables for all the models are available in the supplementary materials. We also show alternative specifications that include models of issue attitudes without demographics and models that use separate variables for issue attitudes rather than one left-right scale in the supplementary materials. 17

Figure 5 displays estimates of the M-NB and W-NB gaps in party identification with 90% and 95% confidence intervals from each of the models. Given the smaller sample size we are working with, we recognize that the larger confidence interval can be an appropriate indication of effects that might be fully evident with a larger sample. Nonetheless, in the discussion below we take care to indicate which significance threshold we are referencing. The plotted results suggest that issue attitudes, either alone or with demographics, cannot account for all the M–NB and W-NB gaps in party identification. We find that nonbinary people are significantly (p < 0.05) less likely to identify as Liberals than both men and women across all five models. The point estimates of the M-NB and W-NB gaps in Liberal party identification are large across all five models (13-20 and 18-22 percentage points, respectively). Adjusting for prior demographics reduces the M-NB gap in Liberal party identification by about 3 percentage points and the W-NB gap by about 2 percentage points in Liberal party identification. This small reduction suggests that selection—at least based on the prior variables we can include from the CES—does not account for a large share of the gap. Adding all the demographic controls reduces the M-NB and W-NB gaps in Liberal party identification further, but they still persist. Adjusting for conversion therapy attitudes or a left-right attitudes scale does little to decrease these gaps (and sometimes increases them). Overall, these results suggest that (1) demographics can account for some of the M-NB and W-NB gaps in Liberal party identification, (2) issue attitudes do not account for these gaps, and (3) something else must explain these gaps.

We find that demographics and issue attitudes explain the M-NB and W-NB gaps in Conservative party identification better than they do Liberal party identification, but they still cannot fully account for the M-NB gap. Without controls, we find large M-NB and W-NB gaps in Conservative party identification (27 and 18 percentage points, respectively). When we adjust for prior

Figure 5 Estimated M-NB and W-NB Gaps in Liberal, Conservative, and NDP Party Identification, with 90% and 95% Confidence Intervals (Demographic and Issue-Attitude Models)



demographic variables, these gaps shrink very little. By contrast, when we add all demographic variables, the M-NB gap shrinks by about 30% (to 19 percentage points) and the W-NB gap shrinks by about 40% (to 11 percentage points). Our models suggest that sexual identity, in particular, contributes to a large reduction in this gap. Adjusting for conversion therapy attitudes does little to reduce the gaps beyond demographics. However, when we adjust for all demographics and the left-right scale, we see another substantial reduction: the M-NB gap falls to about 13 percentage points but remains significant at the higher threshold (p < 0.1), and the W-NB gap falls to 9 percentage points and becomes nonsignificant. Importantly, we cannot conclude that there is no W-NB gap in Conservative party identification after adjusting for demographics and issue attitudes, only that we no longer have a large enough nonbinary subsample to be confident in our results.

Finally, we find that demographics, and to a lesser extent issue attitudes, can explain a large portion of the M-NB and W-NB gaps in NDP party identification. Both gaps are very large without controls (50 and 41 percentage points, respectively). Adjusting for prior demographics reduces the M-NB gap and the W-NB gap by almost 40% (to 31 and 26 percentage points, respectively). This reduction appears to be largely attributable to age, which is a strong predictor of both nonbinary identity and NDP party identification. When we add all demographics, the M-NB and W-NB gaps shrink even further (to 16 and 10 percentage points, respectively), and the W-NB gap becomes nonsignificant. (The regression tables in the supplementary materials, along with our bivariate analyses among LGBTQ respondents, strongly suggest that sexual identity accounts for much of the reduction in models that include all demographic variables.) Finally, we see relatively limited reductions when adjusting for conversion therapy attitudes or the left-right scale, though they both provide added explanatory power beyond demographics alone.

Overall, these results suggest that most of the gaps in party identification persist even when accounting for demographics and issue attitudes. The M–NB gaps in Liberal, Conservative, and NDP party identification and the W–NB gap in Liberal party identification remain significant even after these adjustments. However, the W–NB gaps in Conservative and NDP party identification become nonsignificant, particularly after adjusting for age and sexual identity.

We conduct a similar analysis for voting behavior. As discussed above, we use estimates for vote choice rather than vote intention because we use issue attitudes from the postelection wave. The estimates for vote choice are noisier than for party identification because multiple imputation adds additional uncertainty around the estimates.

