Voters Punish Politicians with Depression

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Despite a literature suggesting that a political candidate’s personality matters for vote choice, no empirical studies have examined the extent to which the mental health of politicians affects the behaviour of voters. Yet, discussions about the health condition of politicians frequently make headlines during campaigns and evidence suggests that mental health disorders such as depression are common in politics. With the objective of addressing this gap, the present study sets out to estimate the extent to which a public revelation of depression affects one’s chances of being selected for higher office, compared to physical diseases. Our research design relies on survey experiments in which subjects are randomly assigned to candidate biographies, some of which contain information on medical conditions. We invited subjects to choose between these candidates and evaluate their personality. We report concrete estimates of the magnitude of a mental health stigma: candidates with depression suffer from a roughly 10 percentage point disadvantage compared to candidates afflicted with a physical illness. We show that even co-partisans are willing to punish candidates with depression.

Our objective in this study is to understand how voters react to political candidates who have suffered from a mental versus a physical illness. We present five related findings of interest. First, using an experimental survey design presenting respondents with a series of paired randomized political biographies, we find that voters in the United States are less likely to vote for candidates who have suffered from depression versus those who have suffered from other common ailments with potentially severe consequences, cancer and high blood pressure (see, e.g., Vasan et al., 2001; Lawes, Vander Hoorn, and Rodgers, 2008). We show that voters are about 10 percentage points less likely to vote for the candidate who has suffered from depression. Second, we examine the effects after accounting for party affiliation. We show that the depression stigma affects the choice of independent voters and, in some cases, of co-partisans. Third, we demonstrate that voters punish politicians with non-depression diseases according to the amount of work they miss as a result of their ailment. However, with depressed politicians the degree of punishment is unaffected by the amount of work missed. Fourth, we demonstrate that depression affects perceptions about the character and preparedness of these individuals. Finally, we demonstrate that the findings are replicated in another context (Canada), where politics is believed to be less personalized and negative than in the United States. This suggests that the punishment of depression by voters may be a general phenomenon.

Given the prevalence of mental disorders, understanding the obstacles that depressive individuals face when seeking positions of higher office has far-reaching implications. An estimated 18% of the adult US population, close to one out of five, have been treated for some form of mental health disorder in 2015 (USA, 2016). Depression is by far the most prevalent type of such illnesses, with roughly 16 million adult Americans experiencing a major depressive episode in a typical year, and more than 300 million people worldwide (USA, 2016; WHO, 2017). Consequences of depression in terms of productivity are significant, with estimated annual losses above 200 billion dollars in decreased work flow and absenteeism in the United States alone (Greenberg et al., 2015). Depression touches a wide array of the population, including university

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students (Eisenberg et al., 2007; Ibrahim et al., 2013), individuals with critical positions such as physicians and health workers (Frank and Dingle, 1999; Peterson et al., 2008), as well as managers and political leaders (Post and Robins, 1995; Tennant, 2001; Davidson, Connor, and Swartz, 2006; Owen and Davidson, 2009).

