

Taking voters' consideration set into consideration:

Modelling electoral choice in two stages

Catherine E. de Vries
University of Amsterdam
C.E.deVries@uva.nl

Martin Rosema
University of Twente
m.rosema@utwente.nl

First draft. Please do not cite without permission of the authors.

Abstract

When individuals choose from a set of alternatives, they often decide in two stages. In the first stage they exclude several of the available alternatives and thus create a consideration set that comprises viable choice options. In the second stage they make their choice from this sub-set. Whereas in consumer and marketing research phased decision making has been extensively studied, in electoral research distinctions between stages in the choice process have been largely neglected. In this paper we identify the presence of consideration sets in the electorate and examine if factors that influence consideration set formation are identical to those that shape vote choice. Analyses focusing on the 2006 Dutch parliamentary elections demonstrate differences between the two stages. First, whereas party leader evaluations did not have an effect in the consideration set stage, they did have an effect in the choice stage. Second, whereas the decision making in the choice stage was characterized by compensatory decision rules, in the consideration stage non-compensatory decision rules played a role. These findings suggests that electoral choice is better modelled in terms of two sequential stages rather than one.

1. Introduction

If individuals want to make a choice from a set of alternatives, there are two ways in which they can make a decision. One possibility is to immediately select the chosen alternative from the whole set of available options. For example, individuals could make an inventory of the positive and negative characteristics of all alternatives and then select one. Another possibility is to decide in stages. The simplest form would be a decision in two stages, in which the set of available alternatives is first limited to a number of viable options, while in the next stage within that set the final choice is made. Such a sub-set of viable options has been referred to as *consideration set*. In several fields of study, in particular consumer and marketing research, phased decision making has been extensively studied and it was found that consumers often form consideration sets before making the ultimate decision (Roberts & Lattin, 1991, 1997; Shocker, Ben-Akiva, Boccara & Nedungadi, 1991). In this paper we adopt a similar perspective to analyse choice in a domain where phased decision making has been largely neglected: the study of voting.

It may well be that voters, like consumers, make their decision in stages. Yet this possibility has received scarce attention (for exceptions, see Oscarsson, Gilljam & Granberg, 1997; Shikano, 2003; Steenbergen & Hangartner, 2008; De Vries, Steenbergen & Hangartner, 2009). In most analyses of voting the set of alternatives comprises all political parties (or candidates) that participate in the election, and the research question is why individual voters selected a particular party or candidate when casting their vote.¹ Neither the theoretical models, nor the empirical analyses, focus on if and how voters limit the set of competing parties to a sub-set of parties they consider to vote for in an upcoming election. Electoral researchers thus seem to implicitly assume that vote decision making involves a single choice, namely selecting one alternative from the whole set of available options.

Voters may decide like electoral researchers usually assume they do, and perhaps some indeed do. However, there are several reasons to believe that consideration sets play a role in electoral choice too. First, when making voting decisions people use the same brains as in all other areas of life where they make decisions. Hence, it seems logical that in all these different contexts similar psychological processes operate. There is no *a priori* reason to believe that voting behaviour arises from another psychology and that voters use different

¹ Electoral choice typically involves the selection of one party or candidate. In some electoral systems, however, the nature of the choice differs. For example, under the system of a single transferable vote the electors are asked to rank-order the candidates on the ballot. In this paper we do not address vote choice under such systems.

decision making mechanisms. So if phased decision making is observed in many contexts of people's life, it is likely that it also takes place in other contexts, such as elections. Secondly, even though in theories of voting consideration sets are virtually absent, election surveys sometimes include questions that seem to build on the idea that voters may have formed a consideration set in relation to an upcoming election. Such questions appear to have arisen out of intuition instead of being theoretically grounded. For example, the Dutch Parliamentary Election Study asks undecided voters in the pre-election interview if there are parties that they "consider to vote for". Moreover, interviewers are explicitly instructed that respondents may list more than one party. The post-election survey of the same study asks those who voted if before the election they had also considered to vote for another party. Both questions seem to build on the assumption that consideration sets exist. Moreover, later in this paper we show that substantial numbers of voters answer these questions affirmatively, and then report a set of parties rather than just one. This provides another indicator of the existence of consideration sets in electoral choice.

