

Unsuccessful candidates are more concerned about electoral fairness than election winners

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Abstract Democracy requires the losers of an election to accept their defeat to ensure a peaceful transition of power. However, we know little about how losing affects candidates' perceptions of the election. Using a regression discontinuity design and survey responses from hundreds of candidates in a country-wide election in Denmark - one of the most robust democracies in the world - we find that candidates who fail to win a seat are more concerned about electoral fairness than election winners. The corresponding effect of losing is 0.46 [95% CI: 0.10, 0.82] points using a 5-point electoral fairness index or 0.6 standard deviations. Our findings have important implications as they suggest that the core democratic institution of elections may paradoxically fuel discontent with democracy among the people who are supposed to be its strongest advocates.

Short title: Unsuccessful candidates worry about electoral fairness

Key words: Elections, Elite perceptions, Regression discontinuity design, Democratic institutions

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Introduction

Elections determine who holds power and who is in opposition, resulting in winners and losers, and the survival of democratic government requires the consent of the losers (Schumpeter, 1942; Katz, 1997; Przeworski, 2019). While there is rich evidence of voters' reactions to electoral defeat (Anderson and LoTempio, 2002; Blais and Gélinau, 2007; Sances and Stewart, 2015; Pierce, Rogers and Snyder, 2016), we know very little about how losing affects candidates. Recent elections in the USA and Brazil provide anecdotal evidence that losing candidates may not concede the election, question the fairness of the election, and blame the election administration and media. The events illustrate that electoral defeat can have significant consequences for candidates' understanding of the election outcome, and in turn for the survival of democracy, but a more comprehensive and systematic analysis is needed to understand the impact of losing on candidates' interpretation of the election result.

We provide such an analysis, using elite survey data and information about candidates' personal election results in the country-wide Danish elections in 2021. Relying on a regression discontinuity design (RDD), we examine hundreds of candidates who very narrowly lost or won in the election. We measure candidates' perceptions of the election through responses to five statements about electoral fairness, each measured on 5-point scales. We average four statements after confirming that they scale together via a pre-registered factor analysis. We find that unsuccessful candidates who failed to win a seat report to be more concerned about electoral fairness than election winners. The corresponding effect of losing is 0.46 [95% CI: 0.10, 0.82] points on a 5-point scale or 0.6 standard deviations. The high quality and integrity of Danish elections make this finding all the more remarkable.

Understanding Candidates' Reaction to Electoral Defeat

Scholars offer various reasons for voter disappointment after their preferred candidate or party loses. Two main perspectives dominate: utilitarian and psychological. The utilitarian view suggests voters are dissatisfied because their preferred policies are less likely to be implemented (Anderson et al., 2005). The psychological perspective emphasizes that people dislike losing due to the mental discomfort it causes, learning 'in rather unambiguous terms that the

electorate did not share their opinions' (Granberg and Nanneman, 1986, p.754). This can lead to cognitive dissonance, which describes the psychological discomfort that emerges as a result of conflicting beliefs, ideas, or values (Festinger, 1957).

The two perspectives also help explain unsuccessful candidates' behavior. In fact, losing candidates likely experience even stronger mental discomfort and reactions than voters. Candidates have a great interest in implementing their policy ideas and care about winning votes and office. Most candidates are ideologically motivated and are highly ambitious (Schlesinger, 1966; Fox and Lawless, 2005). When they enter the political race, they are ready to invest time and resources in the hope of gaining political influence (Gulzar, 2021). By virtue of the great personal investment of candidates, we expect that they will be disappointed with their personal election result if they fail to win a seat in the election. Narrowly losing candidates, our study subjects, probably experience the mental discomfort from losing particularly intense compared to 'sure' loser who expected a loss.

