

影響美國總統選舉投票行為的因素： 政策、政黨及候選人之相對重要性

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《 本文摘要 》

本文主要在研究美國總統選舉過程中，政策考量、政黨認同、及候選人特質等因素的相對重要性。在統計方法上，作者以符合即時資訊處理 (on-line information processing) 理論的方式來建構變項。過去的研究以開放式問卷來評估候選人影響力的方式可能會低估候選人實質的影響力。作者發現，以全體選民整體而言，候選人的人格特質在三個變項裡有最大的影響力，而且候選人特質也會透過投射及說服作用，對選民的政策考慮造成顯著的非直接影響。

關鍵詞：投票行為、兩階段迴歸、候選人中心政治

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The Evolution of Voting Research

The relative influence of the factors influencing the electoral decision is of much interest to political scientists. A major part of the study of voting behavior focuses on what determines the vote. The variables occupying the center stage have evolved over the years. Since the 1940s, the Columbia School's group theory suggests that people's social, spatial, or group memberships largely determine their political actions. They found that the issue positions of candidates are often perceived incorrectly, and thus concluded that issues could not be important. The American Voter found only 18 to 36 percent of the electorate are familiar enough with the issues to have an opinion on the 16 issues they examined. Converse uses "nonattitudes" to explain the fact that respondents often answer questions randomly just to satisfy the interviewer (1964).

As survey research was introduced to the field, the Michigan School put their emphasis on the role of party identification as the 'unmoved mover' in the electoral process. Partisanship not only has a direct effect on the vote choice; it also affects people's policy positions and candidate evaluations. More recently, issue voting is the emphasis of the Rational Choice School. They view issue voting as more rational than voting based on candidate considerations. In most of these voting models, policy, candidate, and party identification are the main variables that affect the final voting outcome. Numerous studies have tried to examine the relative importance of these variables, with no conclusive evidence yet (Page and Jones, 1979; Markus and Converse, 1979; Archer, 1987; Franklin, 1984; Glass, 1985; Romero, 1989). Some of the common problems they encounter are assumption specification (memory-based assumption), model specification (instrumental variables selection), causal specification (recursive models), and variable operationalization.

Assumption specification refers to the information processing assumption made by the researchers. Most electoral models to date explicitly or implicitly assume information processing to be memory-based, which could cause problems while applying survey data if the on-line assumption were true. Numerous studies use the

open-ended presidential candidate evaluation to compare the relative importance of issues, parties and candidates across time, with Kelley's simple act of voting being the most explicit example (Campbell, Converse, Miller and Stokes, 1960 ; Kagay and Caldeira, 1975 ; Miller and Wattenberg, 1985 ; Popkin et al., 1976 ; Nie, Verba, and Petrocik, 1979 ; Nie, Verba, and Petrocik, 1986 ; Lau, 1986 ; Romero, 1989 ; Kessel, 1992). The usual practice is to code mentions of likes and dislikes of candidates into the three independent variables to compare their relative importance and track their changes over time.

This operational scheme is problematic because these reports often reflect rationalizations rather than the true reasons that give rise to the vote. Moreover, open-ended comments are less stable than closed-ended evaluations, which indicates greater superficiality of the likes and dislikes questions (Smith, 1989 ; Rahn et al, 1994). Therefore, as pointed out by Miller and Shanks (1996) “ . . .many scholars concluded that the impact of some types of attitudes on the vote could not be reliably assessed on the basis of volunteered, self-reported reasons, but could be better approximated through multivariate analysis of evaluations based on structured questions. ” (see also Rahn et al., 1994).

This is not to say that open-ended questions are of no use to our understanding of public opinion. Open-ended questions are more useful than comparable closed-ended surveys in topics such as probing respondents' beliefs about the most important problem facing the nation (Schuman, Ludwig, and Krosnick, 1986), and are applied by various studies for their specific purposes (Zaller and Feldman, 1992, Fabrigar and Krosnick, 1995). What we are questioning here is the application of these open-ended responses as the true reasons for vote choices or using them as measurements of candidate personality evaluation. These responses are shown to be less stable than their comparable close-ended counterparts and are not entirely true reasons but rather are often rationalizations. Moreover, they are not intended to measure candidate personal evaluation in the first place. Therefore, although they possess strong predictive power for the vote choice, they are inferior measurements to structured questions on candidate personal evaluations.

This information assumption problem is also related to variable operationalization. Before 1980, no measurements of candidate personal characteristics were

available so the common practice was to recode the open-ended candidate like /dislike questions¹. The new questions from NES after 1980 enable us to construct variables under the on-line information processing assumption. Moreover, these new questions are intended to measure respondents' evaluation of the candidates on certain personality traits, making them ideal for this research.

As for causal specification, recursive models assume causal influence between endogenous variables to be one-way, which is problematic given the intertwined relationships between partisanship, policy position, and candidate evaluation. The selection of exogenous variables is also a major problem for non-recursive models due to assumptions of exclusion restrictions, and the unavailability of data. With secondary analysis using NES data, it is extremely difficult to find enough instrumental variables to construct the model. The limitation on the choices of variables is widened with the adoption of the 1992-1994-1996 panel data. I believe the model introduced here, while it still suffers from violating the generic exclusion restrictions assumption of two-stage least square models to some degree, can show significant improvements over previous models in the areas mentioned above.

As our model will show, candidate personal characteristics have the greatest effect on overall candidate evaluation, with an effect almost equal to the sum of policy position and partisanship combined. Early measurements of candidate personal appeal were inappropriate and led to underestimates of the effect of the candidate factor. Also, I will examine the differences in the relative importance of these variables between the politically sophisticated and those who do not care as much about politics to further help us understand how people think about politics.

Problems with Past Literature and My Model

Early literature on voting behavior takes account of one independent variable at a time and fails to control for the influence of other independent variables. Multivariate regressions rectified the problem but the bias introduced by recursive models remains unsolved (Pomper and Schulman 1975 ; Judd, Kenny, and Krosnick, 1983 ; Shanks and Miller, 1991). Single equation models ignore the likely possibility of reciprocal causal relations among the determinants of vote choice. More so-

Phisticated non-recursive models estimated by simultaneous equations are suggested by various researchers and will be the main approach of this study (Page and Jones, 1979 ; Markus and Converse, 1979 ; Fiorina, 1981 ; Franklin and Jackson, 1983) .

The major weakness of simultaneous equation models is the exclusion restriction assumptions required to identify the equations. Each instrumental variable must affect some, but not all, of the endogenous variables in the model. Given the relationships among policy positions, candidate evaluations, and partisanship, it would be extremely difficult, if not impossible, to make such claims for all instrumental variables in the model. One perspective, as identified by Miller and Shanks (but not necessarily supported by them) , “ sees all attitudes, perceptions, or opinions as the consequence of people’s interactions with stimuli external to themselves as provided by the world of politics. ” “ ...most of our survey-based variables are more or less ‘dependent’ because the real independent variables are the external stimuli (partisan, conflictual or consensual) that provoke or evoke the responses to the questions put to NES respondents. However we classify or categorize those responses, they represent the consequences of interactions among prior attitudes and voters’ exposure to events in the world of politics ” (Miller and Shanks, 1996) .

This perspective implies that quantitative analyses with survey responses are problematic because most variables affect one another. Alternatively, I would prefer Fiorina’s approach that says, “ ... if simultaneity clearly exists, what can one do except to measure variables as precisely as possible, specify equations as carefully as possible, and go forward (Fiorina, 1981) ? ” There are generic difficulties in constructing non-recursive models with survey data, especially with some of the strong causal assumptions needed to identify the equations.

With the new question format and available panel data, I feel this research question important enough to warrant our further examination despite these problems. Indeed, it is impossible for survey measures to provide an index that exclusively measures one endogenous concept (e.g. candidate personal characteristics evaluation) that is not affected by any other attitudes (e.g. policy) . The new NES variables after 1980 are no exception. However, the new measurement is bet-

ter because it asks directly about candidate personal characteristics. Open-ended comments about likes and dislikes are more of an overall evaluation that also covers the policy and partisan spectra, and is only valid if the respondents' derivation process follows the memory-based assumption of information processing. On the other hand, the new structured questions specifically seek to measure the respondents' evaluation of candidates' personal characteristics and do not depend on any particular information processing assumption. Given that a candidate's welfare policy might have an effect on a respondent when he is assessing whether the candidate "cares about people like me," it is still a major improvement in measuring candidate personal evaluation as compared to the recoded open-ended comments.

The effect of different measurements on the estimates of the model will be examined later. Also, by utilizing the 1992-1994-1996 panel data, I have more instrumental variables than in previous studies. Therefore I am able to abandon some commonly used yet potentially problematic demographic variables such as age, gender, and religion, which were assumed to either directly influence only voters' policy preferences (age, gender) or partisanship (religion) (Page and Jones, 1979; Archer, 1987).

I propose a model where partisanship, issue, and policy consideration all affect each other and all three in turn influence the vote decision (See figure 1). Its setup differs from Campbell et al's classical recursive model, Fiorina's issue-causal recursive model, and Jackson's evaluation-partisanship interaction model in significant ways (see Whiteley, 1988 for a complete review). Early studies put major emphasis on the stability of partisanship and construct recursive models where partisanship affects issues and candidate evaluations, while all three have direct effects on the vote. The revisionist analysis of Fiorina (1981) challenges the exogenous nature of partisanship and claims that current and lagged issues and candidate evaluations influence partisanship, while all three determine the vote. It accounts for the short-term changes in partisanship that are empirically documented in electoral studies (Cain and Ferejohn, 1981; Markus, 1982, Clarke and Stewart, 1985), and is closely related to the Downsian model where partisanship is a function of issue position and retrospective evaluation. Its weakness lies in the assumption that issues and candidate evaluations are totally exogenous and not affected by party i-

dentification. Also the relationships among the variables are recursive.