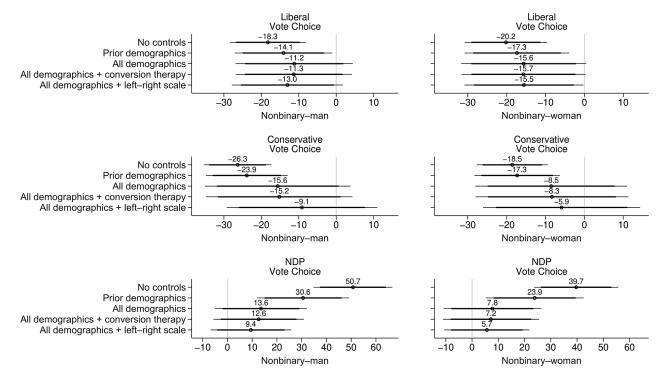
Figure 6 displays the estimated M–NB and W–NB gaps in Liberal, Conservative, and NDP vote choice from our five models. Figure 6 shows very similar patterns to figure 5, but demographic and issue attitudes render all the gaps much smaller and nonsignificant, even at the more generous threshold of p < 0.1, except for the W–NB gap in Liberal voting.

We draw three main conclusions from our analyses of the gaps in party identification and voting. First, we find that demographics and issue attitudes are unlikely to fully account for the M-NB gaps in Liberal, Conservative, and NDP party identification and the W-NB gaps in Liberal party identification and voting. That is, none of the testable explanations—selection, compositional effects, LGBTQ-specific policy attitudes, and general left-right attitudes—fully account for all the gaps in party identification and vote choice. Second, demographics appear to account for a larger share of the M-NB and W-NB gaps in Liberal, Conservative, and NDP party identification than issue attitudes. Among demographic variables, age and sexual identity are particularly important for explaining these gaps. Indeed, our results overall suggest that much of these gaps are attributable to the "sexuality gap." Third, when issue attitudes explain the M-NB and W-NB gaps in party identification and vote choice, it is not LGBTQ-specific policy attitudes that make the difference. Adding attitudes toward a conversion therapy ban generally does relatively little to explain the M-NB and W-NB gaps. Instead, it is nonbinary people's tendency to be more left-leaning than both men and women on a wide range of issues that reduces the estimated M-NB and W-NB gaps. We leave the origins of these more left-wing attitudes to future work. It could be through processes of socialization into nonbinary communities and/or selection into identifying as nonbinary among individuals from more left-leaning families, as Egan (2012) suggests for lesbian, gay, and bisexual individuals. We leave these possibilities for future research.

#### **Discussion**

In our analyses, we have shown that nonbinary people are politically distinct from men and women in their party identification, voting behavior, and issue attitudes using data from the 2021 Canadian federal election. Nonbinary people are to the left of both men and women. They are less likely to support the Liberals and Conservatives and much more likely to support the social democratic NDP. We also find nonbinary people are generally to the left of both men and women in their issue attitudes, even within the LGBTQ community. The gaps in party identification, voting, and issue attitudes between men and nonbinary people are generally larger than the ones between men and women. These results contribute to research on

Figure 6
Estimated M–NB and W–NB Gaps in Liberal, Conservative, and NDP Voting, with 90% and 95% Confidence Intervals (Demographic and Issue-Attitude Models)



gender gaps in political behavior by showing that non-binary people are politically distinct from both men and women. We examine five potential explanations of these gender identity gaps: socialization into the LGBTQ movement, selection effects, demographic compositional effects that are shaped by nonbinary identities, LGBTQ-specific issue attitudes, and non-LGBTQ-specific issue attitudes. None of these explanations fully accounts for these gaps. Even when we include all demographics and a left–right attitude scale, we still find significant M–NB gaps in Liberal, Conservative, and NDP party identification, and W–NB gaps in Liberal party identification and voting.

We make three main contributions. First, our results provide clear evidence that nonbinary gender identities are politically relevant. Nonbinary identity is a very strong predictor of left-wing politics in Canada, and the same may be true in other countries. Political scientists and the broader public need to pay attention to nonbinary identities. Second, we put the gaps between men and nonbinary people and between women and nonbinary people through many of the tests applied to the gender gap between men and women, along with some potential explanations from LGB political behavior research. Our results suggest that we likely need new and

different theories to understand nonbinary political behavior, rather than the commonly used demographic and issue attitudes available in many surveys. Third, we contribute to a growing body of research that disaggregates LGBTQ people to examine differences in political attitudes and behavior across gender and sexual identity subgroups by showing that nonbinary people are to the left of other LGBTQ people, which complicates the results from past work that suggest that transgender people are to the right of other LGBTQ subgroups, particularly cisgender lesbians and gay men (Jones 2021; Strolovitch, Wong, and Proctor 2017).