This feeling of disappointment is likely to manifest itself in losing candidates' views towards electoral fairness, particularly among those candidates who lost by a narrow margin. Our argument is motivated in large part by bodies of literature in political science, psychology, and economics that suggest that humans respond more to negative than to positive information (Soroka, 2014; Baumeister et al., 2001; Robertson et al., 2023). Losing candidates have to deal with the discomfort of having failed despite a rich investment of time and resources, and, thus, they experience large discrepancies between what they believed in before the election and what happened on election day. To save face when failing to reach their goal of political office, they might shift blame away from themselves (Hood, 2011; Tilley and Hobolt, 2011). Previous research reports that losing candidates are inclined to believe that voters were not informed about the issues of the election and attribute losses to factors beyond their control (Kingdon, 1967). By doing so, candidates attempt to obscure their role and responsibility and instead bring attention to external reasons. Blaming others, such as rival candidates, the media, or the administration, can help candidates deal with the discomfort of losing. While the tendency to shift blame to others is a general phenomenon (Kuipers, 2022), it may be especially strong for political candidates because their failures are likely to be noticed by others and can result in loss

of status. Therefore, we expect that losing candidates will shift blame away from themselves and be more likely to cast doubt on the election as compared to electoral winners.

Case Selection and Context

We study political candidates' reactions to election outcomes in Denmark, a country that is among the oldest and most robust democracies in the world. Danish citizens report high levels of satisfaction with the functioning of the political system, and experts state that Denmark represents one of the most ideal realizations of electoral democracy (see in Fig. S1). This makes Denmark a least-likely case to observe strong hostility towards elections among political candidates. The country-wide Danish local election on 16 November 2021 is the context of our study. The 98 municipalities in which the election took place are important political units. The politicians in the municipal councils have considerable autonomy to allocate about half of Danish public spending. Municipal elections are highly competitive and voter turnout is generally high (Bækgaard and Jensen, 2012). 9,164 candidates competed for 2,436 seats in municipal councils across the country. Most candidates run for major national parties, with councils typically including representatives from six or more parties. Candidates are elected every four years through proportional representation using the d'Hondt method, with open or semi-closed lists and no formal vote thresholds (Kjaer and Elklit, 2014). Further details on party candidate selection are in Section N of the supplementary information.

Data, Measures, and Research Design

We first compiled a database with contact information for the candidates running for election. The contact information was collected through web scraping of party web pages and manual coding. Our sample focuses on candidates who were running for one of the major parties represented in parliament. Candidates running for independent lists of citizens were not considered. In total, we managed to collect contact information for 6,220 candidates, amounting to 77% of candidates from the major parties. Two weeks after the election, we sent a personal email with a link to our questionnaire to all 6,220 candidates and asked for their informed consent prior to filling out our survey. To reduce burden among a heavily surveyed population,

we did not send out any follow-up reminders. In total, 1,033 questionnaires were completed through 1-9 December 2021 amounting to a response rate of 16.5%. The survey includes 615 candidates (59%) who failed to win a seat and 418 elected politicians (41%). 69% are men and 29% women.¹

Table 1: Share of candidates across parties

Party	% Sample	% Election
Social Democrats	19.5	20.7
Liberal Party	19.2	19.9
Conservative People's Party	13.8	14.7
Social Liberal Party	12.7	8.4
Socialist People's Party	12.1	9.8
Danish People's Party	5.4	7.6
The New Right	5.9	5.4
Unity List	8.2	9.2
Liberal Alliance	2.0	3.2
The Alternative	1.2	1.2

Table 2: Electoral fairness statements

#1. 'The election took place in a fair and impartial manner' (mean = 1.7, sd= 1.1)
#2. 'The election results reflects the voters' wishes' (mean = 1.8, sd = 1.0)
#3. 'The municipal administration is neutral and impartial in elections' (mean = 2.0, sd = 1.2)
#4. 'The media favors some candidates and parties over others in the coverage of the election' (mean = 2.2, sd = 1.2)
#5. 'I'm concerned that the vote count was rigged' (mean = 4.9, sd= 0.5)