The fact that consideration sets are formed and used to make decisions, does not automatically mean that studying them is the best way forward in research. This can be illustrated with an example. Let us assume, for the sake of argument, that all voters create a short list with their two favourite parties one week before an election and on election day select one party out of this sub-set. Would it then be useful to focus on the consideration set? Some might say "no", just because they value parsimony and adding consideration sets certainly makes the model more complex and thus less parsimonious. Some others might say "yes" to the same question, because a study would then more accurately describe the psychological process underlying the vote decision. Even if the ability to accurately predict vote choice will not increase, insight in the act of voting might still benefit from knowledge about the way that consideration sets are formed in the vote decision making process. The idea would be that understanding involves more than being able to predict a pivotal dependent variable (e.g. party choice in an election) on the basis of a set of independent variables. Understanding also involves insight in all the processes that lead to that decision.

The second, and perhaps most relevant, reason to study consideration sets of voters, is that it may be that voters use different criteria in both stages of the choice process. In consumer research some scholars assumed in their theoretical models that the same factors shape the choices made in both stages (e.g. Roberts & Lattin, 1991). Other scholars, however, argued that in the consideration stage non-compensatory rules are used, whereas in the choice stage compensatory rules are adopted (Gensch, 1997, cited in Shocker et al, 1991, p. 185).

Research findings on this matter have been mixed. While some researchers indeed found that different factors affected decisions in both stages, or the weight of the same factors varied, others found identical influences of the same factors in the formation of consideration sets as in the ultimate choice (Roberts & Lattin, 1997). So in what situations different factors exert an influence is a matter that requires further research.

The third and final reason to focus on consideration sets is that it enables the study of electoral choice in the absence of a final decision about the party to vote for. Consequently, it enables researchers to meaningfully study vote decision making when voters have not yet made up their mind fully. If voters have not yet decided and hence vote choice cannot be identified, focusing on the parties included in the consideration set as the dependent variable would be an alternative suitable strategy.

In this paper we examine if voters form consideration sets and explore in particular if voters use identical or different criteria to form consideration sets and to make the ultimate choice. Below we proceed as follows. In the next section we elaborate on the theory about consideration sets and decision making. We then introduce the data and measures employed in this study, before presenting the empirical analysis. In the final section we discuss the main findings and implication for future research.

2. Theory

Above we have sketched a simple model of phased decision making, in which we assumed that a voting decision consists of two stages in which a sub-set of alternative choices is formed first before the ultimate choice is made. Furthermore, we assumed the sub-set to be stable. In consumer and marketing research some scholars distinguished more stages. The underlying idea is that the formation of consideration sets in itself may also involve more than one stage, in which the consideration set is made smaller in a number of steps before the final choice is made. Shocker et al. (1991) thus distinguish between a *consideration set* (or *evoked set*) and a *choice set*, where the latter is defined as the sub-set of alternatives from which the ultimate choice is directly made. Furthermore, several scholars have emphasized that the selection process of the individual does not start with the set of all alternatives available (referred to as *universal set*), but with the set of alternatives the individual knows or which come to mind. The latter is referred to as *awareness set*.

The model that results, which was adequately pictured by Shocker et al. (1991), is presented in Figure 1. It shows a hierarchy of nested sets from which the choice results. The starting point is the universal set of choice options, which comprises all available options. Individuals might or might not be aware of each alternative. The alternatives that they know constitute the awareness set, which thus is a sub-set of the universal set. The selection of viable alternatives leads to the formation of the consideration set out of the awareness set, which in turn is further limited to the choice set. Out of this set the ultimate choice is made.²

[FIGURE 1 ABOUT HERE]

The model of Shocker et al. (1991) assumes that the sets are fully nested. As a result, it neglects the possibility that individuals choose an alternative that was not included in the consideration set or the choice set. Furthermore, the model also neglects the possibility that individuals consider a choice that is impossible because it is not part of the universal set. In practice, however, that could happen; and it does happen. For example, in elections voters sometimes consider a party – or even intend to vote for it – that does not participate in that specific election. This applies in particular to national parties that do not participate in elections at another level (e.g. municipal elections). Although one could include such possibilities in a model, a drawback would be that the theoretical model becomes less parsimonious.

We apply these ideas from consumer research to elections and study voting as a two-stage process. We hypothesize that voters often decide like consumers in the above examples. When confronted with an upcoming election they first limit the number of alternatives to a smaller set of parties that they consider to vote for, and when election day gets closer they make their choice from this consideration set. In principle it is possible that the consideration set includes only one party. Until the mid 1960s this situation may even have been the rule in many Western European countries where stable class and religious cleavages defined political life. For many Dutch voters, for example, their social characteristics, in particular religiosity and social class, made only one party a viable option – e.g. Catholic People's Party

² The choice usually consists of only one alternative, but a choice could also include two or more alternatives. For example, when buying drinks for an upcoming party a consumer will mostly buy a selection of drinks, not just a single drink. When buying a drink in a pub, on the other hand, a consumer will mostly choose only one.

