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Voting wiser

The effect of Voting Advice Applications on political understanding

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Chapter 3

Same But Different: A Typology of Voting Advice Application Users in First- and Second-Order Elections

Abstract

Voting Advice Applications (VAAs) fulfill different needs for different citizens. In national elections the majority of users can be characterized as politically sophisticated citizens who use VAAs for entertainment purposes and confirmation of their party preference, but a significant minority uses VAAs to learn about politics and make an informed vote choice. VAAs might, however, play a different role in second-order elections, since in these elections campaign dynamics and information supply are very different. This study replicates an existing typology of VAA users in supra-national, national and sub-national elections in the Netherlands and compares VAA use across these elections. We applied latent class analysis on user data from a widely used VAA for each of these elections and identify the same three types of users in each election. Furthermore, we find that in second-order elections, VAAs are more often used for the purpose of gratifying informational needs, and hence their mobilizing potential will be greater in these elections.

3.1 Introduction

Not all elections are created equal – and not all election campaigns therefore have the same intensity and enjoy the same interest from voters. In particular, supranational (European Parliament) and subnational elections (municipality councils, regional political arenas) receive less media attention than national elections (De Vreese, Lauf, & Peter, 2007), and interest and turnout on the part of voters is also lower (Hobolt & Wittrock, 2011). After all, less is at stake in these second-order elections, and this is recognized by voters (Ervik, 2012; Heath, McLean, Taylor, & Curtice, 1999; Reif & Schmitt, 1980). As a result, voters may be less well informed about the key issues of the campaign, the choice of parties, and party agendas. In these second-order contexts, Voting Advice Applications (VAAs) could be very helpful to voters who want to make up their minds about their vote choice. In national, first-order election contexts, a large minority of VAA users indeed indicates to use VAAs to inform themselves about political matters and to make a voting decision (see Chapter 2). Not much is known, however, about users of VAAs in second-order elections and about how they use VAAs. In the current study, we therefore set out to research the usage of VAAs across first- and second-order elections to see if VAAs fulfill different needs, and are consulted by different audiences depending on election context.

Voting Advice Applications inform about what are important issues, what are the positions of parties on these issues, and which party is closest to the individual voter with respect to these issues. In national elections, there is a large demand of VAAs; they are visited by millions of users across Europe. In the Netherlands, for exam-

ple, VAAs reached up to about 50% of voters during the national elections of 2012 (Marschall, 2014). Recently, VAAs have also been developed for the European elections, and for local- and regional-level elections in a number of countries (Sudulich, Garzia, Trechsel, & Vassil, 2014). Substantive, although modest, effects of VAAs have been established by earlier research: using VAAs contributes to higher levels of internal efficacy and possibly to knowledge (Schultze, 2014; Westle, Begemann, & Rütter, 2014, see also Chapter 5), and also increases electoral turnout (Gemenis & Rosema, 2014) and affects vote choice (Alvarez, Levin, Mair, & Trechsel, 2014; Wall, Krouwel, & Vitiello, 2012). To better understand these effects it is essential to know to whom they apply: while VAAs might contribute most to political knowledge for those who are already knowledgeable (Westle et al., 2014), gain in efficacy and turnout are highest among less politically sophisticated voters (Gemenis & Rosema, 2014, see also Chapter 5). We thus need to know: how politically sophisticated are VAA users, and which groups need to be reached in order to increase beneficial and mobilizing effects of VAAs?

Early research on the users of VAAs revealed that they are on average younger, higher educated, more often male and more interested in politics than the general electorate (Hirzalla, Van Zoonen, & De Ridder, 2010; Hooghe & Teepe, 2007; Marschall & Schultze, 2015). This suggests that VAAs will probably not have the capability to mobilize or engage citizens. They are mostly used by those who already are engaged: higher educated males who are interested in politics (Norris, 2001). Some recent studies, however, broadened the scope and took into account political routines and motivations of VAA users. In a study of users of the German *Wahl-O-Mat* (used 6.7 million times in the 2007 federal elections) Marschall and Schulze (2015) focused on the role VAAs fulfill for their users in the vote decision process. They found evidence that typical VAA users are so-called ‘digital voters’: citizens who, for their voting decision, primarily rely on the internet as a source of political information.