# Broader Implications for Survey Research

These results have important implications for survey research. We begin with the most straightforward recommendation: where and when transgender and nonbinary identities are politically relevant, large-sample political surveys (especially N>30,000) should always include questions designed to identify transgender and nonbinary respondents. These surveys are large enough to have meaningful subsamples of transgender men, transgender women, and nonbinary people. If large-

sample political surveys regularly identify transgender and nonbinary respondents, we can make substantial progress in understanding how their gender identities shape political attitudes and behavior.

Similarly, survey researchers may wish to consider alternative research designs, including targeted samples or oversamples of LGBTQ respondents, to understand better how gender shapes political attitudes and behavior. Targeted samples and oversamples of LGBTQ respondents would generally have larger transgender and non-binary subsamples, which would allow for statistical analyses that can include these groups.

Many survey researchers, however, work with conventionally sized general population surveys (N -1,000). These surveys do not have large enough transgender or nonbinary subsamples to analyze separately. Nonetheless, we see several reasons for these surveys to also include nonbinary response options in their gender questions. First, gender questions that only provide male and female response options will necessarily lead to measurement error—nonbinary people can either misgender themselves or stop responding to the survey. Although surveys may have errors in measuring gender identities when they include nonbinary response options, it is better to give respondents the opportunity to select an answer that applies to them rather than forcing them to select among categories that do not apply to them. This is especially important for nonbinary people because gender classification is omnipresent in society (and in survey research). Further, there is little risk associated with including the additional response options. Medeiros, Forest, and Öhberg (2020) found no significant difference in survey evaluations in an experiment designed to test the effect of binary and more inclusive gender identity questions on respondents, and there is no cost in terms of survey space to adjusting response options to questions that are already being asked. Second, nonbinary people are part of a broader LGBTQ umbrella, and it may be possible to analyze LGBTQ subsamples in a conventionally sized survey even when nonbinary people cannot be analyzed separately. If researchers wish to analyze LGBTQ respondents, they may need several variables to identify all LGBTQ respondents, including sexual identity, transgender identity, and nonbinary identity. Third, when surveys repeatedly ask similar questions over time, as in many election studies, nonbinary options will allow for the pooling of respondents across surveys. Fourth, pragmatically, survey researchers should consider providing nonbinary response options in their gender questions because nonbinary identity is much more common among younger age cohorts. The nonbinary population may not always be too small to analyze in conventional sample surveys, and the timing of that transition is unknowable.

### Supplementary material

To view supplementary material for this article, please visit http://doi.org/10.1017/S1537592724000975.

## **Data Replication**

Data replication sets are available in Harvard Dataverse at: https://doi.org/10.7910/DVN/LERDYS

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#### **Notes**

- 1 Some people who identify as neither men nor women do not use the term "nonbinary" to describe themselves. For example, some of them may use terms such as genderqueer, bigender, or agender. However, in the 2021 Canadian Census, about two-thirds of the individuals who do not identify as men or women identify as nonbinary (Statistics Canada 2022). For the sake of brevity and clarity, we refer to anyone who does not identify as a man or a woman as nonbinary.
- 2 For example, among participating election studies to Module 5 (2016–2021) of the Comparative Study of Electoral Systems that provided data on the coding of their sex/gender variables, 11 of 25 still use a binary (male–female) coding.
- 3 Most researchers use "transgender" as an umbrella term that refers to individuals who think of themselves as having a different gender from what society expects of them based on their assigned sex (as male or female) at birth. By this definition, "transgender" necessarily includes nonbinary people because identifying as nonbinary means identifying with a different gender than what society expects based on assigned sex categories. We focus exclusively on nonbinary people in this article because of data

