How to Estimate the Policy Preferences of Party Supporters: Disaggregating VAA Data Versus Modeling Survey Responses

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**Abstract**

Good estimates of the policy preferences of political party supporters are essential for a considerable number of theoretical and practical concerns in political science. However such estimates are not readily available, because surveys are not designed to produce subgroup estimates of public opinion at the level of different political parties, and traditional surveys rarely ask questions about specific policies. In this context, voting advice applications (VAA) can provide a valuable source of data. VAAs ask specific policy questions and have many more respondents than traditional surveys. However, since VAA users are not a random sample of the total population, it is unclear to what extent VAA data can provide valid estimates of public preferences. To address this concern, we compare two approaches for recovering subgroup preferences at the party level. The first approach is disaggregation of VAA responses. The second approach is multilevel modeling with poststratification (MRP) of traditional survey data. MRP is a technique for producing subgroup estimates from data representative at a higher level. To do that, we identify a number of policy-related questions that were asked in three countries – Germany Sweden and the Netherlands – at approximately the same time in the context of one VAA application and in national surveys. We find correspondence between the estimates of party-level policy preferences across both methods. However, we also find that coding decisions, such as including or excluding ‘Don’t knows’, can influence the agreement between the two estimates. Our findings are important for scholars who consider using VAA data for estimating public policy preferences. While our study does not provide a validation of VAA-derived estimates against an objective benchmark, the fact that two different methodological approaches converge on very similar estimates is highly suggestive of the potential of VAA data.

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# Introduction

Good estimates of the policy preferences of political party supporters are essential for a considerable number of theoretical and practical concerns in political science[[1]](#footnote-1). However such estimates are not readily available, because surveys are not designed to produce subgroup estimates of public opinion at the level of different political parties, and traditional surveys rarely ask questions about specific policies. In this context, voting advice applications (VAA) can provide a valuable source of data. VAAs ask specific policy questions and have many more respondents than traditional surveys. However, since VAA users are not a random sample of the total population, it is unclear to what extent VAA data can provide valid estimates of public preferences. To address this concern, we compare two approaches for recovering subgroup preferences at the party level. The first approach is disaggregation of VAA responses. The second approach is multilevel modeling with poststratification (MRP) of traditional survey data. MRP is a technique for producing subgroup estimates from data representative at a higher level. To do that, we identify a number of policy-related questions that were asked in two countries – Germany and the Netherlands – at approximately the same time in the context of one VAA application and in national surveys. We find correspondence between the estimates of party-level policy preferences across both methods. However, we also find that coding decisions, such as including or excluding ‘Don’t knows’, can influence the agreement between the two estimates. Our findings are important for scholars who consider using VAA data for estimating public policy preferences. While our study does not provide a validation of VAA-derived estimates against an objective benchmark, the fact that two different methodological approaches converge on very similar estimates is highly suggestive of the potential of VAA data.

For recent general overivews of VAAs and their use, see Rosema et al. (2014) and Garzia & Marschall (2016).

According to Wheatley et al. (2014), “*Using VAAs to derive the location of party supporters in the policy space is simply a new and innovative technique for mapping the policy orientations of party supporters*.”

Scholars have employed from traditional representative surveys to study VAAs before, but for different purposes, such as examining the impact of VAAs on vote choice and voting (e.g. Marschall and Schultze 2012; Gemenis and Rosema 2014; Dinas, Trechsel, and Vassil 2014; Garzia, Trechsel, and De Angelis 2017)[[2]](#footnote-2).

# The problem and our approach

**Who are the VAA users:**

Existing evidence suggests that the typical VAA user is more likely to be male, younger, more highly educatedand, more politically interested and more likely to engage in other forms of political communication (see the review of evidence provided in van de Pol et al. 2014).

Van de Pol et al. (2014) offer the most conrehensive analysis to date of the profile of VAA users.They identify three general types of users on the basis of shared characteristics: ‘doubters’, ‘seekers’, and ‘confirmers’. Doubters (around 10%) are characterized by uncertainty, are not sure whom to vote for, and are not much interested in politics. Seekers (32%) have clearer party preferences but are still undecided about how to vote. They are not interested a lot in election campagins and are ‘serious’ users of the VAA. Checkers (58%) are highly interested in politics, certain in their vote, have clear prefernecs, and often have decided how to vote, and use the VAA to check or affirm their views. From the three types, the largest groups of seekers would fit (loose) defionitions of party supporters.