The mental fitness of politicians, and not just regular citizens, is an issue of concern for a number of reasons. To begin, psychiatric disorders may affect cognitive abilities, while the primary role of elected officials involves making decisions on complex social issues (Sheffer et al., 2018). Experimental results suggest that depression interferes with cognitive functions and impairs the decision-making process (Elliott, 1998; Murphy et al., 2001; Leykin, Roberts, and DeRubeis, 2011). Scholars have associated depression with increased pessimism and risk-avoidant behaviours (Allen and Badcock, 2003; Smoski et al., 2008). A body of literature in political science and international relations has also emphasized the consequences of psychological factors and personality on the decision-making process (Simonton, 1988; George and George, 1998; Golgeier and Tetlock, 2001; McDermott, 2004; Bar-Joseph and McDermott, 2008; Levy, 2013). Meanwhile, available evidence suggests that the prevalence of mental health disorders among elected officials is especially high. Cases of high-profile political leaders having dealt with depression while in office abound. The struggles of former British Prime Minister Winston Churchill with depression are well documented since the publication of his physician’s memoirs in the 1960s (Moran, 2006). President Calvin Coolidge also suffered from depression throughout his tenure, which is thought to have had significant repercussions on his mood and behaviour (Gilbert, 2003). In fact, a meta-analysis of biographic studies covering two centuries of US Presidents suggests that nearly half of them suffered from a form of psychiatric disorder, the most common being depression (Davidson, Connor, and Swartz, 2006). The prevalence of depression among politicians is not surprising. As a work environment, politics seemingly combines many of the risk factors to depressive episodes (Weinberg, Cooper, and Weinberg, 1999; Weinberg and Cooper, 2003). Politicians are usually called upon to work long hours under stress, they make decisions under uncertainty, and are subjected to interpersonal conflicts on a routine basis.

The present study is interested in whether the public discriminates against individuals with depression at the time of selection for office—in particular, when compared against other debilitating ailments. We define a stigma as the expected difference in support toward candidates suffering from depression compared to a physical disease. We expect to find a stigma based on two streams of academic literature. First, a body of research suggests that voters have a tendency to rely on their perceptions of a candidate’s personality (see, e.g., Miller, Wattenberg, and Malanchuk, 1986; Lodge, McGraw, and Stroh, 1989; Riggle et al., 1992; Kuklinski and Quirk, 2000). Second, a number of studies have documented the existence of a stigma toward depression (Corrigan and Watson, 2002; Griffiths, Christensen, and Jorm, 2008; Evans-Lacko, Henderson, and Thornicroft, 2013; Fokuo and Corrigan, 2017), and in particular at the time of hiring (An, Roessler, and McMahon, 2011; Kosyluk, Corrigan, and Landis, 2014). Despite the evidence of a prejudice toward the mentally ill in a variety of social environments, it remains challenging to estimate accurately the effect of such disorders on hiring. At least two reasons make this a methodologically difficult question. First, information about mental illnesses is not uniformly available to employers. Second, hiring processes in the private sector cannot be easily scrutinized by researchers without concerns for the internal validity of the findings. Our experiments take advantage of the fact that the selection process in politics is open and institutionalized. By making use of an experimental design in which we control the assignment to candidate biographies, we are able to estimate the causal effect of depression on the chances of being selected for office. Moreover, by comparing depression to physical diseases like blood
pressure and cancer that also impede attendance in office, we are able to distinguish between the
effect associated with a concern for a candidate’s ability to fulfill office duties and the stigma
specific to mental illness.

Experimental Design

Our findings rely upon experimental surveys opposing pairs of fictional candidates competing in
an election. The data come from an online survey of 984 American respondents fielded between
April 24 and April 28, 2017 and a second survey of 780 Canadian respondents launched on May 8
and May 9, 2017. Each survey relied on a stratified, quota based sampling methodology based on
census data to achieve representativeness on key demographic variables: age, gender, and region.
The two samples were provided by Qualtrics. Participants were compensated modestly by the
sample vendor. The data collection was conducted under protocols approved by the Institutional
Review Board at the University of Toronto (Protocols #32001 and #26203). Upon reading the
candidate biographies containing randomized pieces of information, participants were invited to
first evaluate the personality traits of each candidate, by indicating which of the two candidates
they trust most, which one appears most prepared, and which one has the best character. Next,
we asked participants to indicate which of the two candidates they would vote for in an election.
We use both these evaluations and vote choice as alternative outcome variables in what follows.