Additionally, in Chapter 2 three types of VAA users are identified. One of these, called seekers, is largely undecided about their voting decision and indeed indicates to resort to the VAA for support in deciding which party to vote for. This user type is generally not very interested in the political campaign and does not feel very efficacious about politics. Another group, the checkers, makes up the majority of VAA users and resembles the typical VAA user as sketched in most previous studies (see Marschall, 2014): very efficacious and politically interested, and they have largely already made a decision. They use VAAs for entertainment and to check if they end up receiving a recommendation to vote for their favorite party. A small third group of users are doubters, who are less efficacious about politics than seekers and checkers and do not have a particular motivation for using the VAA.

While there is some knowledge about the users of VAAs in national election con-

texts, we know little about who is using VAAs in second-order elections, and for what purpose. Do local- regional- and European-level VAAs attract visitors who are looking for information to make a voting decision – the ‘digital voters’ – or rather visitors who have already made their voting decision? Are most users highly interested and engaged in politics or are they mostly unfamiliar with politics at that level? And how does this compare to the national elections? To answer these questions we replicate the analysis on users of the VAA for the national elections reported in Chapter 2, and test whether the typology that was developed there holds at other levels of government. In line with the second-order election model (Reif & Schmitt, 1980), in general we expect users of VAAs to be less engaged with the elections in second-order elections compared to the national elections, but we do expect to find the same structural patterns of VAA usage, thus accentuating the relevance of the typology of checkers, seekers and doubters.

In the next section we will derive expectations about the use of VAAs in different elections from three bodies of literature: on the digital divide, the uses and gratifications approach, and the second-order election model. We will then proceed by testing the typology of VAA users developed for the 2012 national elections and reported in Chapter 2, in all types of elections that are held in the Netherlands: the 2014 municipal, 2014 European, 2015 provincial, and 2015 water authority elections. In addition to replicating the analyses for the typology, we also study to what extent the usage of VAAs over the course of the election campaign by each of the types is similar to the national elections.

3.2 Engaging the Uninterested

With respect to online political information consumption, one of the most important academic debates is on the question to what extent the internet or certain digital media are capable of mobilizing voters, and specifically those who are not politically interested (Bimber, Cantijoch Cunill, Copeland, & Gibson, 2014; Norris, 2001). More precisely, can online tools and sites, by lowering the costs of communication and participation, increase engagement in politics? Can they contribute to political knowledge and electoral turnout? Or are the traditional, offline inequalities in political engagement and knowledge reinforced in the consumption of online political information, which means they have a normalizing effect rather than mobilizing (Norris, 2001)? Within this broad debate, Voting Advice Applications serve as an interesting case. They are purposely built to engage citizens and help them make an informed vote choice (Anderson & Fossen, 2014; De Graaf, 2010; Schultze, 2014), and at the same time reach millions of citizens – more than most other digital platforms that offer information about politics, like newspaper and party websites. The easy, attractive,

and personalized way to inform oneself about elections clearly appeals to many, and this makes VAAs a promising case for the mobilization thesis. Marschall and Schulze (2015), however, could not find evidence that VAAs have a mobilizing role: they are mostly used by politically interested and engaged citizens who often use the internet for political information, and are hence ‘preaching to the choir’.

In Chapter 2, on the other hand, it is argued that by focusing on averages, differences in user types go unnoticed. Instead, by developing a typology, they find that a large minority of VAA users (the seekers and doubters) indicates to be not very efficacious and interested in the campaign, and they are not certain about their vote choice. They do not belong to the ‘choir’ VAAs are preaching to, and more research is needed to understand if VAAs do have the capability to mobilize this subgroup. If VAAs increase political knowledge and participation of only a fraction of this group of seekers and doubters, this already means that a substantial number of voters is more engaged with politics due to their use of a VAA.

3.3 Motivations to Use a VAA

A second perspective to look at the use of political information tools like Voting Advice Applications is the uses and gratifications theory. This perspective fits the normalization thesis (Norris, 2001, p. 230): people are active and goal-directed in choosing the media that gratify their needs (Kaye & Johnson, 2004; Marschall & Schultze, 2015). VAAs, for instance, cannot be ‘consumed’ passively – users need to put effort in answering all statements and understanding the results. Hence, Marschall and Schulze (2015) formulate the expectation that those who decide to use a VAA are voters who are already interested in politics, use internet as their primary source of political information, and base their vote choice on issues rather than other considerations (e.g., charisma of the party leader). After all, these are the types of voters who would be most likely to find gratifications in using VAAs. Their analysis of users of the German *Wahl-O-Mat* confirms these expectations, except their hypothesis that the primary reason to use the tool is issue orientation.