(KVP) for voters with a Catholic identity. Today, however, cleavages have ceased to be dominant and research shows that voters often hesitate between parties and decide shortly before election day. If one accepts that for such voters not *all* parties are viable options when they are still undecided, one implicitly embraces the concept of a consideration set.

Although it would be possible to include changes in the consideration set in a model, for reasons of parsimony we do not. This means that the distinction between consideration set and choice set, which Shocker et al. (1991) made, is no longer necessary. In the resulting model the two key choices are the one in which the consideration set is formed out of the awareness set and the one in which the ultimate choice is made out of the consideration set. In this view, the choice set is nested in the consideration set and a voter ultimately votes for a single party (or candidate)- albeit there are electoral systems in which votes are cast in a different way.³

To reach a satisfactory level of understanding of the decision making process in electoral choice, distinguishing between the different sets of alternatives is not sufficient. The main question is which factors shape those sets and the ultimate choice. In our model we do not specify these factors, but merely acknowledge that there are factors that shape the vote choice, which also influence which parties comprise the awareness set and the consideration set. For example, policy preferences of voters may be expected to influence which parties they consider viable as well as which party they ultimately choose to vote for.

[FIGURE 2 ABOUT HERE]

There are several empirical questions that can be derived from the preceding discussion. These include whether in the electoral context consideration sets exist, when they are formed, what the size of consideration sets is, and – perhaps most importantly – which factors influence which parties are included in the consideration set. Arguably, the most crucial question is whether these factors, or the strength with which they exert their influence, differs between the consideration set and the ultimate choice. If there are differences, this would underline the importance of including consideration sets in studies of voting. If the relevant factors shape consideration sets and vote choice in identical ways, for reasons of parsimony one might exclude consideration sets. Their value would then ‘only’ be to create, or improve, the ability to study vote choice in the absence of vote decisions having been made.

³ One exception is approval voting, which is a procedure in which voters may select as many alternatives as they wish. Another exception is single transferable vote, in which voters rank-order the alternative candidates.

In order to answer questions like those listed above, there are methodological questions that also need to be addressed. More specifically, the key question here is how consideration sets can be measured. There are two different methods in which this can be done, which both have been adopted in past research. First, consideration sets may be identified by asking voters directly about the choice options that they consider, i.e. which parties they consider to vote for. Another method is to construct consideration sets indirectly, namely on the basis of observations about the ultimate choice (Steenbergen & Hangartner, 2008) or on the basis of data about evaluations of individual parties (Oscarsson et al., 1997). Although in the absence of observational data such indirect procedures might be justified, we consider direct observation a superior method. Since we do not yet have scientifically validated equipment for mind reading, the straightforward method of observation is asking voters explicitly.

3. Research design and data

The consideration set model of vote choice developed above will be applied to parliamentary elections in the Netherlands. Like a couple of other European countries, as well as the United States, the Netherlands has a rich tradition of national election studies. The Dutch Parliamentary Election Study (DPES) is a longitudinal project in which surveys have been held around each national election since the late 1960s (Van der Eijk & Niemöller, 1994). Typically, a large sample of eligible citizens is interviewed both before and after the elections. In recent years these interviews were complemented with a written drop-off questionnaire.

Albeit consideration sets have never been a major topic in the DPES, the questionnaires include some questions that can be used to get a first glimpse at the nature of consideration sets in the electoral context. In the pre-election interview voters are asked whether they intend to vote in the upcoming election and if so, which party they will vote for. Those who answer that they do not yet know are asked whether there are political parties that they ‘consider to vote for’. The corresponding answers are presumably the best indicators of consideration sets available in the survey. There is also a relevant question in the post-election survey, but it is more problematic. In the second interview voters are asked, shortly after they reported their party choice, if before the election they had considered to vote for another party. Albeit this question may seem rather similar, it remains unclear whether a party then listed was considered *at the same time* as the party voted for or as other parties

then mentioned. Consequently, it becomes impossible to identify the consideration set at any particular point in time. The pre-election question, on the other, does enable us to do just that.

We therefore use the pre-election question to operationalize the consideration set. The respondents of interest are those who did not yet know for whom they would vote, since voters who did know had already reached the final stage of our model and made their ultimate choice. Respondents answers to the aforementioned pre-election question enable us to identify which party or parties these voters considered to vote for. On that same basis the size of the consideration set can be identified; it equals the number of parties mentioned by a respondent. The other dependent variable in our analysis, vote choice, is measured on the basis of self-report in the post-election interview.