Experiments based on fictional candidates are widely used for political research (see, e.g.,
Lodge, Steenbergen, and Brau, 1995; Funk, 1996; Mondak and Huckfeldt, 2006). Specifically, the
designs we rely upon are paired conjoint experiments in which candidate attributes are randomly
assigned using a Fisher-Yates shuffling algorithm. The online appendix reports the full text
of the paired vignettes used to describe the candidates. Aside from information on the health
condition—our treatment of interest—the other randomized attributes comprise positions on
abortion, gun control and taxes, as well as party affiliation, age, occupation, gender and race.
A recent study examining the external validity of experimental designs suggests that paired
conjoint designs produce results comparable to natural experiments; moreover, the design reduces
the tendency of participants to rely on simplistic cues when evaluating profiles (Hainmueller,
Hangartner, and Yamamoto, 2015). In our implementation, candidate attributes are randomized
independently from each other. As a result, the quantity of interest—the difference in vote support
for the candidate suffering from depression, relative to comparison groups—can be estimated
with standard regression techniques.¹

We implemented two different experimental scenarios, to which the participants were assigned
sequentially. The order of the scenarios was randomly assigned. In the first scenario, two fictional
candidates vie for an open seat (i.e. with no incumbent candidate). One candidate, Candidate
A, was assigned a medical condition: either high blood pressure, cancer, or depression. For
candidates assigned to cancer or depression, we varied the amount of time (one, two, or six weeks
per year) that their physician recommends they take off work to maintain their health. Since the
other attributes are balanced across the profiles, in expectation the difference in vote shares is
attributable to the medical condition and the required time off. We expect a stigma to manifest
itself by comparing the support toward the mentally ill candidate and the two candidates suffering
from either high blood pressure or cancer.

¹Hainmueller, Hopkins, and Yamamoto (2014) refer to that quantity of interest as an average marginal component
effect (AMCE). For simplicity, we use the expression “treatment effect” in the text. Our main results correspond to the
case addressed in Proposition 3 by Hainmueller, Hopkins, and Yamamoto (2014, 16), where treatment effects simplify to
differences in means or equivalent estimates computed with regression models.
In the second experimental scenario, Candidate C is an incumbent running for reelection against a challenger, Candidate D. As a result, this candidate starts with a noticeable advantage in terms of experience. This second experiment allows to test whether the depression stigma is potent enough to diminish the credibility of an individual with an established track record. Once again, subjects are randomly assigned to three conditions, one of which is a biography containing a diagnostic of depression that caused them to miss workdays during their tenure (ranging from 0-30% of votes missed in their previous term). The two other conditions present the same candidates as having missed time in office due to a severe case of the flu or skin cancer. Below, we distinguish between the two main experimental sessions with the labels Open Seat and Incumbent.

Results

Figure 1 depicts the average vote percentages for each candidate across treatment groups, in both experiments. Panel a shows that in the Open Seat session, depression is associated with a roughly 10 percentage point decrease in support compared to the candidate suffering from high blood pressure, and more generally a 10 point decrease compared to the expectation of an even split. Interestingly, a diagnostic of cancer appears to operate the other way around and generate a small electoral bonus, although this effect is not statistically robust. To facilitate inference, we estimate the treatment effects with 95% confidence intervals and report them in Figure 2 for the various possible comparisons between groups. The estimate for depression is –10.6 when compared to the other two experimental groups, and the result can be inferred to the population at the conventional 0.05 level. In the Incumbent experiment, the effect of the depression stigma is lower in magnitude, approximately –6.5 percentage points, and is shy of conventional statistical significance. However, this effect is significant after accounting for the missed time at work (see below).

Figure 1: Vote Percentages Across Experimental Groups (USA).