However, different people might have different motivations to use the tool. In Chapter 2 the use of the Dutch *Kieskompas* was studied, and indeed, three different user types could be distinguished, based on users’ vote certainty, internal and external political efficacy, interest in the campaign and reason to use the VAA. The group of users with the highest level of efficacy and most interest in the campaign (checkers) often already decided about their vote choice and used the VAA primarily to check whether they end up being recommended to vote for their favorite party, or for entertainment purposes. Seekers, in contrast, use it hardly for entertainment, but primarily to make a voting decision. This is probably because almost none of them already made

their minds up about their vote choice. The doubters, lastly, have several reasons to use VAAs; their modal category is also ‘to determine which party to vote for’.

In conclusion, goal-directed media consumption – as assumed by the uses and gratifications approach – seems to support the expectation that VAAs are only used by those who are already interested in politics. However, it could also be the case that they gratify the needs of those not interested in politics (the seekers and doubters) to quickly and without too much effort inform themselves and make a thoughtful voting decision. Additionally, it is possible that someone who is a checker in the national, first-order elections, could rather be characterized as a seeker in second-order elections.

3.4 First- and Second-Order Elections

As noted above, conclusions about VAA users are, up to now, all based on studies of VAAs developed for national, or first-order elections. In second-order elections, such as the elections to the European Parliament and to local councils, generally less is at stake than in the first-order national elections. According to the model developed by Reif and Schmitt (1980), this leads to lower turnout, a better performance of small and new parties compared to large and government parties, and voting decisions that are motivated by national issues rather than issues that are at stake in the respective second-order election – such as the EU or the regional government.

When it comes to the European Parliament, however, there have been some significant changes challenging the “less is at stake” idea. First, the EU integration project has become a contested issue itself, put on the agenda mainly by Eurosceptic parties (Hix & Marsh, 2011; Hobolt & Spoon, 2012). Second, institutional changes have resulted in more power for the European Parliament – especially after the Lisbon treaty and the introduction of the so-called Spitzenkandidaten for the chair of the European Commission (Hix & Marsh, 2011; Van der Brug, Gattermann, & De Vreese, 2016). Third, the recent economic crisis and the measures taken by the European Union in response to it (budget mechanisms, austerity measures) increased media attention to the EU (Van der Brug et al., 2016). However, Hix and Marsh (2011) found EP election outcomes to be stable across time and in line with the second-order model. In spite of the new developments, also the 2014 European election was not very different from earlier elections (Van der Brug et al., 2016).

Most literature on second-order elections focuses on EP elections and relatively little work has been done on sub-national elections (Jeffery & Hough, 2003). The extent to which the elections matter, and something actually is at stake, does not merely distinguish elections to the European Parliament from all other elections. Generally, how much is at stake is different for different types of elections (Van der Eijk, Franklin, & Marsh, 1996). Majoritarian systems are most decisive for the composition of the gov-

ernment, while in multi-party systems elections are about which parties will be able to form a coalition (Deschouwer, 2003). In other words, some elections might be second-order to a larger degree than other elections. This was also suggested by Heath et al. (1999) who compared European, national and local elections in Britain. They found that local elections could be considered to be less second-order than European Parliament elections: turnout is higher and voting decisions are to a lesser extent based on national political issues than in European Parliament elections.

Many observations made by Reif and Schmitt (1980) about the second-order nature of the elections to the European Parliament apply to local and regional elections as well. For example, next to the EP and national (House of Representatives) elections, the Netherlands has three sub-national elections: to municipality councils (local), provincial councils (regional) and to the water authorities (regional). These elections determine the composition of the executive branch at that level of government to a much greater extent than the European elections do. But like in the EP elections, there is less at stake policy wise compared to the national elections. The municipalities, provinces and water authorities all have to operate within the framework of policies set out by the national government. In this study we look at the Netherlands as an example; these dynamics are the same in other European countries.