The dependent variables in our analyses are several measures that indicate the position of voters on the three main policy dimensions of Dutch politics (cf. Pellikaan, De Lange & Van der Meer 2007; Aarts & Thomassen, 2008). In the DPES these have long been measured on the basis of seven-point scales on which respondents were asked to indicate the position of the main parties as well as their own position. The parties included in the 2006 survey were PvdA, CDA, VVD, SP, and ChristenUnie. In a similar fashion respondents were asked to rate political parties and themselves on an eleven-point scale of left/right.

In order to analyse consideration set formation and vote choice, we adopt a research design that takes voter-party dyads as a basis, instead of individuals. This procedure of a stacked data matrix has been adequately described by Van der Eijk and Franklin (1996), who used the framework to analyse vote choice. We transformed the original data matrix in such a way, that each respondent in our analyses was represented separately for each party. This enables us to not explain *which party* the person votes for, but whether ‘a party’ is voted for. One advantage of this procedure is that party characteristics can be added to the analysis. In our study another advantage is relevant, namely that the number of parties selected by an individual is no longer fixed at one, like in models used for categorical data analysis (which are also applied to vote choice). This is relevant in particular for the analysis of consideration set formation, because this deviates fundamentally from vote choice in the sense that voters may choose any number of parties in their set. Moreover, by adopting the same design to study whether a party is included in the consideration set and whether a party is voted for, a meaningful basis for making comparisons between both stages emerges. Because our dependent variable is a dichotomous variable (dummy) indicating of a party was voted for or not, and since our dependent variables are measured at the ordinal level, we employ logistic regression to perform the analysis.

Results

When respondents were interviewed about the upcoming elections for the Second Chamber of the Dutch parliament, a majority said that they intended to vote and also could say for which party. These are voters that had already reached the final stage of the decision making process and made their choice. To be more precise, 87 per cent indicated that they would vote and within this group 65 per cent knew for which party. The remaining 35 per cent form a group that is of special interest for this study. These are citizens who want to vote, but still hesitate for whom. These voters turned out to not be indifferent. On the contrary, when asked whether they considered to vote for particular parties, only 13 per cent of this group did not name any party. The general pattern that emerges is that voters do have one or more parties in mind. This suggests that voters who have not yet decided about for whom to vote, in most cases have formed a consideration set.

This group of voters (N=661) forms the basis for our analysis. These are the voters who are in the middle of the decision making process: they already have formed a consideration set, but have not yet made their ultimate choice. They formed about one quarter of the sampled voters. Note that this figure is presumably a conservative estimate of the number of voters who had formed a consideration set, since the voters who said they did not know whether they would vote (8 per cent of the sample) were not asked about parties they considered to vote for. It may well be that these undecided voters also have a consideration set of parties that they perceive as viable options. Most of these voters hesitated between two parties (about 60 per cent). The others usually either could only think of one party, or they hesitated between three parties. Larger consideration sets (more than three parties) were seldom observed. Only very few voters consider four or even more parties. Dutch voters consider a range of options when it comes to their electoral vote preferences. This undoubtedly also has to do with the multi-party system that characterizes the Netherlands.

The first question that we address in the empirical analyses is whether there are differences between the formation of consideration sets and making the ultimate choice in terms of the way in which dimensions of judgement are combined. Studies in consumer research sometimes found that in the consideration set stage non-compensatory decision rules were used, whereas in the choice stage compensatory decision rules were adopted. This means that in the consideration set stage negative judgements about a choice option on a particular dimension of judgement could not be compensated by a positive judgement on another dimensions, whereas in the choice stage negative judgements on any dimension can.

We explore this matter in the electoral context by adopting a three-dimensional spatial framework, in which the dimensions correspond with the three policy areas that have been identified in previous research (Pellikaan, De Lange & Van der Meer, 2007; Aarts & Thomassen, 2008) as forming the structure of electoral competition. These three dimensions of judgement involve economic issues (e.g. income inequality, unemployment benefits), moral issues (e.g. euthanasia, gay marriage), and cultural issues (e.g. asylum policy, assimilation by Muslims). The DPES contains a set of questions about respondents policy preferences in these domains, as well as their perception of the stands of political parties, on a seven-point rating scale. Three of these questions are used as indicator of the three dimensions, namely items about income inequality, euthanasia, and asylum policy. Our first measure is the perceived distance to each of the parties included in this part of the questionnaire: PvdA, CDA, VVD, SP and ChristenUnie. If voters would decide using compensatory decision rules, a linear combination of these three indicators should provide an adequate explanation of preferences for these parties in the consideration set or as a final choice. In order to examine if non-compensatory decision rules are adopted, another measure is introduced. More specifically, we created a measure that indicates for each party the maximum distance to that party on any of the three dimensions. If negative judgements on any dimension cannot be compensated by more positive judgements on another dimension, we would expect such a measure to exert a negative impact in preference formation.

