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Analysing the Relationship between Voter Turnout and Health in Ireland

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Abstract
Health issues are an integral part of the political agenda in Ireland. Yet no study to date has examined the impact of health concerns on political outcomes. This study investigates the relationship between health, both physical and psychological, and perceptions of the health service, and voter turnout in Ireland using the European Social Survey in 2005, (n=2286, RR 59.7%). The results show that individuals with poor subjective health are significantly less likely to vote in a General Election. Dissatisfaction with the health service is also associated with a lower probability of voting. However these effects interact: those with poor health and who are dissatisfied with the health service are more likely to vote. Psychological well-being has no effect on voter turnout. The health effects identified in this study are large and further work is needed in this area to identify the causal mechanisms underlying this relationship.

Introduction

Health issues are an integral part of the political agenda in Ireland. There is significant public concern about hospital waiting lists, the A&E 'crisis' and hospital closures. Yet no study to date has examined this link between health issues and voting behaviour in Ireland. The rational choice theory of voting behaviour posits that individuals vote in order to maximize their expected utility and will therefore only turn out to vote if the benefits of voting exceed the costs.[1] Yet the costs and benefits of voting may differ depending on health status. Those experiencing poor health have greater incentives to vote as they are more likely to be users of the health system and favour public provision of health services. Therefore, it is important to investigate if this is indeed true, given that poor health may also act as a barrier to voting.

Theoretical models of voter turnout divide the costs of voting into three sets of factors - physical resources, psychological resources and recruitment resources.[2] Poor health may affect all three factors. First, ill health may lead to a reduction in physical resources. For example, as voting requires a physical, and to some extent, a mental effort, poor health may impair these resources, consequently making it more difficult to vote. A study of voter turnout among the disabled finds that those with spinal cord injuries are 10% less likely to vote compared to otherwise similar individuals.[3] Second, adverse health may also decrease turnout as one must concentrate on 'holding body and soul together, not on remote concerns like politics,[4] which will lead to a reduction in psychological resources such as political interest, political efficacy and civic values. Finally, ill health may also affect voters' recruitment potential. As individuals in poor health are typically more isolated than others they may engage in less social activity and are less likely to be recruited by political activists. Overall if the perceived costs of voting are greater than the perceived benefits, turnout should be lower for the unhealthy.

Studies investigating the link between health and voter turnout within the general population are few, and have typically relied on aggregate level data. A study of mortality rates and turnout in Britain finds a negative correlation between the two.[5] Similar results have been found in studies of Russia and the US.[6,7] An individual-level analysis using British cohort data finds that poor general and mental health are associated with lower turnout.[8] The literature also identifies a relationship between poor health and left-wing voting.[9,10,11] The only study of this nature in Ireland finds a positive relationship between dissatisfaction with health, adverse lifestyle factors and support for left-wing parties.[12] This study presents the first analysis of the relationship between individual health and dissatisfaction with the health system and voter turnout in Ireland.

	1	2	3
Health measures:			
Poor subjective general health	-0.067* (2.19)	-0.068* (2.21)	-0.144** (2.96)
Positive mental well being (WHO-5)	0.001 (0.45)	0.001 (0.46)	0.001 (0.52)
Negative perception of the health service	~	-0.042* (2.14)	-0.056** (2.60)
Interaction: Poor subjective health* Negative perception of health service	~	~	0.076* (1.97)
Controls:			
Education in years	0.010** (2.66)	0.010** (2.69)	0.010** (2.66)
Sufficient household income	0.021 (1.05)	0.02 (1.03)	0.021 (1.09)
Male	-0.017 (0.89)	-0.018 (0.95)	-0.018 (0.97)
Age	0.022** (7.11)	0.022** (7.30)	0.021** (7.22)
Age squared/100	-0.016** (5.11)	-0.016** (5.34)	-0.016** (5.23)
Trade union member	0.042 (1.89)	0.045* (2.06)	0.045* (2.09)
Placement on left-right political ideology scale	0.017* (2.79)	0.016** (2.73)	0.017** (2.79)
Observations	1691	1681	1681