Jackson (1975) developed one of the earliest non-recursive models where a simultaneous relationship exists between candidate evaluations and party identification. Given this relationship, there are no theoretical reasons why such non-recursive relations would not appear between issue positions and candidate evaluations or issue positions and partisanship. Page and Jones's (1979) model come closest to the present setup in that there are three-way interactions among policy positions, candidate evaluations, and party identification. But there are at least three major differences with the present model. First, the main candidate evaluation variable in their model is an overall evaluation measurement (represented by thermometer scores) rather than a measurement directed toward the candidate's personal characteristics, which were not available at the time.

This inherent shortcoming of variable operationalization weakens one of their major findings, which is the strong effect (.57) of overall candidate evaluations upon perceived policy distances. When voters make overall candidate evaluations, policy considerations are one of the important factors contributing to the decision. Therefore it is not surprising for overall candidate evaluation to have an effect on policy perception because policy consideration is a subset of the overall evaluation. The relative importance of policy voting and candidate personal characteristics remains unclear. Second, Page and Jones' personal qualities evaluation is coded from open-ended comments and is an exogenous variable that does not have a direct effect on either policy or partisanship. This is quite different from the present model where candidates' personal characteristics are derived from structured questions and can affect perceived policy positions and /or party identification. In other words, the potential effects of projection and persuasion are not included in their setup. Finally, as noted earlier, I have more choices of instrumental variables from the 1992-1994-1996 panel data that were not available to previous researchers. These variables should be better instrumental variables than the demographic ones (age, gender, religion) they replace.

Aside from the advantage of non-recursive models, the model introduced here takes into account how candidate personal characteristics may influence party identification and policy evaluation. More specifically, as pointed out by Brody and

Page (1972) , the effect of persuasion and projection should be taken into account when measuring issue voting. An attractive candidate may be able to persuade the voters to form or change policy preferences, while voters might project their own policy positions on a favored candidate. Moreover, a popular candidate can also sway voters away from their partisanship, probably to a lesser extent. Of course, an unappealing candidate may have a similar effect on policy position and partisanship as well, albeit in the opposite direction. These effects are incorporated in the model by specifying the indirect effects of candidate personal qualities through their effect on policy evaluation and partisanship. These processes of inference are very important in information processing because this is a method people commonly employ to reduce their information costs. They infer about things they do not know from information they know.

I use the post-election vote choice variable and pre-election endogenous variable measurement to minimize the likelihood of vote choice having a backward influence on candidate evaluations, partisanship, and policy positions. The vote choice variable is measured at time ($t + 1$) , while the endogenous variables are all measured at time t . In other words, while it is plausible that one's vote choice would in turn affect his future policy position, candidate evaluation and partisanship, it can not have effects on past evaluations in this setup.

Model Specification, Data, and Variable Description

The model in figure 1 depicts the process of voters making their electoral choices. When voters encounter relevant information, it is processed by the active schema (ta) at the time, and the affective value of the information is retained and stored in the running tally of the respective schema. The current value of the existing schema not only affects the processing of future information but also information processed by other schemata. For example, after watching the presidential debate, a strong Republican may feel closer to Dole on policy, have a higher personal evaluation of Dole, or strengthen his Republican identification. On the other hand, a strong Democrat who watched the same debate could have a totally opposite feeling. This is an example of how schematic thinking can have effects on in-

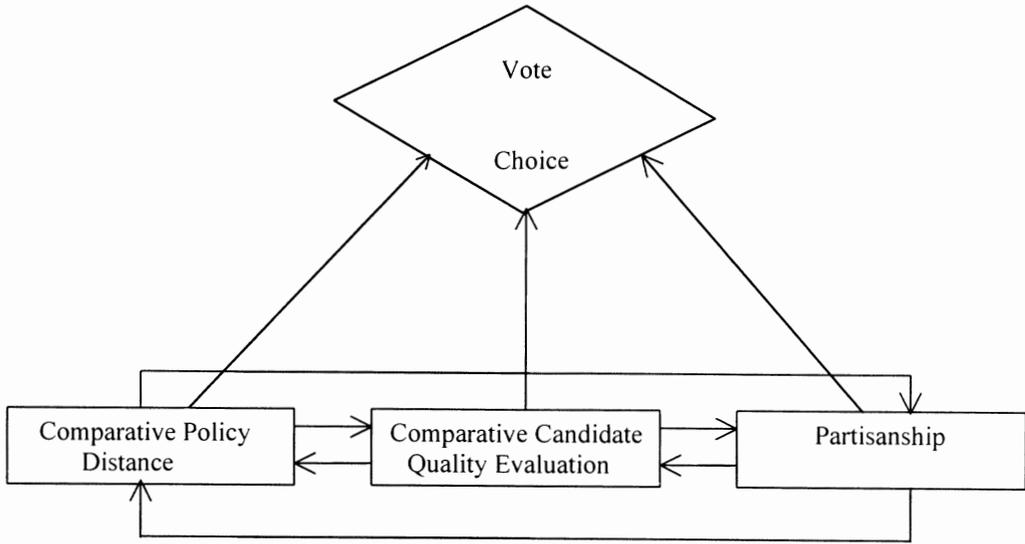


Figure 1 The Model for Presidential Voting

formation processing.

Once a specific schema is formed, later information is processed through it. Depending on the schema (ta) that is activated, the same piece of information can have different effects. The proposed model can help us discover the relative importance of the three schemata in arriving at the vote choice in the aggregate. Policy position, candidate personal evaluation, and partisanship all affect each other and determine the vote choice at the same time. The coefficients among these schemata have other significant implications as well. For instance, the arrow pointing from candidate evaluation to policy positions includes persuasion and projection effects, which means our own policy position as well as the perceived candidate policy position can both be affected by our evaluation of the candidate. The discussion of these effects is beyond the scope of this study. We will focus on the estimation of the model coefficients.

The technique of two-stage least squares will be used to estimate the model. These coefficients can not be computed without introducing instrumental (exogenous) variables to overcome the underidentification problem. Therefore, I include race, income, education, parent's party, ideology, region, union membership, payments recipient, moral standards, and views of the Vietnam draft as instrumen-

tal variables, and use them to construct a full model of candidate evaluation (See figure 2) . The equations and respective variable measurements are presented as follows :

$$(1) \text{Overall Candidate Evaluation} = a_{11} + b_{11} * \text{Comparative Policy distance} + b_{12} * \text{Comparative Candidate Qualities} + b_{13} * \text{Partisanship} + u_1$$

$$(2) \text{Comparative Policy distance} = a_{21} + b_{21} * \text{Comparative Candidate evaluation} + b_{22} * \text{Partisanship} + b_{23} * \text{income} + b_{24} * \text{payments} + b_{25} * \text{white} + b_{26} * \text{black} + b_{27} * \text{education} + b_{28} * \text{ideology} + b_{29} * \text{union} + u_2$$

$$(3) \text{Comparative Candidate Evaluation} = a_{31} + b_{31} * \text{Comparative Policy Distance} + b_{32} * \text{partisanship} + b_{33} * \text{morality} + b_{34} * \text{vietnam} + u_3$$

$$(4) \text{Partisanship} = a_{41} + b_{41} * \text{Comparative Policy Distance} + b_{42} * \text{Comparative Candidate Evaluation} + b_{43} * \text{Income} + b_{44} * \text{Educ} + b_{45} * \text{Black} + b_{46} * \text{White} + b_{47} * \text{Ideology} + b_{48} * \text{South} + b_{49} * \text{Father's Party} + b_{410} * \text{Mother's Party} + b_{411} * \text{union} + u_4.$$

OVERALL CANDIDATE EVALUATION : Instead of using the dichotomous variable of which major candidate the respondent voted for, this study uses the comparative evaluation of candidate thermometer feeling (see Page and Jones, 1979) , subtracting Democratic candidate thermometer score from Republican candidate thermometer score, the result is called Overall Candidate Evaluation. The score ranges from 97 to - 97, with large positive scores indicating positive evaluation of the Republican candidate and large negative scores denoting favorable assessment of the Democratic candidate.

The reason for adopting this operationalization is that the thermometer score is an extremely good approximation of the vote choice and contains even more information than the dichotomous variable does. According to Page and Jones (1979) , in both 1972 and 1976, “ over 95 percent of the voters who scored one candidate higher than the other on the thermometer scale reported voting for that candidate. ” The corresponding figure for the presidential election of 1996 is 97 percent. This measure is indeed an extremely good approximation of the vote choice. However, thermometer scores do have potential measurement errors due to idiosyncratic scaling of individual respondents. Not all respondents treat the 100-point scale homogeneously.