We perform the analysis outlined twice, namely once for explaining the content of the consideration set and once for explaining the choice within this set. The findings show that in the consideration set stage each of the three dimension indeed was relevant (Table 1). As expected, if the perceived distance to a party on a dimension increased, the chance of considering to vote for this party decreased. The effect was largest for the economic dimension, slightly weaker for the moral dimension, and still somewhat weaker for the cultural dimension. One should realise, though, that the strength of the effects also depends on the parties included in the analyses. Because of the available data we have limited our analyses to five parties, which exclude those that have the most outspoken profile on this dimension. In all, these findings lend support to the argument that all three dimensions are relevant for electoral competition in the Netherlands. In the choice stage a different pattern emerges. The indicator of the economic dimension is not statistically significant. Whereas proximity on the economic dimension had an effect on the formation of the consideration set, the choice within this set was not affected by the perceived distance to the parties involved on this dimension. The other two policy dimensions, though, did have an effect. The pattern that

emerges is one in which voters form a consideration on the basis of all three dimensions, with most emphasis on the economic dimension (traditional left/right), and then make their ultimate choice within this set on the basis of the moral and cultural dimension.

[TABLE 1 ABOUT HERE]

Arguably the most interesting result of this part of the analysis is the effect of our distance measure that taps the use of non-compensatory decision rules. In the consideration set stage this measure had an effect. This suggests that decision making in this stage indeed matched, at least in part, non-compensatory decision rules. Beyond the impact of the three policy dimensions, the maximum distance to a party on any of the three dimension negatively affected the chance of inclusion in the consideration set. The mechanism can be explained with an example. This is exactly what one would find, for instance, if some voters would argue “the Christian Union [a small Dutch Protestant party which is currently in government] might best represent my policy views on the whole, given their stands on economic matters and issues like migration and integration, but I will not vote for them because they are too far away to my position on issues like abortion and gay marriage”. In the consideration stage such effects are found. In the choice stage, however, this same measure has no impact. Apparently, in the final stage of the decision making these mechanisms are absent and decision making follows compensatory rules.

In the second part of our analysis we broaden the scope by adding two parties to our analysis: GroenLinks and Partij voor de Vrijheid (PVV). We focus on the relative impact of three factors: left/right ideology, party evaluations, and party leader evaluations. In previous research (Rosema, 2004, 2006) we demonstrated that the impact of issues is almost fully mediated by evaluations of the individual parties. Moreover, when analysing the impact of party leaders, which we hypothesize becomes more relevant in the final stage of the decision making process, it is crucial to have voters feelings about the competing parties as a point of reference or baseline (Aarts, 2001). We did not include the evaluation score as such, but transformed these into scores that indicate preference rather than evaluation. The underlying logic is that we should not always expect the chance of a vote to increase with higher evaluation scores. Whether a party is voted for also depends on the evaluations of other parties. Hence, what matters is not how positively a party is evaluated as such, but how positively it is evaluated in comparison with the other parties. We therefore created a preference measure that indicates how much worse a party was evaluated compared to the

best-liked party. A score of 0 indicates that no other party was rated more favourably. In a similar fashion we constructed a measure for party leader preferences. We also include perceived distance in terms of left/right, because it is a summary measure of perceived distance in the political space and has long been considered the most important factor structuring electoral competition in the Netherlands (Van der Eijk & Niemöller, 1983). Moreover, as mentioned earlier the perceptions of party positions on the policy dimensions were not available for all parties, while left/right perception measures were employed for a larger set of parties. Finally, we included a dummy variable for the consideration set as well as a variable indicating the consideration set size. The rationale of the latter is that a political party included in the consideration set is less likely to receive the vote if the number of other parties in that same set increases.

[TABLE 2 ABOUT HERE]

The results demonstrate that in the consideration set stage left/right ideology and party evaluations had a strong impact. Evaluations of party leaders, on the other hand, did not have any impact. In other words, in the consideration set stage there is no direct impact of party leaders. In so far as they have an impact, it is by influencing citizens' evaluations of the parties that they lead or the ideological positions that they take. The picture changes, though, if we move to the choice stage. Party evaluations and left/right ideology again have the strongest impact, but here party leader evaluations also enter the equation. This suggests that whereas voters do not decide which parties are viable options on the basis of leader evaluations, when confronted with a set of parties that they hesitate between, party leader evaluations are used to make the ultimate choice. This matches with the idea that the role of party leader evaluations is that of a tie breaker (cf. Rosema, 2006).

