

order to chasten it and modify its behavior in future. Protest voting fits the general definition of tactical voting given at the outset of the article, if one includes the result of future elections in the 'better outcome' that the voter seeks. As an example, consider a voter who prefers that party A win the seat in a single-member district but is nonetheless unhappy with some aspects of A's performance. Such a voter may try to 'send a message' by either abstaining, casting an invalid vote, voting for a third party, or (if the voter is confident that A will nonetheless win) voting for A's main opponent. The point is not to defeat A, but to reduce A's margin of victory and hopefully scare it into better behavior in future.

See also: Majoritarianism and Majority Rule; Third Parties: United States; Voting: Class; Voting: Issue; Voting, Sociology of; Voting: Turnout

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G. W. Cox

Voting: Turnout

Why do some people vote and others do not? Why do some countries have higher turnout rates than others? Would election outcomes change or governmental policies be different if turnout levels were higher? These are the primary questions that concern students of voter turnout.

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1. Factors that Affect Turnout

With one caveat, a useful approach to explaining turnout rates of either individuals or countries entails considering the various costs and benefits of voting. The caveat is straightforward and reflects the observation that any single vote 'is lost in a sea of other votes' (Downs 1957, p. 246). Paul Meehl clearly sketches out the implication of 'this big brute fact,' namely that 'my chances of determining who becomes President [or influencing just about any election outcome] are of about the same order of magnitude as my chances of being killed driving to the polls—hardly a profitable venture ... [Voting] is irrational as an instrumental action toward an egocentric end' (Meehl 1977, p. 11). To make any headway in explaining voter turnout, one must recognize that there are intrinsic or expressive benefits to be gained from voting that do not depend on the infinitesimally small probability of affecting an election outcome. Without this expanded conception, save for the small number of instances where there are penalties for nonvoting, there can be no coherent explanation for why so many people choose to cast ballots.

The significant factors that affect the costs and benefits of voting may be usefully characterized as either of the institutional or individual variety. There are three primary types of institutional variables. Laws that specify the registration process, the type of election districts, and the structure of the national legislature all influence turnout. *Political characteristics* like the degree of disproportionality in the translation of votes into seats and the number of political parties represent another set of institutional characteristics that affect turnout. The role of the last group of factors, which taps the connection between the *social structure* and the political process, is more uncertain.

With regard to individual characteristics, although any examination of the vast turnout literature will reveal a plethora of factors, four stand out. Although the size of the difference varies, in virtually every election context the better educated have higher turnout than those who are less educated; older people have higher turnout than the young; those who are more interested in politics have higher turnout than those whose interests lie elsewhere; and, in elections that pit parties against one another, strong partisans have higher turnout than people who weakly identify or don't identify with a party. The explanation for these patterns may be found in a careful consideration of the costs and benefits potential voters face.

2. The Costs of Voting

Focusing first on the costs that people must overcome in order to vote, previous research quite clearly demonstrates that the higher the costs, the lower the turnout. Two primary costs should be considered.

Although one can find exceptions, it is generally the case that in order to vote people must first be registered. This can entail dealing with bureaucratic requirements and be rather time consuming, especially in a country like the USA where individuals, as opposed to the government, must take the initiative to register, often well in advance of election day when the excitement that accompanies the approach of an election is usually absent. Turnout is higher in countries that impose lower registration costs on their citizens, and within a country that imposes higher costs, like the USA, turnout is lower among those who are less well equipped to bear those costs (i.e., the less educated).

All voters must bear the second significant cost of voting, deciding for whom or what to vote. Commonly referred to as information costs, people must gather or be given sufficient information to decide how they will vote. It is a cost that can be easily overlooked, because for 'people already well informed, keeping up with politics is scarcely dull, is almost effortless, and the notion that information costs something seems almost peculiar' (Converse 1975, p. 97). Yet for many, politics is barely a peripheral concern. For these less interested people, information costs are higher and their turnout is consequently lower.

Two other individual factors are helpful in mitigating information costs. The greater exposure to and experience with the political system that come with age fosters turnout by making voting decisions easier. In addition, partisans can rely on the relatively simple cues of party labels to make their choices, and consequently their turnout is also higher.

Information costs for potential voters are also reduced if they are undertaken by someone or something else. In this regard candidates and political parties are extremely useful. Voter mobilization efforts reduce information costs because they diminish the need for people to gather for themselves the necessary information in order to make their decisions. Consequently, factors that provide candidates and parties with incentives for broad-based mobilization efforts, like nationally competitive electoral districts, close elections, and lower levels of disproportionality in the translation of votes to seats, all have the effect of boosting turnout by bringing down information costs for potential voters.