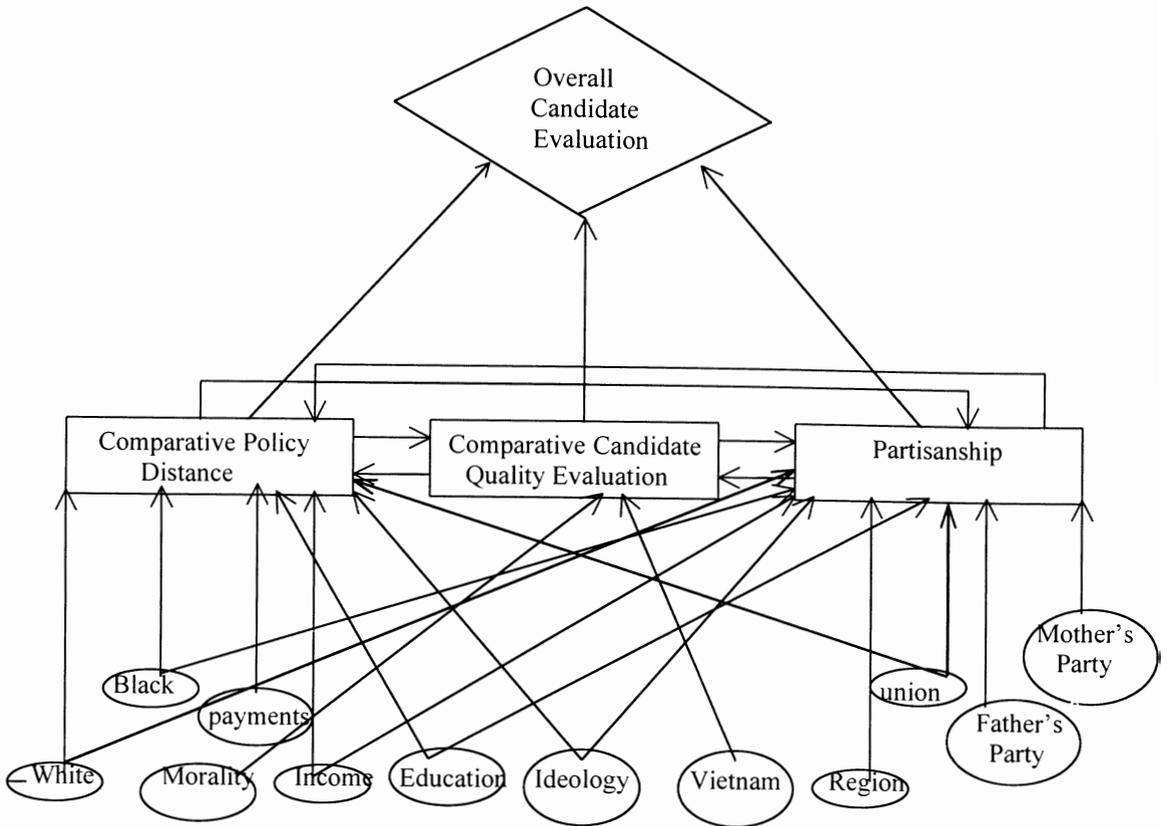


Figure 2 Full model of Candidate Evaluation

With this measurement, two voters each with thermometer score differences of 90 (90-0) and 10 (60-50) favoring a candidate reveal additional information on the extent to which one candidate is favored over the other. On the other hand, using the vote choice variable would only show that one candidate is preferred over the other. Another advantage of using thermometer scores is that non-voters are not excluded from the analysis. Since we are interested in how people think about politics, there is no compelling reason why we would dismiss half of the sample from our analysis. As noted earlier, the post-election thermometer scores are used to avoid the overall candidate evaluation affecting policy position, candidate evaluation and partisanship.

COMPARATIVE POLICY DISTANCE : I construct a policy index using ten issues : job, service /spending, defense spending, health insurance, job /environment balance, aid to blacks, abortion, crime, environmental regulation, and

women's rights. For all issues except abortion, the respondents were asked to provide their own policy positions and the perceived candidates' positions on the same seven-point scale². I subtract the absolute policy distance between the respondent and the Republican candidate from the absolute policy difference between the respondent and the Democratic candidate for all issues. Therefore, a large positive value would indicate a closer policy position with the Republican candidate while a negative value implies closeness to the Democratic candidate. Note that the issues chosen need not be comparable on the same dimension, if there are indeed multiple dimensionalities in the voters' ideology. This operationalization simply calculates the sum of the relative distances of the voter from the candidates for all issues. Although I do not claim to exhaustively cover all the important issues in 1996, the issues included do represent nicely the conventionally politically relevant ones.

COMPARATIVE CANDIDATE QUALITY EVALUATION. With a similar logic as the above variable, large positive values of this indicator represent a positive assessment of the Republican candidates' personal characteristics over those of the Democratic candidate. This index is compiled by aggregating the responses to seven equally weighted questions which ask the respondents to rate candidates on the following personal characteristics: moral, inspiring, "provide strong leadership", "cares about people like you," knowledgeable, honest, and "get things done", assuming all these qualities are preferred in a president. The respondents were asked whether these qualities describe the candidates extremely well (1), quite well (2), not too well (3), or not well at all (4). The range of the variable is from -21 to 21, with large positive numbers denoting relatively higher assessment of the Republican candidate over his Democratic counterpart.

These questions were developed by political scientists and psychologists to identify personal qualities or traits that might be relevant to the voters' evaluations of presidential candidates, and are ideal for this research (Kinder, 1980). They measure various evaluative dimensions including competence (Knowledge, intelligent), effectiveness (provides strong leadership, inspiring, get things done), integrity (moral, honest), and empathy (compassionate, cares about people like you) of the candidates³ (Funk, 1994). Unfortunately, these questions were not asked until 1980, so for elections prior to 1980, the usual measurement of candi-

date evaluation were the open-ended questions of likes and dislikes about each candidate. As noted earlier, using open-ended comments as measurements of candidate evaluation is problematic. Utilizing this newly available set of questions enables us to compile a better measurement of candidate personal characteristics and is one of the improvements over previous models. The actual differences between the two measures will also be examined later.

PARTISANSHIP : The commonly used seven-point scale of party identification is used, with seven implying strong Republican identification.

INSTRUMENTAL VARIABLES : Three of the instrumental variables we use deserve special explanation :

PAYMENTS : This is a variable indicating that the respondent is currently receiving governmental payments. The sources include social security, food stamps, Medicare, Medicaid, unemployment compensation, AFDC, veterans' benefits, government retirement pensions, disability payments, and workman's compensation. The assumption here is that those who have received governmental payments would have different opinions on policy, especially with regards to jobs, service spending, and insurance. Although some might suggest that receiving payments might affect one's partisanship, I would argue that this effect works indirectly through policy consideration. Also, the evaluation of a candidates' personal characteristics should not be directly influenced by this variable.

MORALITY and VIETNAM : These two variables affect how respondents evaluate the candidate personally, but should have no direct effect on policy and partisanship. **MORALITY** is a dummy variable with 1 indicating that the respondent agrees that " the newer lifestyles are contributing to the breakdown of our society, " " this country would have many fewer problems if there were more emphasis on traditional family ties, " and disagrees that " the world is always changing and we should adjust our view of moral behavior to those changes. " Respondents coded one can be thought of as more traditional, regarding morality as absolute rather than relative. **VIETNAM** is also a dummy variable with 1 indicating that the respondent thinks " that most men who tried to avoid military service during the Vietnam War should have served regardless of their personal beliefs. " Because of the rumors of Clinton's extramarital affairs and his draft situation, these

two variables should have effects on how Clinton was evaluated personally, while having no direct effects on policy position and partisanship.

RACE, INCOME, EDUCATION, IDEOLOGY, and UNION are variables that affect respondents' policy position as well as their partisanship, but should not directly affect how candidates are evaluated personally. Take race as an example. Being a black person would affect one's partisanship and policy orientation (e.g. aid to blacks), but would not affect how Clinton and Dole were evaluated as persons. If indeed blacks have a higher evaluation of Clinton personally, it is not a direct effect of race, but rather comes indirectly from the influence of partisanship or policy position. Similarly, income, education level, ideology, and being in the household of a union member would not have a direct effect on how a candidate is evaluated personally. UNION is a dummy variable denoting that someone in the household belongs to a union. IDEOLOGY is coded on the well-known seven-point scale. INCOME and EDUCATION are both coded as cardinal variables with large values indicating either a higher income or a higher level of education completed. Finally, FATHER'S PARTY, MOTHER'S PARTY and REGION only affect respondents' partisanship directly but not their policy positions or candidate evaluations. REGION is a dummy variable indicating that the respondent is from the south.

This analysis is made possible by utilizing data from the 1992-1994-1996 panel. It would be quite difficult, if not impossible, to replicate the model for all other presidential election years due to the limitations on data availability. There simply are not enough questions asked in one particular year that would provide us with sufficient numbers of variables (both endogenous and exogenous) to estimate the model. For example, parent's party affiliations were not asked in 1996 anymore, so the data in 1992 was applied. MORALITY, VIETNAM, and PAYMENTS are also data from the 1992 survey. From the 1992 survey, only three policy issues (defense, job, and government spending) are available to calculate the relative distance between respondents and candidates, and this is not quite representative of the policy spectrum. My speculation is that no single-year NES survey would contain enough information to construct a similar model. Moreover, close-ended questions of candidate personal appeal are not available until 1980, which makes model

building for earlier elections even more difficult. The results are reported in figure 3 with the standardized regression coefficients (beta). Insignificant coefficients are reported in parentheses and their causal paths in dotted lines.

As noted earlier, the exclusion restriction assumptions are indeed difficult to satisfy, and different specifications would quite likely lead to different results. I have tried my best to construct the most plausible model here, and will test alternative specifications later.