The findings by Heath et al. (1999) about turnout and vote decisions are consistent with the hypothesis that the less is at stake in elections, the less voters feel motivated to find out about issues relating to the specific arena they are voting for, and the less motivated voters feel to turn out to vote. Interestingly, this is precisely where VAAs claim to be helpful: informing voters about party positions on the most important issues, and by doing that increasing the turnout. A couple of studies indeed confirmed the positive effects VAAs have on turnout (e.g., Dinas, Trechsel, & Vassil, 2014; Gemenis & Rosema, 2014) and political knowledge (Kamoen, Holleman, Krouwel, Van de Pol, & De Vreese, 2015; Schultze, 2014; Westle et al., 2014) or at least a feeling of political efficacy (see Chapter 5 in this dissertation). If VAAs in second-order elections are more often used for the purpose of informing oneself about issues, parties and their positions, this should be reflected both in overall levels of interest and engagement, and in the composition of types of VAA users.

3.5 Hypotheses

Based on the typology developed in Chapter 2 and the literature on the digital divide, uses and gratifications and the second-order election model, we formulate the following expectations:

- H1 The user typology of checkers, seekers and doubters that was found for first-order elections can be replicated for second-order elections
- H2a Overall levels of internal and external efficacy, interest in the campaign and vote certainty will be lower for second-order elections than for first-order elections
- H2b Lower levels of efficacy, interest and certainty will result in larger proportions of seekers and doubters relative to checkers using the application

Because checkers are more interested in the election campaign than seekers and doubters, we expect checkers to use VAAs relatively early in the campaign as compared to seekers and doubters, whose usage of VAAs will be more prominent closer to the elections. This was found for first-order elections in Chapter 2. But since we expect generally lower levels of interest in the election campaign of second-order elections, we also expect relatively lesser traffic at the VAA website during the campaign, compared to election day itself.

- H3a Checkers use VAAs relatively early in the campaign; seekers and doubters use VAAs more often as election day comes closer
- H3b Overall, in second-order elections usage of VAAs will be more concentrated closely to election day, as compared to first-order elections, and the more second-order the election the more this is the case

3.6 Data and Methods

3.6.1 Participants

Our analyses rely on original data gathered in collaboration with the VAA *Kieskompas*. *Kieskompas* is the second most widely used VAA in the Netherlands and served as a prototype for many other VAAs worldwide, such as the EU Profiler and the Canadian Vote Compass (Garzia & Marschall, 2014). In the Netherlands, *Kieskompas* develops a VAA for all elections. In the period from 2012 to 2016, all types of elections that are held in the Netherlands took place once: the national legislative elections (for the parliament) in September 2012, municipal elections in March 2014, elections for the European Parliament in May 2014, and province council elections and water authority elections in March 2015. Table 3.1 shows how often the VAAs were used in each of these elections. For the parliamentary elections, the European elections and the water

authority elections a nation-wide *Kieskompas* VAA was developed. In the municipal elections, a VAA was developed for 36 of the 403 Dutch municipalities. In the province council elections, a VAA was developed for 1 of the 12 provinces (the province of Utrecht). The differences in numbers of users between VAAs in Table 3.1 is largely due to the availability of these VAAs: in some elections a *Kieskompas* was available across the country but in other elections only locally.

Table 3.1: VAA use in each election

Year	Election	Number of VAA users	Number of exit survey respondents
2012	Parliament	694,387	53,617
2014	Municipality council	473,989	33,736
2014	European parliament	183,915	11,800
2015	Province council	32,171	1,558
2015	Water authority	710,289	27,933
	Total	2,094,751	128,644

The design of the VAA is identical for each election: on the first ‘page’ users are asked to indicate their age, gender, education, the extent to which they have already decided which party to vote for, and interest in politics. Subsequently, users give their opinion on a Likert scale to a list of 30 statements about key issues in the election campaign (like “*All nuclear power plant should be closed by the end of 2015*”). *Kieskompas* compares these responses with the positions of all parties on these issues, and presents the match in a two-dimensional figure (see Krouwel, Vitiello, & Wall, 2012, for the details). About one minute after arriving at the result screen, a short questionnaire (the exit survey) pops up with questions about the user’s reason to use the VAA, internal and external political efficacy and the extent to which they followed the election campaign. The response rates to the exit survey varied between 3.8% and 6.7%, with a mean of 5.2% of all VAA users. The analyses reported in this paper are based on items from this exit survey, background information asked on the first page and the log data from the site, specifically the moment at which the user visited the application.