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- limitations in speaking about transgender respondents. However, we mention transgender people when they are theoretically relevant.
- 4 We put "sex" between quotation marks because surveys often are not clear about which aspect of sex or gender they are measuring. Traditional interviewer coding of "sex" measures an external observer's perception of the respondent's sex. Online surveys that ask respondents to self-identify are measuring respondents' gender identities—their self-categorizations.
- 5 These studies often refer to self-conceptions as masculine or feminine as "gender identity." We do not use "gender identity" to describe these terms because that phrase is commonly used in transgender and non-binary communities to refer to an individual's self-categorization in terms of gender categories.
- 6 For example, someone who identifies as agender (without a gender identity) may respond at the low end of both the masculinity and femininity scales. Someone who identifies as bigender (both a man and a woman) may respond at the high end of both the masculinity and femininity scales. Someone who identifies as androgynous may select the middle of both these scales. The umbrella term "nonbinary" does not necessarily say anything about how someone will respond to these questions.
- Of course, we recognize that many conventionally sized surveys ( $N \sim 1,000$ ) will not have large enough nonbinary subsamples for well-powered statistical tests. We recommend including nonbinary respondents in univariate and bivariate analyses of other variables so that these analyses reflect the population of interest, which includes nonbinary people. However, there is no good option for including nonbinary respondents in regression analyses when there may only be, say, three nonbinary respondents. Combining nonbinary respondents with either men or women would mean misgendering them, which raises theoretical and ethical concerns. Dropping nonbinary people from the analysis entirely means that statistical models no longer generalize to the entire population. Including a dummy variable for nonbinary respondents avoids erasing nonbinary people from research, but it presents some statistical risks—including noisy coefficients, potentially overfitting the model to a very small number of nonbinary respondents, and making it more difficult for researchers to diagnose problems with their regression models. Ultimately, researchers using conventionally sized surveys may need to check whether any models they run that include nonbinary dummy variables face modelling problems. If they do, researchers may ultimately need to drop nonbinary respondents and accept that their statistical models can only generalize to men and women (for a similar

- argument, see Achen 2002). However, taking these extra steps is important to respect the place of non-binary individuals in society and their contibutions as survey respondents.
- 8 A related possibility is that we may expect nonbinary people to be more like transgender respondents. After all, the transgender movement typically promotes an umbrella vision of the transgender identity category that includes nonbinary people. We have relatively limited data on transgender political behavior, especially in comparison with other LGBTQ subgroups and from general population surveys. Some studies have used data from the Cooperative Election Study to examine transgender respondents in comparison with other LGBTQ subgroups (Jones 2021; Strolovitch, Wong, and Proctor 2017). These findings suggest that transgender people are less left-leaning than other LGBTQ subgroups. However, they rely on an unusual question for identifying transgender respondents that asks about whether they have started a gender transition ("Have you ever undergone any part of a process [including any thought or action] to change your gender/perceived gender from the one you were assigned at birth?"). It is unclear how we should interpret this question in comparison with other more commonly used approaches for identifying transgender respondents, such asking them whether they identify as transgender or identifying transgender respondents by comparing their responses on questions about their assigned sex at birth and current gender identity. In any case, these surveys cannot disaggregate nonbinary people from other transgender people, which leaves open the possibility that transgender men and women may drive the overall results for transgender people in these studies. If so, nonbinary people may be distinct from other groups within the transgender
- 9 Baisley (2023) focuses on same-sex marriage and gender identity human rights protections. However, this finding extends even to the period of this study. When a proposed ban on conversion therapy came to a vote in the House of Commons on June 22, 2021—the last vote on the legislation before the 2021 federal election—51 Conservatives voted in favor of the ban and 62 voted against it. This is a clear majority opposed to LGBTQ rights legislation. Since 2021, the Conservative Party has passed explicitly anti-trans resolutions at policy conventions (Lourenco 2023). These resolutions call for barring trans and nonbinary minors from receiving gender-affirming medical care and trans women from single-sex women's-only spaces, such as bathrooms, prisons, and sports.
- 10 The gender quotas were based on man/woman quotas. All the people who identify as "non-binary" or

- "another gender" were accepted into the sample. All respondents from the territories were accepted.
- 11 We thank an anonymous reviewer for raising these concerns about measurement error.
- 12 Using the 2016 Census is appropriate because the 2021 Census has not yet released data suitable for constructing weights on these four variables based on the CES target population.
- 13 In line with past work discussed above, the 2021 CES nonbinary sample is more likely to be young, low income, or a sexual minority, be native speakers of French, live in Quebec, be a "visible minority" (not white and not Indigenous), or be born outside Canada relative to both men and women.
- 14 Nonbinary people may, of course, identify as transgender, not straight/heterosexual, or as Two-Spirit.
- 15 We report results with both 90% and 95% confidence intervals and both p < 0.1 and p < 0.05 as standards because we believe the lower standard of significance is appropriate given the small nonbinary subsample.
- 16 An ideal study of the selection hypothesis would include many more variables than we have through the 2021 CES, including variables on respondents' parents and early childhood socialization. We leave this for future research.
- 17 The models that enter separate issue-attitude questions or scales as different variables have much wider confidence intervals, but they nonetheless suggest similar patterns in the point estimates.

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