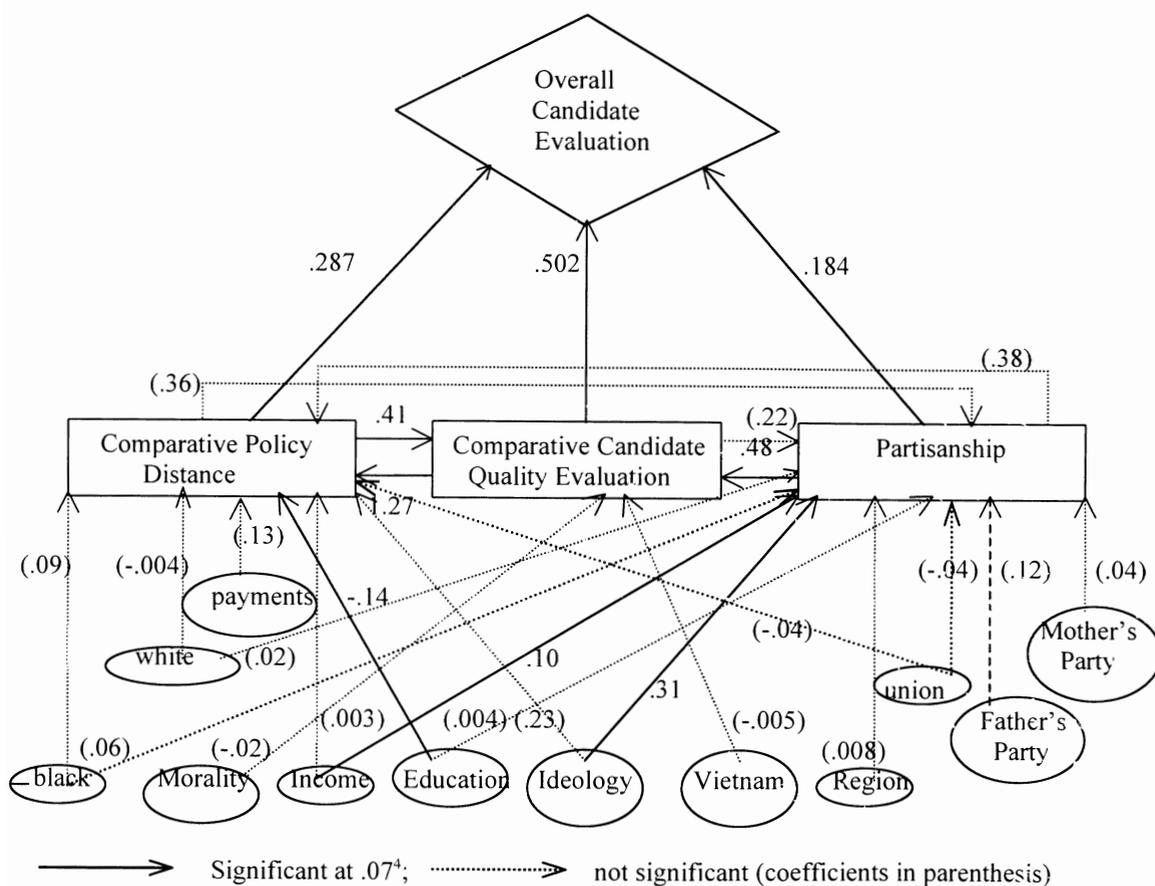


Figure 3 Full Model of Presidential Evaluation in 1996

What Affects the Vote ?

In 1996, policy considerations, candidate personal quality, and partisanship all affect the overall candidate evaluation directly, while a candidate's personal appeal

appears to have the strongest direct effect. As for indirect effects, the largest one is the path from candidate to policy. This represents the strength of candidate evaluation affecting policy positions, which is the combination of the projection and persuasion effects mentioned earlier. On the other hand, policy consideration also has significant, though smaller, effects on how candidates are evaluated. Partisanship's indirect effects come mainly through its influence on candidate evaluation. Party identification is least affected by candidate evaluation or policy consideration, as is indicated by the statistically insignificant and relatively small correlation coefficients, demonstrating its relative stability as an endogenous variable.

Although not completely comparable models, similar models across elections display the same general pattern since 1972, as will be shown later. To sum up the effects of each variable, each of the three exogenous variables has a significant direct effect on the overall evaluation. As for indirect effects, policy position and candidate evaluation affect each other, while partisanship affects candidate evaluation with statistical significance. The results conform to the general expectations from the literature, where partisanship is the relatively more stable variable of the three and is least affected by candidate and policy considerations in the short run. The strong indirect effect from candidate to policy represents the sum of projection and persuasion effects, which are arguably two of the most important mechanisms of voters' information processing.

Finally, partisanship affects how candidates are perceived, but surprisingly its effect on respondents' policy voting is not statistically significant. This might be caused by policy positions being influenced by candidate personal evaluation in the first place. Note that the policy variable is constructed by comparing the relative distance of the voter from the two candidates' perceived policy positions. It is possible that the effect of partisanship on policy is picked up by the effect of partisanship on candidate evaluation.

Table 1 shows the total effects of these variables and the variance of overall candidate evaluation explained by the three endogenous variables (R^2). Candidate personal characteristics have the largest direct effect, the largest indirect effect, and thus, the largest total effect on overall candidate evaluation. It accounts for about half of the total effects and is the most important frame of reference re-

spondents use to reach the overall evaluation. Policy considerations and partisanship each possess approximately a quarter of the total effects.

I do not claim the results to be conclusive due to the nature of the analysis—the assumption that exogenous variables do not have effects on the excluded causal paths can not be totally satisfied. However, I am confident that the present setup represents major improvements over previous models in the following areas: first, it is a fully non-recursive model that allows the three endogenous variables to interact with each other. Second, the construction of candidate personal evaluation with the new close-ended questions is a much better measurement than the recoding of open-ended comments. These closed-ended questions are superior for measuring evaluations of candidate personal characteristics because they do not depend on a particular assumption of information processing.

Third, the inclusion of new instrumental variables, such as welfare recipients and the Vietnam draft, to replace the more problematic demographic variables used by previous studies also improves the model. Last but not least, more issue questions (10 issues) in the 1996 NES survey enable us to cover more of the policy spectrum than earlier models did. I hope the effort and results will attract more attention to the subject of why and how candidate personal characteristics have such influence on the overall evaluation of a candidate and its implications for democratic theory. We need more empirical explorations on the topic to enhance our understandings of the electoral process.

Table 1. Summary effects of the 1996 presidential elections

	Direct effect	Indirect effect	Total effect	%	R ²
Policy	.287	$.41 * .502 + (.36 * .184) = .272$	.59	28%	
Candidate	.502	$1.27 * .287 + (.22 * .184) = .405$	.91	46%	
Partisanship	.184	$(.38 * .287) + .48 * .502 = .35$	.53	27%	.79

Alternative Specifications and Sensitivity Analysis

In this section, I will attempt to test alternative specifications to examine how sensitive the results are to variable and model specifications. One possible weakness of the model is the exclusion of economic voting, which was shown to be an important variable in the voting literature. It will be tested first. Generally speaking, it is advantageous to the incumbent when the economic condition is good. However, it is empirically difficult to be included as an endogenous variable in the model. The model would have four endogenous variables affecting each other, and the exogenous causal paths would be almost impossible to specify. Therefore, I will try modeling the economic voting variable as an exogenous variable to examine the difference its inclusion would make.

In order to incorporate the effect of economic voting, there are two possible types of indicators that can be integrated in the model. The first type is objective economic indicators that can reflect the state of the economy, for example, the misery index, ratio of disposable income growth to inflation, etc. The problem with using these objective indicators is that these figures (e.g. Misery index at 6 or 15) do not really tell us how the respondent would feel about the candidates or the parties since there exists no true baseline for making the comparison. Also, these figures are constants and can not be applied to regression analysis for a particular election. Therefore, I choose to use subjective economic evaluation by respondents as an exogenous variable that would affect candidate evaluations and partisanship but not policy positions.

NES asked the respondents to evaluate retrospectively and prospectively how they are doing financially, with possible answers ranging from one (much better) to five (much worse) . I construct an index called ECON by adding up the responses to these two questions, with 2 indicating very good economic evaluation and 10 denoting the least favorable assessment. These subjective indicators are not without problems. Since they are a subjective assessment of the economy, they could be influenced by partisanship or candidate evaluation. This is a problem to be noted but not dealt with here and is another reason why these indicators were not

put in the model earlier. With this in mind, when ECON is added to the model, the results of the effects of the endogenous variables remain essentially unchanged (see appendix A). The only minor difference is that adding the ECON variable makes some of the other instrumental variables slightly less significant. The direct and indirect effects of this model and other alternative specifications are all reported in table 2.

One problem with the above analysis is that those who said they are doing much better than a year ago, but forecast that the future would be much worse, are coded the same for both questions as those doing much worse this year but having a positive outlook, and those who feel they have stayed at the same level. Therefore, I tried to estimate the model again, with retrospective and prospective evaluations separated as two variables. The prospective variable is statistically insignificant while the retrospective variable is significant and picks up all the effects of the original ECON variable. This is a piece of supporting evidence for the importance of retrospective voting. The effects of the endogenous variables still remain virtually unchanged (see appendix B). Therefore, with or without these economic voting indicators, the final estimates of the relative importance of the three endogenous variables are quite robust.

Next, I would like to try a different operationalization for policy voting. For five of the ten issues included in policy voting, respondents were further asked how important each issue is to them⁵. Therefore, I construct a weighted variable that takes into account each issue's relative importance to the respondents. An extremely important issue weighs five times as much as an unimportant one. The five issues that were not included in the importance assessment were given a neutral weight of 3. As with the original variable, a large positive value indicates a closer policy position to the Republican candidate, while a negative value implies closeness to the Democratic candidate. Of the five issues whose importance were revealed, an average of 51% indicated that the issues were extremely or very important while only 8% thought that the issues were not too important or not important at all. Replacing the original policy variable with the new weighted variable, I found the results to remain unchanged.

Finally, I would like to test the model's sensitivity to alternative specifications

by changing the causal paths of some of the exogenous variables. First of all, in the original model, attitudes toward the Vietnam draft were modeled to have an effect only on candidate character evaluation. Some might suggest that it could also have an effect on defense spending, which is one of the issues included in the policy index. Secondly, morality was restricted to have an effect only on candidate evaluation. However, it is possible that morality could have an effect on issue positions such as abortion and crime. The results of these alternative specifications are reported in table 2.