Our survey design affords us with the opportunity to examine treatment effects by subgroups of respondents. A relevant question for political science scholars is whether the impact of mental health is limited to out-partisans and independent voters, or if it also affects the choice of co-partisans. We examine this question by computing conditional treatment effects, using subsamples for combinations of party identifiers and candidate affiliations. Figure 4 presents the findings. In the case of Republican candidates, the depression stigma affects primarily the
choices of independents and Republican identifiers, for whom the effect of a depression diagnosis is twice as large as for respondents who identify as Democrats. The difference with the first two groups is statistically significant. This finding may sound counter-intuitive, but can be explained by the fact that respondents who identify with a political party are much less likely to choose the candidate from the opposite side to begin with. When focusing on Democrat politicians, we also observe a similar tendency of co-partisans to punish their candidate when they cope with a mental illness, although the differences between groups are not significant. The punishment by co-partisans is less pronounced for incumbents, a scenario that we discuss in more details in the online appendix.

Our design also allows us to examine the change in support for Candidate A as a function of the leave of absence required by the medical condition. This indicator provides respondents with a concrete reference to evaluate the impact of the ailment on the capacity of the candidate to fulfill their office duties. Figure 5 reports the predicted probabilities that a respondent chooses the ill candidate for different leaves of absence, against the blood pressure group used as a reference. We fit these probabilities using a logistic regression with an interaction effect between the treatment groups and the length of the leave of absence. As can be observed, the candidate dealing with cancer would have to miss 6 weeks of work before experiencing a level of support close to the
one received by the candidate suffering from depression. By accounting for downtime explicitly, this result suggests that the depression stigma is not merely related to expectations voters may form about the impact of the disease on absenteeism.

For the second experimental session, we varied the information disclosed to respondents about the percentage of votes missed by the candidate coping with a medical condition (we used four different values: 0, 10, 20 and 30%, for all conditions). Although the treatment effect was short of statistical significance in this session, the difference between depression and the two other physical diseases can be generalized at the 95% confidence level when candidates have missed fewer than 20% of the votes, in which case the treatment effect is nearly the same as in the Open Seat session, or −10.2 percentage points (see the online appendix for additional results). To illustrate, Figure 6 displays the predicted probability of choosing the incumbent candidate, for each combination of treatment group and the share of votes missed. For both cancer and the flu, voters appear to punish candidates conditional on the share of votes they missed as a result of their illness. In contrast, the probability of choosing the incumbent suffering from depression is not affected by variations in the reported downtime. As a result, we find that a politician suffering from cancer must have missed 30% of votes before having a predicted support as low as someone dealing with depression who missed no votes as a result. A politician suffering from depression is punished by voters regardless of whether the disease affected their duties.

To illustrate how depression may affect public perceptions of a candidate’s personality, we also compute treatment effects using alternative outcome variables. As mentioned previously, we asked respondents to indicate which candidate they trust most, which appears best prepared, and which has the best character. Table 1 reports findings based on models using responses to these questions as outcome variables. In all cases, a prior mental health condition negatively affects perceptions of the depressive candidate’s character and preparedness. The effect on each evaluation is similar in magnitude to the one reported previously for vote choice, if not larger. For example, candidates coping with depression are about 11 percentage points less likely to be perceived as having the best character compared to those dealing with physical ailments. These findings provide useful clues to explain the reasons behind the depression stigma. Our vignettes described each medical condition, physical or mental, with a similar wording and the same information about the severity, such that the remaining source of variation can be attributed specifically to the difference between mental health and physical diseases. The fact that some voters are likely to view depressive individuals as being of lesser character than physically ill
candidates supports the idea that depression is perceived on different grounds from other types of medical conditions, and may still be subject to misconceptions among the public.

**Table 1:** Effect of Depression on Evaluations of Personality Traits (USA)

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Open Seat</th>
<th>Incumbent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character</td>
<td>$-0.114$</td>
<td>$-0.113$</td>
</tr>
<tr>
<td></td>
<td>$(−0.183, −0.049)$</td>
<td>$(−0.181, −0.043)$</td>
</tr>
<tr>
<td>Preparedness</td>
<td>$-0.120$</td>
<td>$-0.089$</td>
</tr>
<tr>
<td></td>
<td>$(−0.184, −0.055)$</td>
<td>$(−0.161, −0.020)$</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>$-0.079$</td>
<td>$-0.042$</td>
</tr>
<tr>
<td></td>
<td>$(−0.146, −0.015)$</td>
<td>$(−0.112, 0.026)$</td>
</tr>
</tbody>
</table>

We compute the treatment effects using changes in predicted probabilities for the depression treatment versus the two other groups, based on logistic regression models. 95% confidence intervals are in parentheses. Details on the methodology appear in the appendix.