3. *The Benefits of Voting*

Even in a political context where voting costs are minimized, they are never eliminated; 'voting is inherently costly' (Downs 1957, p. 265). It is therefore necessary to consider the benefits citizens derive from voting in order to explain why anyone casts a ballot at all. The 'big brute fact' that a single vote has virtually no effect on an election outcome leads to the ob-

servation that 'most of the action is, in fact, in the intrinsic values of voting *per se*' (Aldrich 1993, p. 266). This is likely to be the case even in the few countries that have mandatory voting laws, given that the penalties for nonvoting are minor and that enforcement is minimal. The higher turnout induced by these laws probably derives from the expressive benefit of fulfilling a civic obligation, rather than avoiding a sanction.

Though less strong in countries without mandatory voting, the notion that one has a duty to vote pervades most democracies. Schooling is one way this norm is inculcated, and provides another reason why the better educated have higher turnout, whether it derives from the positive feelings of having voted, or sidestepping the guilt that would accompany not performing one's civic duty. In addition, stronger partisans and those who are more interested in politics gain greater intrinsic satisfaction from voting because they are more engaged with the political system.

The association between institutional characteristics and the benefits of voting is less intuitive, but is empirically evident. Voting is more gratifying when there is a stronger connection between election results and government formation. The relationship is weaker in countries with more political parties, where post-election coalition building is far more frequent and complicated, and turnout is lower. Similarly, in countries with unicameral national legislatures, the consequences of election outcomes are more decisive for governing, and people are therefore more likely to perceive elections as meaningful and vote (Jackman 1987).

The last variable to consider is the 'linkage' between the social and political structures within a country: the degree to which social groups and political parties are aligned. In countries where substantial proportions of people with a given group (religious, racial, occupational, etc.) characteristic vote for a specific party, the benefits of voting ought to be enhanced because voting becomes an expression of group identification. Moreover, information costs are lower because people will have an easier time deciding how to cast their ballots. And where parties and groups are more closely aligned, parties have greater incentive to invest resources in mobilization efforts. At the empirical level, measuring the degree of linkage between parties and social groups has proved difficult, and reports of its turnout effects are inconsistent (Powell 1986, Jackman 1987), suggesting that the topic deserves further scrutiny.

4. *The Implications of Nonvoting*

Attention to social structure leads to the final question regarding the effects of nonvoting on election outcomes and government policy. In any country without universal electoral participation (i.e., all countries)

some groups will have higher turnout than others. Compared to their proportion of the population, some will be over-represented while others will be under-represented in the voting population. The potential political implications for the party system and election outcomes are sufficiently significant that in his presidential address to the American Political Science Association, *Unequal Participation: Democracy's Unresolved Dilemma*, Arend Lijphart (1997) advocated compulsory voting.

Two factors determine the implications of non-voting. First, the difference between the preferences of voters and nonvoters must be considered. To the extent that what nonvoters want differs from the desires of voters, the representation of interests in the voting population will be a distortion of the interests of the larger population. If voters and nonvoters have similar preferences, then the degree of distortion will be less. The second important consideration concerns the relative size of the nonvoting population. If the number of nonvoters in an election is small compared to the number of voters, then even if nonvoters have a very different set of preferences, their small number will limit the potential for impact on the aggregate preferences of voters. However, where nonvoters are more numerous, their potential influence grows.

Several concrete examples illustrate the interplay between nonvoters' preferences, the size of the non-voting population, and implications of nonvoting. In the USA, after the Voting Rights Act of 1965 and the widespread dismantling of legal and extralegal barriers to black suffrage in the southern states, large numbers of African-Americans entered the voting population. Their preferences were quite different from those of white voters, thereby spurring the political realignment in that region of the country. In contrast, when the USA (in 1919) and Switzerland (in 1971) extended the right to vote to women, similarly large-scale political change did not ensue. Although larger numbers of voters were added to the electorate, their preferences were not especially distinctive, and as a result the electoral consequences were minimal.

In the current political era, the potential implications of nonvoting are greatest in the USA because turnout is comparatively low and the connection between socioeconomic status and turnout is relatively strong. (In other countries, the relationship is weaker because aggregate turnout is higher.) The actual consequences, however, do not appear to be great. First, the relationship between socioeconomic status and partisan and policy preferences is modest. More importantly, when one considers the groups that comprise the nonvoting population, one finds that those groups with the most distinctive preferences (the poor and minorities) are outnumbered by others. The largest groups of nonvoters, the young and residentially mobile, are not politically distinctive, with the exception of the former's greater inclination toward political independence. Thus, 'nonvoters appear well represented

by those who vote' (Highton and Wolfinger 2001, p. 10). The possibility that this conclusion applies to other countries is suggested by G. Bingham Powell's (1986) comparative analysis that finds that at the individual level within countries, age, not education, is the strongest demographic predictor of turnout.