Table 2 Alternative specifications

Economic voting with a combined indicator

	Direct effect	Indirect effect	Total effect	%
Policy	.287	$.42^* .502 + (.49^* .184) = .30$	.59	29%
Candidate	.502	$1.31^* .287 + (.13^* .184) = .40$	.90	45%
Partisanship	.184	$(.38^* .287) + .49^* .502 = .36$	.54	27%

Economic voting-both retrospective and prospective

	Direct effect	Indirect effect	Total effect	%
Policy	.287	$.41^* .502 + (.47^* .184) = .29$	.58	30%
Candidate	.502	$1.14^* .287 + (.14^* .184) = .35$	.86	44%
Partisanship	.184	$(.23^* .287) + .48^* .502 = .31$	.49	26%

Weighted policy

	Direct effect	Indirect effect	Total effect	%
Policy	.274	$.42^* .501 + (.35^* .19) = .28$	.55	28%
Candidate	.510	$1.25^* .274 + (.24^* .19) = .39$	.90	45%
Partisanship	.190	$(.33^* .274) + .48^* .51 = .34$	.53	27%

Vietnam

	Direct effect	Indirect effect	Total effect	%
Policy	.287	$.41^* .502 + (.36^* .184) = .27$	.56	29%
Candidate	.502	$(1.17^* .287) + (.22^* .184) = .38$	.88	45%
Partisanship	.184	$(.33^* .287) + .48^* .502 = .34$	.52	27%

Morality

	Direct effect	Indirect effect	Total effect	%
Policy	.287	.41* .502 + (.36* .184) = .27	.56	29%
Candidate	.502	1.05* .287 + (.22* .184) = .34	.84	44%
Partisanship	.184	(.33* .287) + .48* .502 = .34	.52	27%

* statistically insignificant paths in parenthesis

For changes in the specification of morality, the results were almost identical with the original specification, except that some of the instrumental variables became more statistically significant. The coefficients of income, ideology, and father's party on partisanship became more significant although the magnitudes of the coefficients remained the same. The candidate factor still has about half of the total effects while policy and partisanship each has about a quarter of the total effects, as the original model indicates. As for the changes with the additional causal path of the effect of the respondents' opinion of the Vietnam draft on policy positions, the overall effects did not change significantly. However, the effect of candidate evaluation on partisanship became insignificant (.13).

While this change could be a sign that the model is sensitive to the specification of the Vietnam draft issue, I suspect that at least part of the change is due to the fact that the draft issue is one of the only two issues that has a direct effect on candidate evaluation. In other words, it might not be that the Vietnam draft variable per se has such a significant effect on the overall estimate. Rather it may be that the act of making one of the only two variables that has an exclusive effect on candidate evaluation take an additional causal path has an effect on policy. Therefore, I try to test this speculation by making the variable 'income' have an effect on candidate evaluation but not on policy positions. Note that I do not claim that income should be specified as such. Rather this is done with the intention of adding another variable that has a causal effect on candidate evaluation to make up for the loss of the draft issue and to see whether the effect of candidate evaluation on policy which had disappeared would reemerge.

As expected, the effect of candidate on policy became borderline significant

(.08) with this change. Therefore, given that the Vietnam draft issue might affect the model to a certain extent, its effect has much to do with the fact that there are few variables that have only direct effects on candidate evaluation, the Vietnam issue being one of them. Had there been more instrumental variables that have direct effects on candidate evaluation, I would think that the effect of this one causal path change would be minimal.

The results from these alternative specifications do not differ dramatically from the original model, which adds to our confidence in the estimates. However, the number of alternative specifications tested here is limited and does not rule out the possibility of other specifications that would dramatically alter the results. Given the nature of the method, more needs to be done to produce conclusive evidence.

Why is Candidate Personal Appeal Important?

With the 1996 model, we find that candidate personal appeal is the most important factor in the overall evaluation. The reason could be that both Clinton and Dole are not candidates who make strong partisan appeals, and the relative stability of partisanship makes it immune to short-term effects from candidate assessment and policy consideration. Rather, both candidates expended a significant amount of effort portraying each other as “old,” “wooden,” “untrustworthy,” “corrupted,” and “immoral” (DiIulio, 1997). On the other hand, issue voting is difficult since there are several conditions that must be met by the candidates, voters, and the media, which make it difficult to realize for many, if not most voters. In the 1996 presidential election, there does not seem to exist a set of salient issues that defines the election.

As pointed out by several other scholars, it is easier to form a character opinion on presidential candidates. Judging character is a relatively familiar and convenient way for citizens, and is manageable with the casual attention an average citizen pays to politics (Kinder, 1986, p.235; Kinder and Sears, 1985).

If voters do base their electoral decisions on candidate personal characteristics more than other factors, does that imply irrationality on the voters' part? Abs-

lutely not. Voting on the perceived competence of the candidates is arguably more rational than voting on partisanship or policy position. After all, the president has to be able to carry out his policy promises in order to make them meaningful (Popkin et al, 1976). As Page (1978) points out, “ in an age of nuclear weapons, no aspect of electoral outcomes is more important than the personality of the president, which might well determine how the United States would react in an international confrontation ” (pp. 232 – 233) .

Candidates do have the incentive to be ambiguous on policies. Moreover, policy promises made in campaigns are non-binding and are relatively free to change. Media coverage does not help issue voting either. It has been shown that the media focus on the horse-race aspect of the campaign and on candidate traits rather than on issues (Patterson, 1980 ; Brady and Hagen, 1986 ; Brady and Johnston, 1987) . Given that the average voter is only willing to allocate limited time and attention to an election, there is no surprise that candidate voting would be important.

The Oval Office, aside from policy enactment, has the more important role of national leadership to play. Voters' electoral decisions are more than the sum of policy evaluation and partisanship. Therefore, choosing a President is more than choosing between policy alternatives according to one's own ideology or partisanship. Voters, self-consciously or not, place significant weight on personal characteristics such as physical appearance, charisma, perceived competence, and so on. These personal qualities significantly influence how voters cast their ballots. Rosenberg, Bohan, McCafferty, and Harris (1986) demonstrate in an experimental setting that even the nonverbal aspects of candidate characteristics presented in a photograph can have significant effects on the vote choice. Candidates' personal characteristics are more important in the decision process than normally assumed. Of the three schemata under examination, candidate personality is the most accessible one to most voters both because it is easier to develop, and because relevant information has a lower access cost during the campaign. Therefore, on the aggregate, evaluation of candidate personalities is more important to voters than issue or partisanship.

The Difference Between Open-ended & Structured Measurement

Closed-ended questions about candidate personal characteristics are not available before 1980. A measurement widely used to survey candidate evaluation is the open-ended comments of likes and dislikes about the candidates. This section examines briefly how the two measurements differ and their respective effect on the overall model estimation.

Following earlier models and the coding of NES cumulative files, I construct a variable labeled *AFFECT* by calculating the sum of Republican presidential candidate 'likes' and Democratic presidential candidate 'dislikes' minus the sum of Republican presidential candidate 'dislikes' and Democratic presidential candidate 'likes' in 1996. A large positive value for *AFFECT* denotes favorable assessment of the Republican candidate. However, *AFFECT* contains not only comments on personal characteristics but also includes responses directed to policy preferences and partisan affection. Therefore, I recoded from '*AFFECT*' a new variable '*AFFECT1*,' which excludes comments with policy and partisan implications and contains only comments on candidates' personal qualities, hoping the effort would make *AFFECT1* approximate *CANDIDATE* better. The model is estimated again twice, once with *AFFECT* and once with *AFFECT1* replacing the original variable *CANDIDATE*. The result is reported in table 3.

The model for *AFFECT* displays the same general pattern as the *CANDIDATE* model, with *AFFECT* and policy position having influence on each other, and partisanship affecting *AFFECT*. However, the *AFFECT1* model exhibits a very different pattern. The mutual influence between policy and *AFFECT1* becomes insignificant, while there is significant influence from party identification to *AFFECT1*. This shows that the change from *AFFECT* to *AFFECT1* makes the mutual influence between policy and candidate evaluation disappear.

The difference can also be observed by comparing table 1 and table 3. The R^2 of the direct effect equations are roughly comparable. It goes down from .81 to .76 when *AFFECT* replaces *CANDIDATE* and remains unchanged when *AFFECT* is replaced by *AFFECT1*. This shows that the difference between *AFFECT* and *AF-*

FECT1 is being picked up by the other endogenous variables. When CANDIDATE is replaced by AFFECT, the direct effect of AFFECT goes down considerably (from .50 to .34) while its indirect effect increases from .41 to .54. Although the total effects of AFFECT and CANDIDATE are comparable, I suspect that much of the indirect effects of AFFECT are spurious because it includes policy and partisan related comments. These comments could be causing the indirect effects of AFFECT through POLICY and PARTISANSHIP.

Table 3 Effects of the 1996 presidential election with AFFECT & AFFECT1

	Direct effect	Indirect effect	Total effect	%	R ²
Policy	.38	.47* .339 + (.38* .230) = .25	.63	32%	
AFFECT	.339	1.26* .38 + (.26* .23) = .54	.88	45%	
Partisanship	.23	.38* .339 + (.27* .38) = .23	.46	23%	.76

	Direct effect	Indirect effect	Total effect	%	R ²
Policy	.471	(.08* .224) + (.47* .302) = .16	.63	34%	
AFFECT1	.224	(.97* .471) + (.19* .302) = .51	.73	39%	
Partisanship	.302	(.142* .471) + .54* .224 = .19	.49	26%	.75

* statistically insignificant paths in parenthesis

This speculation is confirmed by estimating the model which results from replacing AFFECT by AFFECT1, which does not include policy and partisan comments. The direct effect of AFFECT1 goes down further to .22, while its indirect effects are not statistically significant. This shows that the indirect effect of AFFECT is an artifact because it includes policy comments, and therefore has influence on and is influenced by policy position. To sum up, when the candidate personal appeal measure is changed from closed-ended questions to open-ended comments, the influence of candidate personal characteristics not only decreases, its indirect effects on policy also became statistically insignificant. There are two possibilities for explaining this, either CANDIDATE overestimates, or AFFECT1 under-

estimates, the effect of candidate personal evaluation. Given the problems of open-ended questions and observing the changes from AFFECT to AFFECT1, we are quite confident that CANDIDATE is a better measurement of candidate personal evaluation than AFFECT1. It is highly likely that earlier models that use the open-ended format to assess candidates' personal influence have underestimated the effects of candidate personality evaluation.