The share of the 1,033 survey respondents' affiliation to political parties matches the actual share of candidates across parties in the election closely (see Tab. 1). The Social Liberal Party (center-left) and the Socialist People's Party (left-wing) are slightly overrepresented, while the Danish People's Party (right-wing) is slightly underrepresented. Our data includes candidates from all 98 municipalities and constitutes a good match of the geographical distribution of candidates across municipalities observed in the election (see Fig. S3). Our main outcome measure is an electoral fairness index based on five pre-registered statements. Candidates are asked to state their agreement with the statements using a 5-point scale from 'completely agree' to 'completely disagree' (see Tab. 2). The statements concern more ('vote count was rigged') or less ('vote does not reflect voters' wishes') extreme doubts about the election and thus cover concerns about electoral fairness in a comprehensive manner. In addition, we measure a candidate's satisfaction with their personal election result. The question reads 'On a scale from 0-10, where 0 stands for very dissatisfied and 10 for very satisfied, how satisfied are you with your personal election result?' (mean = 6.97, sd = 2.82). On average, candidates who win a seat are likely to differ from candidates who fail to win a seat on observable and unobservable characteristics such as experience, ambition, and campaigning. To obtain an estimate of the causal effect of losing on perceptions of electoral fairness, we employ a regression disconti-

¹The remaining candidates do not identify as men/women or prefer not to answer.

nunity design (de la Cuesta and Imai, 2016; Cattaneo, Idrobo and Titiunik, 2020). We adapt the design to proportional representation and compare candidates who narrowly fail to win a seat to those who narrowly win a seat (Dahlgaard, 2016). Thus, our analysis applies to narrow winners and losers, not the sure ones, which are theoretically less interesting because they were never real contestants for public office. Candidates who lose by a small margin are defeated not only by candidates from other parties but also by those within their own party. This setting should lessen the bitterness of the candidates who lose by a narrow margin. Our running variable (the ‘winner-loser vote margin’) captures the extent to which candidates in our sample were either close losers or close winners on the basis of the distance in personal votes to the last winning candidate within the same party in a given municipality. We note that it is not possible to calculate the running variable for all candidates that completed our survey (see Section N for details).

In total, we were able to calculate the winner-loser margin for 801 candidates. Figure S2 in the supplementary information shows the distribution of candidates along the winner-loser margin. The coding is based on official election results including the number of personal votes for candidates provided by *KMD valg*, a government-run, online database of elections in Denmark. In the SI, we show that our results hold with an alternative running variable based on the winner-loser vote margin across parties. Our running variable (mean = 34, sd = 759) creates a discontinuity at the value of 0 where the electoral status changes from ‘not elected’ to ‘elected’. Similar to the classical application of the RDD design in majoritarian systems, we assume that candidates around the threshold can be considered as near-random winners or losers. This means the distribution of potential outcomes is continuous at the treatment threshold. If candidates sort non-randomly, this assumption is violated. We test this by checking the density of observations at the threshold (see Fig. S6). We find a null result, which suggests the RDD can be used. In addition, we report balance tests checking for discontinuities in covariates measured in a pre-election candidate survey conducted by two major Danish news outlets and our own post-election survey (see Fig. S7 and Fig. S8). The results suggest that the assumption of continuity of potential outcomes is unlikely to be violated. We employ the state-of-the-art and model the relationship between the treatment and our outcome variables with a local linear

regression, use a bandwidth that minimizes the mean-squared error, and estimate cluster-robust standard errors and CIs that correct for remaining bias (Hyytinen et al., 2018; Cattaneo, Idrobo and Titiunik, 2020). We show that our results are robust to the use of alternative bandwidths and functional forms (see Fig. S10 and Tab. S7-S10). Finally, we find no discontinuities with placebo cutoffs (see Fig. S9).

Results

Figure 1 (left panel) groups candidates according to their winner-loser vote margin (the open circles). Candidates with a positive winner-loser vote margin, on the right, won a seat, while the candidates with a negative winner-loser vote margin, on the left, failed to win a seat. The vertical axis shows the average satisfaction with the personal election result, using local linear regressions within the optimal bandwidth of the winner-loser vote margin. The figure shows a vertical drop in satisfaction between the line on the right side of the winner-loser margin and the left side, indicating the causal effect of losing as compared to winning on candidates' satisfaction with the personal election result. The effect is -2.34 [95% CI: -3.25 , -1.42] or 0.8 standard deviations and thus substantial in size.