Wheatley, Carman, Mendez & Mitchell (2014) forcefully argue that VAA users can be used to study the preferencs of public supporters. Here is a lengthy quotation from their article:

*“Of course, a critic may counter that VAAs cannot be used for party mapping because the VAA is marketed as – and indeed its purported function is – a tool that is used by voters who have not yet decided how to vote. It should not therefore hope to measure the policy orientations of party supporters. We reject this criticism. VAA respondents navigate to a VAA website for a variety of reasons – curiosity, novelty, a general interest in politics and elections, to confirm that they support the ‘correct party’ and to see where their own policy positions fall compared to all of the political parties. For these reasons, we find that a substantial proportion of VAA respondents may be broadly classified as ‘party supporters’, as discussed below.”*

They also suggest that for the Scotish data from 2011 they study, the VAA users, and especially those with an explicit party affiliation’ were relatively politically committed, but more polarized nad more coherent in their views compared to the sample of the contemporarious nationally-represnetative election survey.

As Wheatley et al. (2014) argue, the lack of representativeness of VAA data does not preclude the possibility to study the issue positions of party supporters.

**The issue of non-representativenes:**

Pianzola (2014) models the self-selection of VAA users in order to correct estaimtes of the impact of VAA use. It is remarkable that the results based on selection models do not differ dramatically from results that do not take into account self-selection. This provides indirect evidence that the sample of VAA users is not heavily biased.

**Ths issue of response scales:** VAAs typically employ Likert-type scales , often with 5 response categories with a neutral point. The choice of response scale can have significant consequences. According to Gemenis (2013), this way of labelling ‘*confounds direction (agree/disagree) with intensity (completely/tend to) by asking respondents (and coders) to think along multiple dimensions, which can lead to measurement contamination*.’ He also argues that ‘*if 5-point response keys offer more choices, 3-point response keys might be preferable in terms of intercoder reliability*.’

When it comes to the presence or absence of a midpoint on the response scale, Gemenis (2013) notes that *‘… offering midpoints can be advantageous in terms of validity and reliability … [however] research has also shown that the midpoint is often used by respondents as a ‘don’t know’ option…’* There is a more general problem with Likert scales with distinguishing non-response from truly neutral positions.

Itmes that offer a reference point (or even some contextual information) can decrease item non-response and affect placements. Likert scales also are not truly appropriate when the item refers to quantitative chagnes in unspecified amounts (e.g. increase in taxes).

Rosema and Lowerse (2016) study the impact of response scale on the voting advice that the user receives.

Holleman et al. (2016) analyse the effect of the polarity of the wording of the item and show significant effects of question wording when the question contains implicit and explicit negations.

*@Jeroen: all this above should be useful when we discuss on which questions there is a better match and why*

**A somewhat similar study:**

Our study a related to an (yet unplubishsed) analysis by Popp et al. (2016) who use VAA data to study voting intentions. They find that using MPR to model the VAA responses can be useful to forecast election outcomes with a degree of success comparable to approaches based on national representative samples.

# Results from the analysis

## Disaggregating VAA data

## Modeling survey resspones

## Compariing VAA and sruvery estimates

### Germany

### The Netherlands

## Additional considerations

# Conclusion

Based on a Swiss VAA, Ladner (2016) finds that issue voters have weaker party ties. *@Jeroen – would be nice to link to this result later.*

Our stidy touches upon the problem of political representation on concrete isues versus representation on general ideological left-right dimensions. In the past scholars have privileged the latter (e.g. Lefevere & Walgrave, 2014), but in normative terms it is not so clear that ‘ideological’ representation (which is not even ideological in the strict sense) is more desirable than representation on concrete policy issues. The availability of VAA data has increased the number and range of concrete policy posisions on which citiznes, voters, party supproters, and political parties can be matched. Given that the VAAs can provide reliable data on public preferences, as our study suggests, assessment of the congurnece and reponsivenes between different subsets of the general public and political parties will become more popular and more normative consequential in the future.

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# Supplementary material

## Appendix 1

1. The authors would like to thank Andre Krouwel for providing access to the VAA data. Dimiter Toshkov and Jeroen Romeijn acknowledge funding from the GOVLIS project (Sapere Aude XXXX). [↑](#footnote-ref-1)
2. @Jeroen: perhaps we can try to get data from the last one to compare the profles of VAA users in the future. Btw, this study here might have Swiss data for comaprisons between VAA and survyes: Also look at this one for Switzerland: <https://www.researchgate.net/publication/319989990_The_Elite-Voter_Gap_Revisited> [↑](#footnote-ref-2)