Does Political Sophistication Matter ?

Although the focus of this study is on the overall relative importance of policy, candidate, and partisanship consideration, it would be interesting to also examine how voters with different levels of political sophistication differ. Knowing how political sophistication would affect one's information processing would enhance our understanding of how people think about politics. Previous studies have found that political sophistication affects the extent to which individuals rely on issues and ideology when evaluating presidential candidates (Knight, 1985 ; Jacoby, 1986, Stimson, 1975). However, there are disagreements as to whether more politically sophisticated individuals would be more or less likely to rely on candidate traits in forming their candidate preferences.

The conventional view is that less attentive citizens are less capable of focusing on issues, and thus rely more on candidate personal qualities to make their electoral decision (Campbell et al., 1960 ; Niemi and Weisberg, 1976 ; Nie et al., 1976 ; Pierce, 1993). On the other hand, Miller, Wattenberg, and Malanchuk found that more politically informed voters are more likely to make comments about the candidates' inner dispositions and behaviors (1986). Glass also argues that sophisticated citizens realize that candidates' issue positions are mercurial and would rely more on personal attributes to form an overall evaluation (1985). I would like to examine the difference political sophistication makes by applying the above model to groups with different levels of political sophistication.

I classify respondents into two groups, those with high and low political sophistication, by constructing a variable summing the respondents' education, level of information, and apparent intelligence. Level of information and apparent intelli-

gence are both subjective assessments of the respondents by the interviewer, and have scores ranging from 1 to 5, with 5 indicating the highest level of each variable. Education is a seven-point scale covering all levels of education, with higher values indicating higher levels of education completed. A simple bivariate correlation reveals that these measures are correlated with each other in the expected direction. Those who have more education also have a higher level of information and higher intelligence, as rated by the interviewer (See table 4). Respondents are then classified into two groups according to the sum of the three variables - high and low political sophistication groups. The above voting model is then applied to each of the two groups and the result is reported in table 5. The detailed model specification and results are provided in appendices C and D.

Table 4 Correlation between Education, Information, and Intelligence.

	Education	Level of Information
Level of information	.49**	
Intelligence	.573**	.739**

** significant at the .01 level

Table 5. Difference Between High & Low Sophistication Groups

High sophistication				
	direct	Indirect	total	%
Policy	.273	$.70^* .518 + (.50^* .175) = .45$	.72	39%
Candidate	.518	$(.15^* .273) + (.01^* .175) = .04$	.56	30%
Party ID	.175	$(.28^* .518) + (.98^* .273) = .41$	.59	31%
Low sophistication				
	direct	Indirect	total	%
Policy	.305	$.57^* .475 + (.22^* .193) = .31$	.62	35%
Candidate	.475	$.87^* .305 + (.34^* .193) = .33$	.81	46%
Party ID	.193	$(.11^* .305) + (.22^* .475) = .14$	.33	19%

Policy considerations do have a larger total effect on the politically sophisticated respondent. The total effect of policy position is the most important one for the

high sophistication group while candidate personal attribute plays the most important role for the low sophistication group in the overall evaluation. Moreover, policy position also has a larger influence on candidate evaluation for the more politically sophisticated citizens (.70) than the less sophisticated ones (.57). Perhaps the most important and striking difference between the two groups is that the policy assessment of the low sophistication group is strongly influenced by their candidate personal attribute evaluation, while the policy positions of the more sophisticated respondents are not affected by their evaluation of candidate personality, as evidenced by a small and insignificant coefficient (.15). These findings support the view that political sophistication does matter and that more sophisticated people rely more on policy consideration while less sophisticated people depend more on candidate personal evaluation, to arrive at their vote choice decisions. The findings also suggest that projection and persuasion effects are more likely to occur on citizens with low political sophistication. They are more likely to use candidate personal characteristics as information shortcuts to infer candidates' positions or be influenced by candidates' perceived positions.

There is another interesting observation worth noting from table 5. Although policy consideration has the largest total effect for the high sophistication group, candidate personal evaluation has the strongest direct effect. This is in stark contrast with the low sophistication group, where the direct effect of candidate personal evaluation is not as strong, but the indirect effect is large. This observation could be the key to the question of why previous studies found contradicting evidence on which group would be affected most by candidate personal evaluation. It is likely that research that utilizes analysis of open-ended comments found only direct effects and concluded that highly sophisticated citizens rely more on candidate evaluation (e.g. Miller, Wattenberg, and Malanchuk, 1986; Glass, 1985), while studies that employ statistical analysis incorporated total effects and discovered that the less sophisticated respondents rely more on candidate attributes (e.g. Pierce, 1993). This explanation echoes Miller and Shanks' speculation that open-ended questions underrepresent indirect effects and measure mainly direct effects (1996). Therefore, on the aggregate, the evidence tends to support the view that candidate personal characteristics have stronger effects on voters with relatively

low political sophistication, and a major part of its influence comes indirectly through policy consideration.

Applying the Model Across Elections

As noted earlier, it is extremely difficult to apply the model to previous elections because there are not enough instrumental variables in one survey. Moreover, even if enough instrumental variables were found in a given election year, it would be difficult to compare the results across years because different sets of instrumental variables are used. In spite of these problems, I build a model using instrumental variables that are available each election year since 1972. Elections before 1972 can not be estimated due to unavailability of important endogenous and exogenous variables. For example, self-reported ideology was not asked until 1972. Also, respondents either were not asked to place candidates on policy scales or the scales were not comparable with later studies. The 1984 presidential election is also excluded because parent's party affiliations were not asked. The specification of the model and the policy questions and candidate qualities included in the analysis are listed in appendix E. The validity of the specification very likely suffers from the limited choices of instrumental variables. Therefore, some of the causal paths of the model are suspicious. For example, why would age affect policy and candidate, but not partisanship? The results here are not intended to be conclusive but rather provide a rough estimate of how policy, candidate, and partisanship affect the vote choice across elections, given the available data.

The POLICY variable is constructed using all available policy questions in a given election. Elections before 1980 do not have the close-ended candidate questions available so AFFECT1 was used instead. Due to the limitations mentioned above, the path estimates obtained in this analysis are by no means conclusive. The results are as follows :

The effect of candidate personal characteristics is quite stable across years, having an average of 47% of the total effect, and is also the most important schema in all the elections under examination. For all elections except 1980, there is a strong significant effect of candidate on policy. However, the candidate measure in

1980 is not really comparable with the other elections, since questions on personal characteristics were in a developmental phase. Half of the candidate personal qualities asked were negative ones, and were dropped in later NES surveys. Also the positive qualities asked were not as complete as the later surveys. Therefore, we can conclude that evaluation of candidate personal traits does have a steady influence on policy consideration.

Table 6. Estimates of effects across elections

1972

	Direct effect	Indirect effect	total	%
Policy	.555	$.57^* .213 + (.16^* .254) = .16$	.72	33%
Affect1	.213	$1.18^* .555 + (.83^* .254) = .87$	1.08	50%
Partyid	.254	$.16^* .213 + (.12^* .555) = .10$	.35	16%

1976

	direct effect	Indirect effect	total	%
Policy	.434	$.39^* .345 + (.24^* .223) = .19$	.62	37%
Affect1	.345	$.58^* .434 + (.60^* .223) = .39$	.73	44%
Partyid	.223	$(.10^* .434) + (.13^* .345) = .09$	.31	19%

1980

	direct effect	Indirect effect	total	%
Policy	.291	$.65^* .586 + (.86^* .093) = .46$	.75	37%
Candidate	.586	$(.38^* .291) + (4.18^* .093) = .50$	1.09	53%
Partyid	.093	$(.12^* .291) + (.12^* .586) = .11$	.20	10%

1988

	direct effect	Indirect effect	total	%
Policy	.239	$.36^* .538 + (.40^* .225) = .28$	.52	28%
Candidate	.538	$.92^* .239 + (.28^* .225) = .28$	.82	44%
Partyid	.225	$(.25^* .239) + (.43^* .538) = .29$	.52	28%