As we have five items to measure perceptions of electoral fairness, we create an index variable.² The primary advantage of using an index for a construct is that we have less measurement error and more gradation in the measurement when compared to the individual items. As a result, one gets a better measure of the underlying concept. Our pre-registered exploratory factor analysis suggests that all items except for 'I'm concerned that the vote count was rigged' are represented by the same factor. Therefore, we average the four items by creating a composite scale (labeled 'Electoral Fairness Index #1-4', mean = 2.3, sd = 0.7). We also build an index with the three items having the highest loadings, excluding the statement about media bias (labeled 'Electoral Fairness Index #1-3', mean = 1.8, sd = 0.8).

For both index variables, we report that narrow losers are more concerned about electoral fairness than narrow election winners (see center panel in Fig. 1). The corresponding effects of

²We reversed the coding of the items 'Concerned That Vote Count Was Rigged' (#5) and 'Media Favors Some Candidates' (#4), so that all items point in the same direction.

losing are 0.46 [95% CI: 0.10, 0.82] or 0.6 standard deviations and 0.42 [95% CI: 0.04, 0.80] points or 0.5 standard deviations on a 5-point scale.³ We interpret this as evidence of a gap between narrow winners' and losers' perceptions of electoral fairness among the political elite.

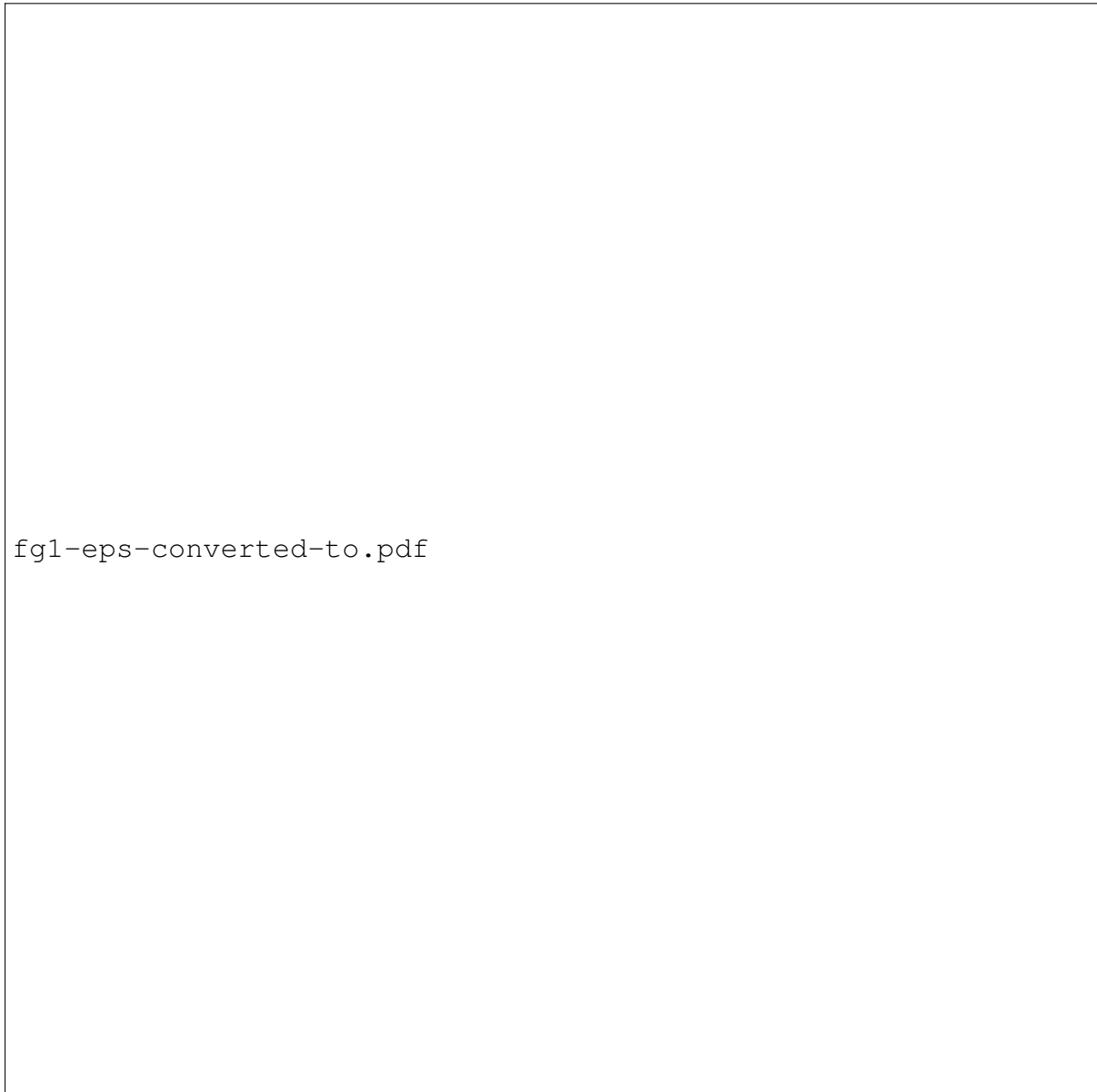


Figure 1: Left panel: Regression discontinuity effect of losing on a candidate's satisfaction with personal election result. Additional results are presented in Table S1. Center panel: Regression discontinuity effect of losing on electoral fairness index. Additional results are presented in Table S2. Right panel: Regression discontinuity effect of losing on electoral fairness items. Additional results are presented in Table S3.

More generally, our results show that the sense of misery that comes from narrowly losing

³Our main analyses regarding candidates' satisfaction with their personal election results and the main index variable are well-powered (see Tab. S10).

an election can affect democratic attitudes, even among candidates in one of the strongest democracies in the world. However, the above difference in the electoral assessment could be partially attributed to satisfied winners, and we should keep that in mind when interpreting the results. Evaluating the individual items in the right panel of Figure 1, we observe that losers consistently demonstrate greater concern than winners. The difference between winners and losers in their concern about media bias is most pronounced. Our findings, from candidates' views two to three weeks post-election, contrast with voters' immediate reactions that fade within days (Pierce, Rogers and Snyder, 2016).