Methods

The data used is the second wave of the European Social Survey, collected in 2004/05.[13] This is a random sample of individuals over the age of 15. The response rate in Ireland was 59.7% giving a sample of 2,286. The sample available for the data analysis is smaller due to missing values. The dependent variable is whether the individual voted in the previous General Election - the 2002 election in this case. The three health variables of interest are a measure of subjective health, a measure of mental well-being and the respondent's opinion of the state of the health service. The self-assessed measure of general health indicates whether the respondent reported excellent/good health, or alternatively, poor/fair health. 15.6% of the sample reports poor health. Psychological health is measured by the World Health Organisation Well-Being Index (WHO-5) scale, which ranges from 0 to 25 and has been shown to perform well in screening for depression.[14] A score below 13 is used as an indication for further testing for depression. The mean for the sample was 17. Respondents were also asked their opinion of the health service, from 0 (extremely bad) to 10 (extremely good). We create a binary variable equal to one if they gave an answer between 0 and 4 (inclusive), and is zero otherwise, as a measure of dissatisfaction with the health service. 57% of the sample is dissatisfied using this criterion. The control variables included are commonly used in the voting literature: education (measured in years), sex, age (entered as a quadratic), whether an individual is a member of a trade union, a self-assessed measure of political ideology on the left/right continuum from 1 (left) to 10 (right) and a binary indicator of whether the respondent's household is living comfortably on its present income. To control for the possibility that the health indicators reflect social circumstances we also included the father's education as a control for socioeconomic background, however it did not change the results significantly. While we have included all available confounding variables, it is possible that there are additional confounding factors which may explain the correlation between health and voter turnout which are omitted from the analysis. Hence there remains the possibility that some of our explanatory variables may be endogenous. Further work – and better data- is required to address this.

Statistical analysis

Maximum likelihood probit models of the probability of an individual turning out to vote are estimated. The sample weights provided are used to correct for over/under sampling. The coefficients reported are the marginal effects, which indicate the effect of a unit change in the independent variables on the probability that an individual votes. All estimation is with Stata, version 9.2 using the dprobit routine.

Results

The results are presented in Table 1. Model 1 includes the subjective measure of general health and the measure of mental well-being along with the additional controls. An individual who reports bad health is 6.7% (i.e. 6.7 percentage points) less likely to vote. This coefficient is significant at the 5% level. The effect of good mental health/well-being, while positive, is not statistically significant. The other coefficients are in line with the international literature in general. Voting increases with age, but this effect declines as one gets older. More educated people are more likely to vote, with each additional year of education increasing the probability of voting by 1%. Trade union members and individuals placing themselves on the right of the ideological scale also have a greater probability of voting. Model 2 extends this analysis by including the binary measure of dissatisfaction with the health service. It shows that individual who are dissatisfied with the health service have a lower probability of voting. To test whether dissatisfaction with the state of the health service is moderated by one's own personal health situation an interaction between the subjective health measure and the dissatisfaction variable is included in Model 3. There is a well determined positive interaction between the two. Hence for someone who is satisfied with the state of the health service, being in poor health lowers the probability of voting by over 14%, whereas if that person is dissatisfied with the health service then the probability of voting is only about 7% lower. The additional covariates remain largely unchanged in the three models.

Discussion

This study finds that personal health and the state of the health service are important issues for Irish voters. Our results are consistent with the hypothesis that poor health is a contributory factor to individuals not engaging in political participation and suggest that the perceived cost of voting for the unhealthy (the effort involved in voting), is greater than the perceived benefits of voting (based on the policy implications of the election outcome). While poor general health lowers the probability of voting, we find that poor mental health, as characterized by the WHO-5, does not lead to a reduction in voter turnout. This is contrary to a study of mental health and turnout in Britain.[8]

The study also finds that individuals who are dissatisfied with the health service are less likely to turn out to vote. This result is somewhat surprising. Rather than being motivated to vote by their unhappiness with the health system, it would appear that some voters are sufficiently disillusioned with the health service as to discourage them from voting. Yet the inclusion of the interaction term between personal health and dissatisfaction with the health service indicates that this perception is mediated by one's own personal health - if one is healthy (and therefore less likely to utilize the health service) then the state of the health service may be of less concern. Indeed the results suggest that if one believes one's personal health is poor and that the health service is unsatisfactory then these effects combine to increase the probability of voting. This may also reflect differences in the level of information about the health service. Those in poor health have to utilize health services, and subsequently have more information about the state of the health service than others. This subsequently could act as a trigger for their political mobilisation.

Electoral participation is one form of social capital and the level of voting is an important barometer of the health of civil society. A number of studies have noted the importance of social capital for generating both community and individual wellbeing.[15,16,17] Understanding the relationship between public health and political participation is therefore important. This study shows that poor health leads to lower voter turnout, which suggests that the interests of the unhealthy are less likely to be represented in government. Unhealthy non-voters, therefore, represent an untapped source of electoral support. A political party which succeeds in attracting the unhealthy non-voters into the electorate, by presenting a suitably targeted policy package, could help to minimise this inequality. Further work is needed in this area to identify the causal mechanisms underlying this relationship.

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