1992

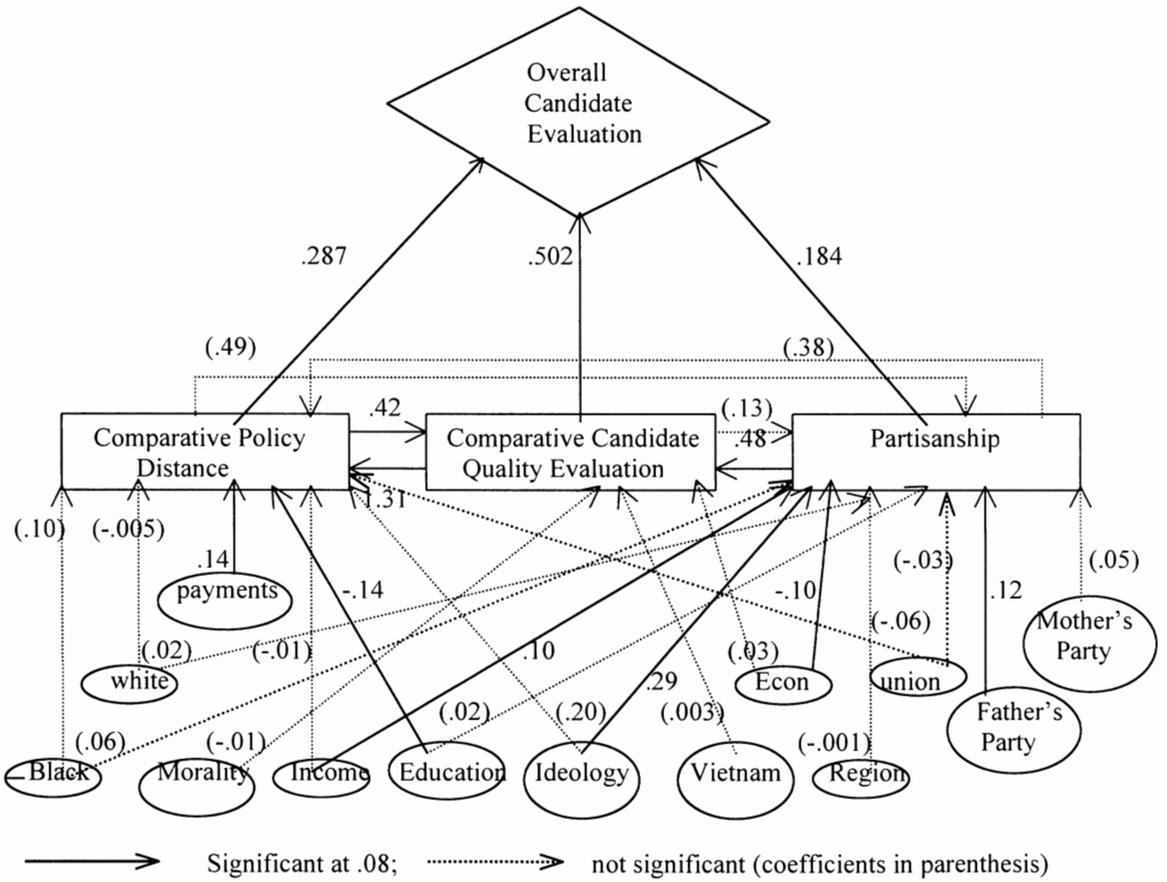
	direct effect	Indirect effect	total	%
Policy	.19	$.72^* .572 + .37^* .216 = .49$	.68	37%
Candidate	.572	$1.07^* .19 + (.38^* .216) = .29$	.86	46%
Partyid	.216	$(.003^* .19) + (.16^* .572) = .09$	.31	17%

In examining the results of applying the model across elections, we would expect there to be more variations than there are. There are at least 3 possible causes for this. First, the model wasn't correctly specified due to the limited availability of exogenous variables. The second possible reason is that the variation of policy questions and candidate traits analyzed in each year makes the estimates not comparable with each other. Third, the earliest election included in the analysis was 1972, and this coincides with the emergence of the television era. Therefore, it is possible that the modern media coverage of the presidential campaign has made the candidate factor the most influential one over the past two decades. If the analysis were done for earlier elections, the candidate factor might not be the most important one in the election. Once again, the result in this section is in no way conclusive due to the data constraint.

Policy voting, on the average, has 34% of the total effect. The election of 1988 has the strongest partisan influence (28%) and the least policy effect (28%) . Note that the measurement across years for policy issues and candidate assessments is varied due to the availability of data. Overall, the pattern we observe from these elections is comparable with the full model developed in 1996 with the panel data. Partisanship, candidate evaluation, and policy position all have direct effects on overall candidate evaluation, with candidate personal evaluation having both the largest direct and total effects. Candidate evaluation and policy position have indirect influence through each other. On the other hand, partisanship has only weak and insignificant indirect effects in all of these elections. The result here seems to reaffirm findings of the earlier model that candidate personal attribute is the most important variable and that candidate personal assessment consistently affects policy voting.

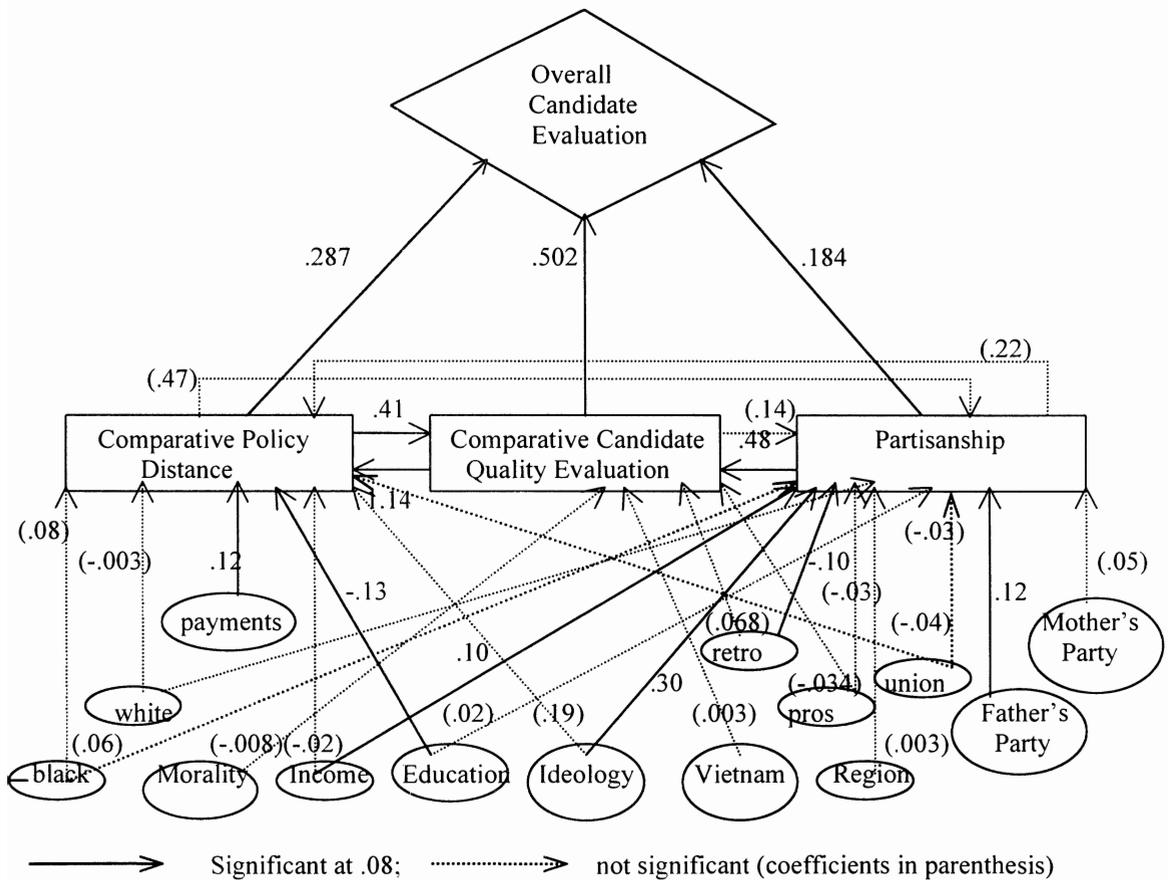
Appendix A

Model with Economic Voting – variable ECON



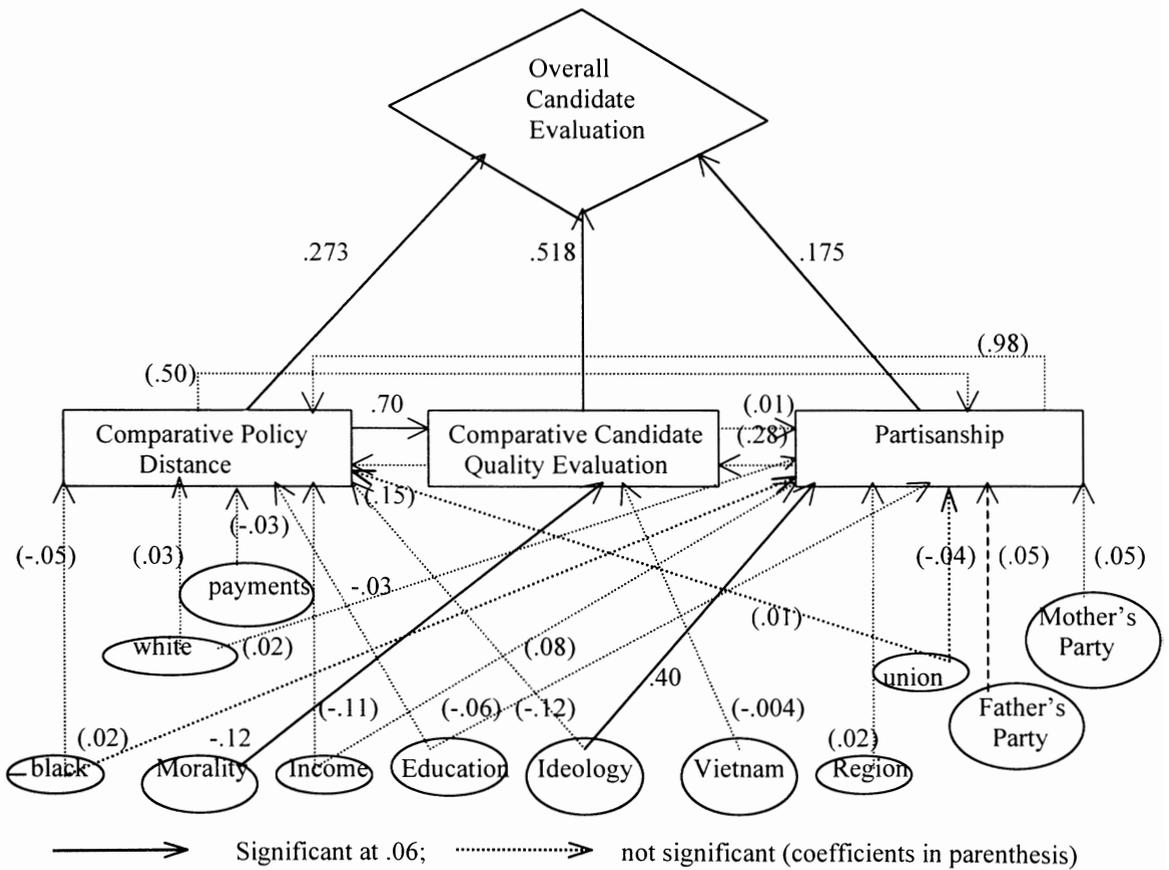
Appendix B

Model with Economic Voting – variables Retrospective (Retro) and Prospective (Pros)