Finally, we replicated the experiments using a sample of Canadian respondents. Although modern electoral campaigns are said to focus increasingly on the personality of candidates, as opposed to political parties, political science research suggests that this phenomenon is not nearly as pronounced in Canada as in the United States (see, e.g., Dalton, McAllister, and Wattenberg, 2000; Karvonen, 2010). Therefore, replicating the findings in a different polity where campaigns are not as harsh would help to support the finding that a depression stigma can be generalized outside the United States. The experimental design is identical in all respects, including the diseases mentioned in the candidate biographies, with the exception of party names (the candidates belong to the Liberals or Conservatives as opposed to Democrats and Republicans) and issues chosen to reflect current affairs in Canada. We replicated the entire set of results and balance tests for the Canadian experiments (see appendix).

Figure 3 reports the main treatment effects replicated in the Canadian experiments, computed in the same fashion as in the US. Overall, we find that the candidate suffering from depression faces a loss in support relative to candidates coping with physical diseases. The effect is negative in both experimental sessions (open seat and incumbent). However, the treatment effect for the depression stigma is statistically significant only in the incumbent session. In the first session (Open Seat), candidates with a history of illness all suffer from a decline in support relative to the healthy candidate, but the difference with the depression condition is not statistically significant. For the session opposing an incumbent with a challenger, the penalty for depression relative to the two other diseases (flu and skin cancer) is larger than 10 percentage points, close to the size found earlier in the first American study. For the Canadian case, we also find that incumbent candidates suffering from physical illnesses must have missed a disproportionate amount of votes before experiencing a punishment close to that of depressive candidates (see Online Appendix).

**Discussion**

Our experimental results present new evidence about the magnitude of the depression stigma affecting people competing for high office. We make use of paired conjoint experiments presenting subjects with candidate biographies for elections in the United States and Canada. Across four scenarios in two different countries, we find that depression leads to an estimated decrease in support for afflicted political candidates as large as 10 percentage points relative to those with
other debilitating physical conditions. Importantly, our design allows us to isolate the depression stigma from other effects. In each scenario, we compared vote choice for the candidate with depression against the support to candidates coping with physical diseases. This rules out the rational concerns that voters may have about the capacity of a person to fulfill one’s duties: what we define and measure as a depression stigma is the additional prejudice faced by people suffering from a depressive disorder. By estimating the effect attributable to the work time lost due to illness, we demonstrate that individuals dealing with physical ailments must have high levels of absenteeism before being punished to the same extent as candidates with depression.

This finding has implications for the study of modern democracies. In particular, it contributes to a literature suggesting that voters often base their decision on peripheral factors rather than rational considerations about the issues being debated (Todorov et al., 2005; Achen and Bartels, 2016). The larger trend towards the personalization of politics (see, e.g., McAllister, 2007; Bennett, 2012) has brought the personality of leaders to the forefront of campaigns. Accordingly, influential models of vote choice have singled out the importance of short-term factors such as feelings toward candidates, in particular perceptions of trust and competence (Bartels, 2010; Bittner, 2011). One consequence of this development is that the health condition of elected officials has become a common feature of modern politics. A recent example is Hillary Clinton’s diagnosis of pneumonia, which made the headlines during the 2016 US presidential campaign. The finding that voters punish candidates with a history of depression appears consistent with the general emphasis on personality traits in modern politics, and highlights the importance of understanding how people base their decisions during the most critical exercise of democracy.

References