This study focuses on the users of VAAs rather than the population of voters or inhabitants of the Netherlands. Since socio-demographic information was asked on the first page rather than in the popup- questionnaire, the response rate was much higher for these demographic questions: between 56.9% (2015 provincial elections) and 74.8% (2012 national elections). This allows us to map quite accurately to what extent the exit survey respondents are representative of VAA users in general. For each election, the percentage of females in the final sample is lower than in the population of VAA users, and the final sample is slightly higher educated. For each election the

sample is slightly older than the population of VAA users. See the appendix for all distributions.

3.6.2 Indicators

To develop the typology of VAA users, we use a number of indicators that we measured in the exit surveys of the VAAs. The selection of each of these indicators is based on previous VAA research and literature on political news consumption, in particular online political news consumption. The answer categories for the first indicator – one’s reason for using the VAA – were inspired by the factor analysis reported by Kaye and Johnson (2004), and adapted to VAAs. In the 2012 national elections, the categories were: to gain more insight into the positions of the parties; to check whether I agree with the party I intend to vote for; to determine which party to vote for; or as an entertaining test to think about or discuss with others. In the other elections a fifth category was added (inspired by the results of the 2012 elections): to check if the VAA makes sense. The second indicator, vote certainty, was measured using the following categories: I have already decided which party to vote for; I am still deciding between a few parties; or I do not know yet.

Internal efficacy was measured using the statement “I feel that I have a pretty good understanding of the important political issues facing our country”, taken from the standard internal efficacy scale (see Morrell, 2003). “Country” was replaced by the relevant political arena, i.e., “municipality”, “province”, “water authority” or “the EU”. Respondents indicated to what extent they agreed on a 5-point Likert scale ranging from “completely disagree” to “completely agree”. External efficacy was operationalized with the item “There are so many similar parties that it does not matter whom I vote for”, which has also been used by De Vreese and Semetko (2004). The same 5-point answer scale was used here.

The last indicator was the intensity by which respondents followed the election campaign: very intensely, intensely, not very intensely or not at all. The last two categories were collapsed because of the low numbers of respondents choosing them. In the provincial elections, this item was not included in the survey, which is why we replaced it for this election with the question: “How interested are you in politics”, with five answer categories ranging from “very interested” to “not interested at all”. To make the categories as comparable as possible to the other elections we reduced them to: “(very) interested”, “not interested, not uninterested”, and “not interested (at all)”. In the municipal elections and the EU elections, where both questions were included, the correlation between interest in the campaign and interest in politics is $r = 0.49$ and $r = 0.51$, respectively. For reasons of comparability and replicability, all indicator variables used for the analyses – except for interest in the provincial elections and reason

to use the VAA in the national elections – are identical to those in Chapter 2.

3.6.3 Analysis

The typology developed in Chapter 2, based on the 2012 national elections in the Netherlands, was developed using latent class analysis (LCA). In short, LCA searches for a categorical latent class structure that explains the response patterns of different respondents. It tries to find a classification (typology) of respondents explaining these response patterns. For an elaboration of the technique and the settings, see Chapter 2. In a first step, we ran the same LCA using the same indicators for the municipal elections, the European parliament elections, the provincial elections (here we used interest in politics rather than interest in the campaign), and the water authority elections¹. Conditional on the typology being replicated in the other elections, in a second step we study the user traffic for each user type over the course of the campaign, and compare this between elections to test our second hypothesis.

3.7 Results

Table 3.2 shows the results of the latent class analysis for each election². The first four columns in the table show the results for the 2012 national elections, also reported in Chapter 2³. In order to examine the first hypothesis that the typology developed for the national elections can be replicated for second-order elections, we compare each typology to the original. In Table 3.2, each election has four columns: three columns

¹ Ideally, instead of running a LCA for each election separately, a model is developed for all elections at once (multigroup LCA), allowing formal tests of comparability of types across elections. We could however not use this approach for our complete dataset as the indicator 'reason to use' has slightly different answer categories in the national elections compared to the other elections, and the indicator 'intensity of following the campaign' is not included in the provincial elections. This makes the models not comparable enough for formal tests. A multigroup latent class model comparing only the municipality and European elections, in which means are allowed to vary across elections but the measurement model was restricted to be the same, resulted in a significantly better fit than that of a model without assumptions about comparability across elections ($\chi^2 = 258584.4$, $df = 31$, $p < .001$). In other words, we can be sure that we measured the same types of VAA users in both elections (Hagenaars & McCutcheon, 2002). When we include the water authority elections, this results in a slightly worse fit, which indicates that the typology is slightly less comparable in these elections, which is also visible in Table 3.2.