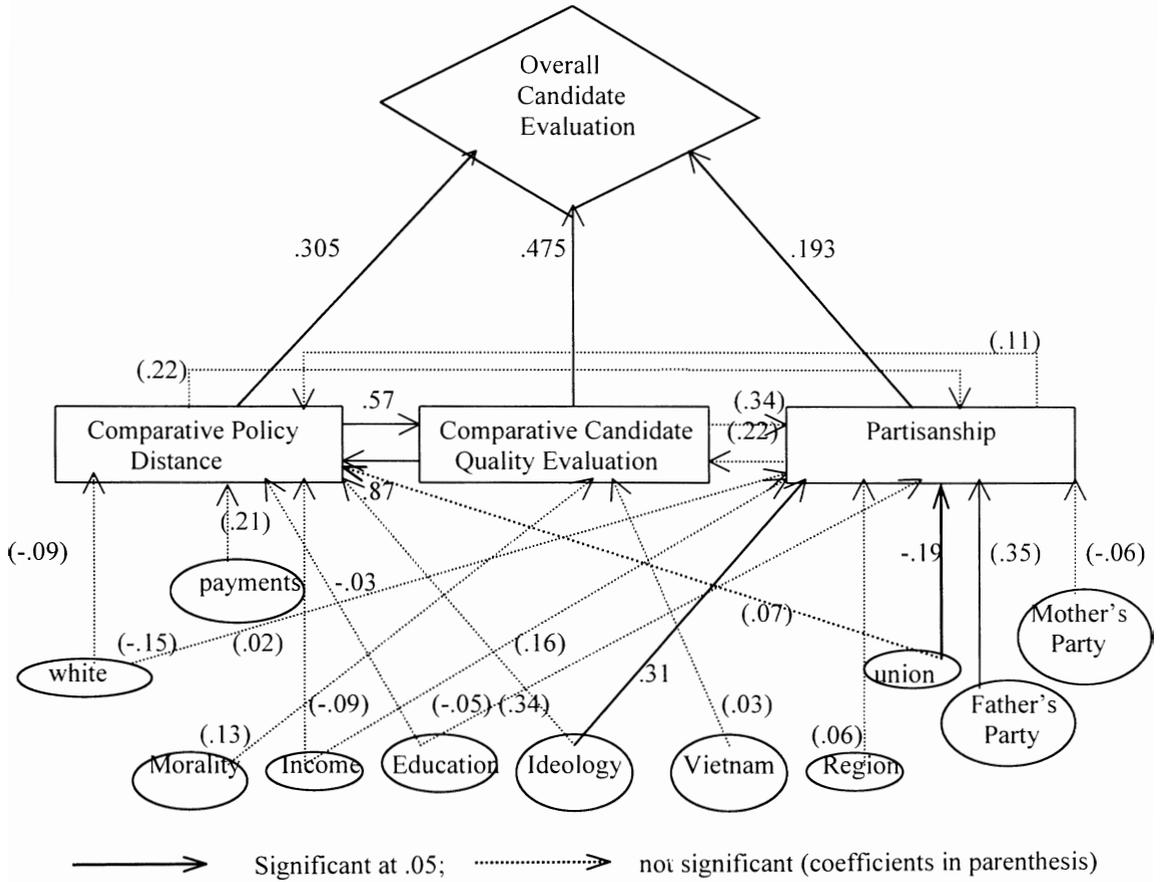
Appendix C

Model for High Sophistication Respondents



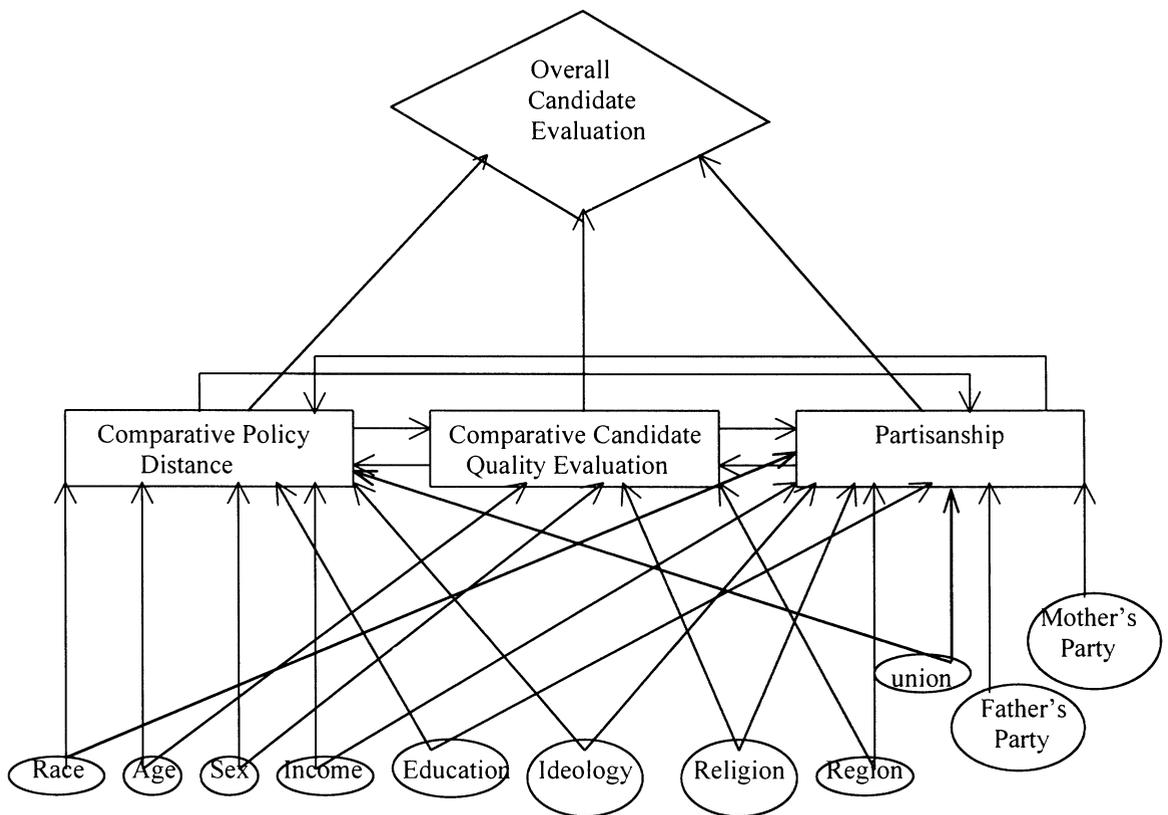
Appendix D

Model for low sophistication respondents



Appendix E

Model for Estimating Effects Across Elections



- 1972 Policy issues : tax rate, Vietnam withdrawal, inflation, legalize marijuana, school busing, health insurance, industry pollution ban, women equal role
Candidate traits : coded from open-ended questions
- 1976 Policy Issues : job /standard of living, right of the accused, school busing, aid to minority, medical insurance
Candidate traits : coded from open-ended questions
- 1980 Policy Issues : defense spending, government service, inflation /unemployment, abortion, tax cut
Candidate traits : moral, dishonest, weak, knowledgeable, power hungry, inspiring, and strong leadership
- 1988 Policy Issues :
Candidate traits : intelligent, compassionate, inspiring, knowledgeable, moral, provide strong leadership, cares about people like you
- 1992 Policy Issues : job, government spending, and defense spending (needs to check further)
Candidate traits : intelligent, compassionate, decent, inspiring, knowledgeable, moral, provide strong leadership, cares about people like you

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註 釋

- 註 一：There are similar questions in the 1980 NES survey. The qualities under examination are not stabilized until after 1984.
- 註 二：The opinion on abortion is coded on a four-point scale, with one denoting no abortion in any situation and four indicating that abortion should be a matter of personal choice.
- 註 三：Two qualities, intelligent and compassionate, were not included in this particular survey.
- 註 四：The causal path going from income to party identification is statistically significant at .07, while the arrow from ideology to partisanship is significant at the .06 level. All the other coefficients along dark lines are significant at the .05 level.
- 註 五：The following five issues were further probed for their importance：service /spending, defense spending, help blacks, abortion, and job /environment. Possible responses are extremely important, very important, somewhat important, not too important, and not important at all.

The Relative Importance of Partisanship, Issue, and Candidate in American Presidential Electoral Behavior-a discussion of methodology and case study

Chihjen Emile Sheng

Abstract

This study focuses on the analysis of the relative importance of policy considerations, candidate personality assessments, and partisanship in the presidential selection process. In constructing my statistical models, I utilize developments in information processing theory to construct variables that conform to the on-line information processing assumption. Previous studies using open-ended questions to operationalize candidate assessments may underestimate their effects. I find that for the whole electorate, the personal characteristics of candidates have the most effect of the three schemata under examination, and there is a strong indirect influence of candidate assessment on policy considerations through projection and persuasion effects.

Keywords: presidential election, voting behavior, two-stage least square, candidate-centered politics