To conclude, voter turnout is shaped by both individual and institutional factors. Explaining the connection between these factors and the decision to cast a ballot requires a consideration of the costs and benefits facing potential voters. Because the costs and benefits are not identical for all people, different groups vote at different rates. As a result, there is a possibility that the preferences of voters will not be representative of the entire population. To be sure, this sort of distortion is evident, but a number of factors suggest that in general its magnitude is not especially large.

See also: Citizen Participation; Electoral Geography; Electoral Systems; Participation: Political; Political Representation; Voting: Class; Voting: Compulsory; Voting: Issue; Voting, Sociology of; Voting: Tactical

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B. Highton

Vulnerability and Perceived Susceptibility, Psychology of

Virtually all major theories of health behavior are based on the assumption that people estimate their vulnerability or susceptibility to a disease and evaluate the costs and benefits of precautionary behavior before taking action. Research on the accuracy of perceived risk or susceptibility is summarized, followed by a discussion of the relation between perceived susceptibility and precautionary behavior. Methodological considerations about how to measure perceived susceptibility and how to investigate its role as a behavioral determinant will be discussed. Implications for health education practice will be briefly discussed.

1. The Role of Vulnerability in Models of Health Behavior

Vulnerability or perceived risk is generally conceived as consisting of two components: the *likelihood* and the *severity* of negative outcomes. Most of the prevailing models of health behavior assume that decisions about risk behaviors are based on conscious decisions in which perceived risks and benefits determine behavior (see *Health Behavior: Psychosocial Theories*).

The *theory of reasoned action* (Fishbein and Ajzen 1975) and the *theory of planned behavior* (Ajzen 1991) are frequently used models of health behavior in which the probability and severity of consequences for people's health of specific behavioral practices are assumed to be a prime determinant of attitudes toward precautionary behavior. These behavioral beliefs can also include risks for health and/or well-being.

The *health belief model* (HBM) is another frequently used framework to explain preventive health behavior (Janz and Becker 1984). The model aims to describe decisions about the costs and benefits of specific actions and distinguishes several factors that are assumed to determine the adoption of protective action. Among these are the perceived vulnerability to developing a specific health problem and the perceived severity of that problem. Precautionary behavior is assumed to be most likely when perceived severity and vulnerability are high, while the perceived benefits of

precautionary behavior are substantial, and the costs of behavior change are low.

Weinstein's (1988) *precaution adoption process* is also based on behavioral decision theory, and assumes a series of steps or stages preceding the adoption of preventive action to reduce the threat of negative consequences for people's health. First, people have to realize that a specific risk exists. Second, they have to realize that the risk is significant and can affect people. Third, they have to realize that they are vulnerable to the risk. After these necessary requirements, behavioral change will be a function of the perceived severity of the consequences for health and the efficacy and costs of preventive behavior.

In *protection motivation theory* (Rippetoe and Rogers 1987) perceived vulnerability is also a major factor in the motivation to avoid risk. The theory combines perceived vulnerability to the negative event with appraisals of its severity and the efficacy of the recommended (preventive) action and self-efficacy. The latter factor refers to the ability to initiate and/or sustain a specific precautionary behavior.

Thus, most models of preventive health behavior incorporate the recognition of one's own risk-status or vulnerability as an important condition for adopting behaviors that reduce these risks. The construct of vulnerability basically has the same meaning in all of the models, and it has been assessed with questions that seem more or less interchangeable. One implicit assumption of all these models is that people are able to adequately assess the risks associated with their behavior (see *Health: Self-regulation*).

2. Accuracy of Perceived Risk/Vulnerability

There is a substantial amount of research showing that the estimation of risk tends to be a complex process that depends on factors such as the context in which the risk is presented, the way the risk is being described, and also on personal and cultural characteristics. Risks that are more cognitively 'available' due to personal experience or media coverage tend to be overestimated. Thus, estimates of the likelihood of risks such as contracting AIDS or being involved in an air crash tend to be too high, while estimates tend to be too low for more common and/or less sensational risks such as heart disease or being involved in a car accident. The magnitude of perceived risk is also affected by how the perceived probability of a negative outcome is measured. For instance verbal methods such as a scale ranging from 1 (very unlikely) to 7 (very likely) lead to different answers than numerical methods such as a percentage scale ranging from 0 to 100 percent. Verbal measures are better predictors of individual preferences than the more difficult numerical scores. Generally, people have a reasonable idea of the relative risks of various activities and behaviors, although their estimates of the magnitude of risks tend to be biased.

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