Discussion

It is important to recognize the limitations of our study, particularly in its scope and the potential variability of the mechanism across different political contexts. First, we study candidates in a proportional electoral system, where we anticipate less hostility compared to majoritarian systems. In majoritarian contexts, losses are exclusively against opposing parties, not co-partisans as in our setting, thus offering less mitigation of hostilities. Second, unlike the local candidates in our study, national politicians are likely more cautious about deflecting blame due to their higher public visibility and personal stakes as full-time professionals. Therefore, applying our findings to national politicians remains uncertain. Third, our study is only a first step to understand candidates' consent of the election result. We studied narrow winners and losers and we therefore need to distinguish sure losers from narrow losers to fully comprehend candidate responses. Sure losers, who lost resoundingly, probably consent more to the election result. Finally, our design cannot separate the effects of disappointment in close losers from the surprise and satisfaction in close winners. Future research could explore this by collecting data on candidates' pre-election expectations.

It is hard to blame candidates for feeling disappointed and dissatisfied after narrowly losing an election, given their ambition and personal investment. Losing creates mental discomfort, especially for those who came close, who may cope by blaming others and questioning election fairness. However, they need to be careful about the way they communicate their concerns to avoid lasting negative effects on the legitimacy of high-quality elections. There is rich evi-

dence that politicians have a strong influence on citizens' political views (Druckman, Peterson and Slothuus, 2013; Bisgaard and Slothuus, 2018; Jung, 2020), including the interpretation of election results. Recent research shows that 'good loser' messages reminding voters of the fact that losing is part of democracy can stimulate losers' perceived fairness of the electoral process (Esaiasson, Arnesen and Werner, 2022; Clayton and Willer, 2023). In turn, if candidates exhibit dissatisfaction and concern, they are very likely to influence citizens' perceived fairness of the election negatively (Clayton et al., 2021). We conclude that politicians bear great responsibility regarding their post-election communication. However, in some contexts, electoral malpractice is real, and communicating concerns can be justified and is perhaps even important to ensure future electoral integrity.

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