4. Discussion

In this paper we have adopted ideas about phased decision making from consumer research and applied it in the context of elections. The underlying idea is that voters may, like consumers do when they have to make choices, decide in two stages. In the first stage they form a consideration set, which corresponds with all parties they perceive as viable choice options. In the second stage they make their choice within this set.

We applied the model to the 2006 Dutch parliamentary elections. The data indicated that when interviewed shortly before the election, about a quarter of the sampled voters were still in the consideration set stage. They had not yet made their choice, but they had brought down the number of options. Most of them hesitated between two parties, albeit there were also voters who could only think of one party or who had three parties in mind. Consideration sets of more than three parties were an exception.

Two findings stand out. First, whereas party leader evaluations did not have an effect in the consideration set stage, they did have an effect in the choice stage. Second, whereas the decision making in the choice stage was characterized by compensatory decision rules, in the consideration stage non-compensatory decision rules played a role. These findings suggests that electoral choice is better modelled in terms of two sequential stages rather than one. If future studies would take voters' consideration sets into account and study their formation in different contexts, this would further increase our understanding of electoral choice.

References

- Aarts, K. (2001). The impact of leaders on electoral choice in the Netherlands - Revisited, *Acta Politica*, 36 (4), 380-401.
- Aarts, K., and Thomassen, J. (2008). Dutch Voters and the Changing Party Space 1989–2006. *Acta Politica*, 43 (2-3), 203-234.
- De Vries, C. E., M. R. Steenbergen and Hangartner, D. (2009). A Choice Set Modeling Approach to EU Issue Voting. Paper presented at the European Union Studies Association, Los Angeles, USA, 23-25 April.
- Oscarsson, H., Gilljam, M., and Granberg, D. (1997). *The Concept of Party Set: A Viable Approach or Just Another Way to Slice the Same Cheese?* Paper presented at the annual meeting of the Swedish Political Science Association, Uppsala, Sweden, 5–7 October 1997.
- Pellikaan, H., De Lange, S., and Van der Meer, T.(2007). Fortuyn's Legacy: Party System Change in the Netherlands. *Comparative European Politics*, 5 (3), 282-302.
- Roberts, J.H., and Lattin, J.M. (1991). Developing and testing of a model of consideration set composition. *Journal of Marketing Research*, 28, 429-440.
- Roberts, J.H., and Lattin, J.M. (1997). Consideration: Review of research and and prospects for future insights. *Journal of Marketing Research*, 34, 406-410.
- Rosema, M. (2004). *The Sincere Vote: A Psychological Study of Voting* (unpublished doctoral dissertation). Leiden: University of Leiden.
- Rosema, M. (2006). Partisanship, candidate evaluations, and prospective voting. *Electoral Studies*, 25 (3), 467-488.
- Shikano, S. (1997). *Construction of choice sets and its influence on voting decision: Application of the probabilistic choice set model for voter choice under two-ballot system in Germany and Japan*. Paper presented at the ECPR Joint Sessions of Workshops, Edinburgh, United Kingdom, 28 March – 3 April 2003.
- Shocker, A.D., Ben-Akiva, M., Boccara, B., and Nedungadi, P. (1991). Consideration set influences on consumer decision-making and choice: issues, models, and suggestions. *Marketing Letters*, 2 (3), 181-197.
- Steenbergen, M. R., and Hangartner, D. (2008). *Political choice sets in multi-party elections*. Paper presented at the Workshop “The politics of change”. Amsterdam, The Netherlands, 13-14 June 2008.

- Van der Eijk, C., and Franklin, M. (1996). *Choosing Europe? The European Electorate and National Politics in the Face of the Union*. Chicago: The University of Michigan Press.
- Van der Eijk, C., and Niemöller, K. (1994). Election studies in the Netherlands: pluralism and accommodation. *European Journal of Political Research*, 25 (3), 323-342.
- Van der Eijk, C., and Niemöller, B. (1983). *Electoral Change in the Netherlands*. Amsterdam: CT Press.

Figure 1: A model of individual choice (Shocker et al., 1991)

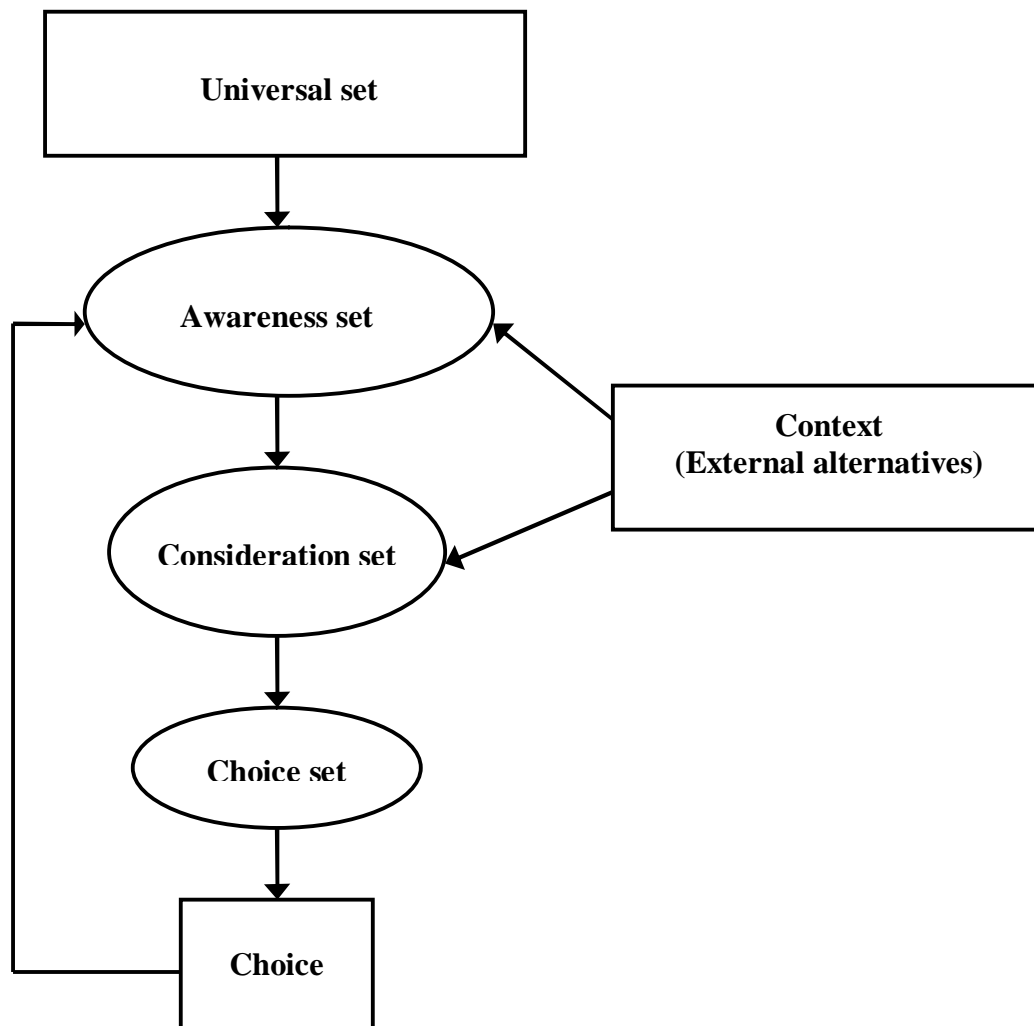


Figure 2: A consideration set model of vote choice

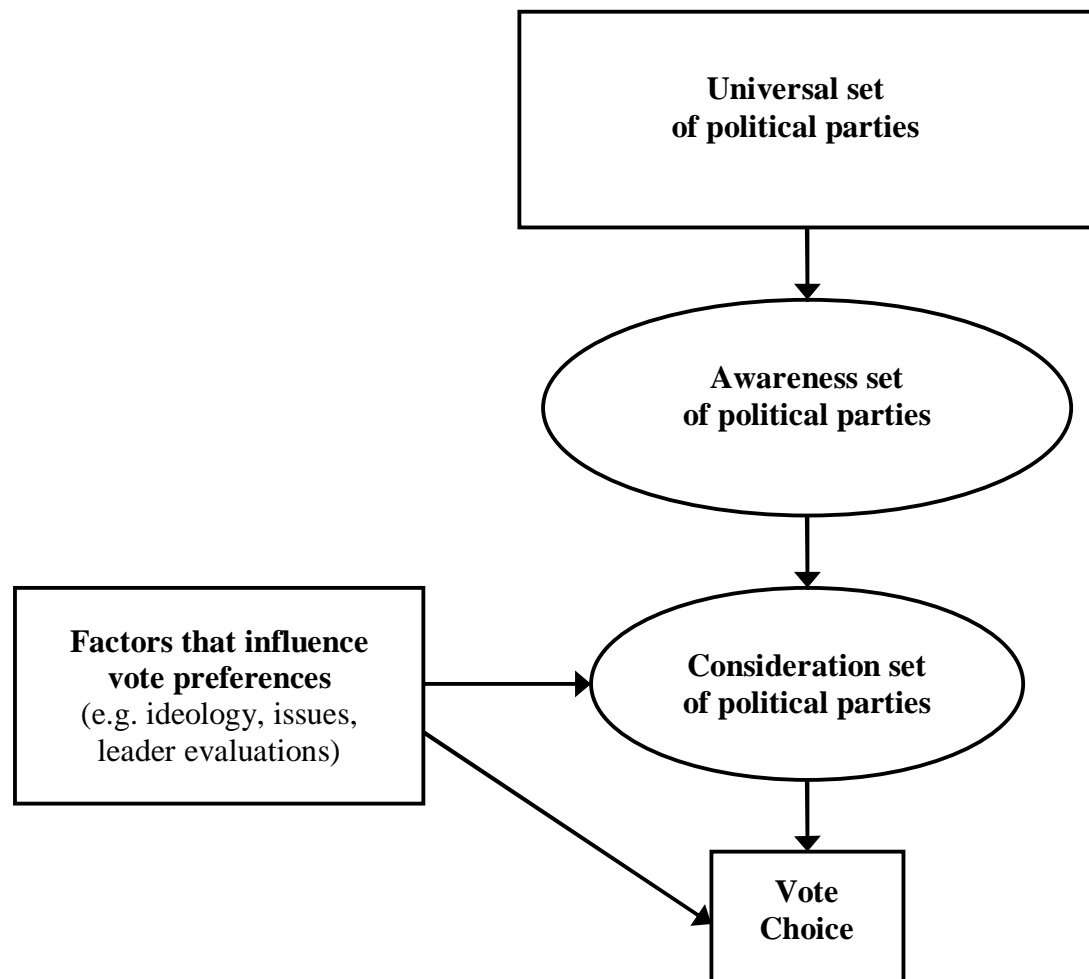


Table 1: The impact of three policy dimensions on consideration set and vote choice (results of logistic regression analysis)

	<i>Consideration set</i>			<i>Vote choice</i>		
	B	(s.e.)	Exp (B)	B	(s.e.)	Exp (B)
Distance on economic dimension	-0.37***	(0.03)	0.69	-0.12	(0.07)	0.89
Distance on moral dimension	-0.30***	(0.04)	0.74	-0.17*	(0.07)	0.84
Distance on cultural dimension	-0.21***	(0.04)	0.81	-0.21**	(0.07)	0.81
Maximum distance on any dimension	-0.10*	(0.05)	0.90	0.12	(0.10)	1.13
Party in consideration set				2.68***	(0.18)	14.54
Consideration set size				-0.59***	(0.13)	0.56
Constant	0.25***	(0.06)	1.28	-1.48***	(0.28)	0.23
Nagelkerke R ²	0.21			0.35		
Correctly classified (%)	79.7			81.4		

Data source: Dutch Parliamentary Election Study 2006.

Note: Analyses are based on a stacked data matrix that includes voter-party diads for five parties: CDA, PvdA, VVD, SP and ChristenUnie.

* p<0.05 ** p<0.01 *** p<0.001

Table 2: The impact of cognitive and affective factors on consideration set and vote choice: ideological distance, party evaluations, and party leader evaluations (results of logistic regression analysis)

	<i>Consideration set</i>			<i>Vote choice</i>		
	B	(s.e.)	Exp (B)	B	(s.e.)	Exp (B)
Ideological distance (Left/Right)	-0.28***	(0.03)	0.76	-0.44***	(0.06)	0.64
Party evaluation	-0.77***	(0.05)	0.47	-1.62***	(0.12)	0.20
Party leader evaluation	-0.08	(0.04)	0.93	-0.16*	(0.08)	0.85
Party in consideration set				1.41***	(0.15)	4.10
Consideration set size				-0.38**	(0.11)	0.68
Constant	0.71***	(0.07)	2.04	0.34	(0.23)	1.40
Nagelkerke R ²	0.37			0.57		
Correctly classified (%)	79.9			89.2		

Data source: Dutch Parliamentary Election Study 2006.

Note: Analyses are based on a stacked data matrix that includes voter-party diads for seven parties: CDA, PvdA, VVD, SP, ChristenUnie, GroenLinks, and PVV.

* p<0.05 ** p<0.01 *** p<0.001