² In Table 3.2, the labels that are added to the classification results in all elections after the 2012 national elections are based on the interpretation of the authors. The LCA only gives the distributions of the indicator variables. However, we could easily identify the same types across elections because the distributions for the classes in each election resemble the distributions for the original 2012 typology to a great extent.

³ To make the results more comparable we rescaled external efficacy to have a range from 1 – 5, which is why the values reported here are one higher than the values reported in Chapter 2.

showing the answer patterns per user type, and one (bold printed) column indicating what the overall distributions of the indicator variables are per election. The reason for using a VAA, vote certainty and intensity of campaign interest are measured on a nominal level and hence Table 3.2 shows the percentages per category; they sum up to 100% for each user type. Internal and external efficacy was measured on an interval scale (range 1—5) and Table 3.2 displays their means for each type.

Table 3.2: Distributions of indicator variables for each user type

	2012 National elections			2014 Municipal elections		
	Doubters (%)	Seekers (%)	Checkers (%)	Doubters (%)	Seekers (%)	Checkers (%)
Reason for using the VAA						
Gaining more insight into party positions	19	19	14	16	30	26
Checking agreement with favorite party	26	29	46	38	15	41
Determining vote choice	29	41	3	17	51	5
For entertainment	25	12	38	28	2	18
Checking sensibility VAA						
Total	100	100	100	100	100	100
Vote certainty						
Already decided	19	3	54	34	1	44
Still deciding between a few parties	45	64	43	50	47	49
Don't know yet	36	33	3	16	52	7
Total	100	100	100	100	100	100
Internal efficacy (M)	3.4	3.3	4.0	3.7	2.8	3.6
External efficacy (M)	2.2	4.2	4.5	4.2	2.1	4.3
Intensity of campaign interest						
Very intense	7	2	14	10	7	39
Intense	32	30	54	44	26	36
Not very intense/none	62	68	31	46	67	25
Total	100	100	100	100	100	100
Percentage of each type	10	32	58	100	15	37
N				53,617		33,736

(Table continues on next page)

	2014 European elections				2015 Provincial elections			
	Doubters (%)	Seekers (%)	Checkers (%)	Total (%)	Doubters (%)	Seekers (%)	Checkers (%)	Total (%)
Reason for using the VAA								
Gaining more insight into party positions	19	22	22	22	20	32	28	29
Checking agreement with favorite party	19	16	48	31	14	15	44	31
Determining vote choice	46	59	6	32	41	50	6	25
For entertainment	9	1	16	9	15	2	15	10
Checking sensibility VAA	8	2	9	6	10	2	7	5
Total	100	100	100	100	100	100	100	100
Vote certainty								
Already decided	12	1	39	20	15	3	42	25
Still deciding between a few parties	38	49	57	51	38	59	57	56
Don't know yet	50	51	4	28	47	38	1	19
Total	100	100	100	100	100	100	100	100
Internal efficacy (M)	2.9	2.8	3.6	3.2	2.4	2.6	3.2	2.9
External efficacy (M)	2.1	4.0	4.4	4.0	2.0	3.9	4.4	4.0
Intensity of campaign interest*								
Very intense	18	8	38	23	46	30	78	57
Intense	28	27	37	32	37	59	21	36
Not very intense/none	54	65	25	45	17	11	1	6
Total	100	100	100	100	100	100	100	100
Percentage of each type	11	41	48	100	10	36	55	100
N				11,800				1,558

* Note: for the provincial elections we measured interest in politics rather than interest in the current campaign.

(Table continues on next page)

2015 Water authority elections					
	Doubters	Seekers	Checkers	Total	
	(%)	(%)	(%)	(%)	(%)
Reason for using the VAA					
Gaining more insight into party positions	21	23	36		26
Checking agreement with favorite party	10	6	33		15
Determining vote choice	60	70	18		52
For entertainment	4	1	8		3
Checking sensibility VAA	5	1	6		3
Total	100	100	100		100
Vote certainty					
Already decided	10	5	33		14
Still deciding between a few parties	22	22	47		30
Don't know yet	68	73	20		55
Total	100	100	100		100
Internal efficacy (M)	2.3	2.4	3.1		2.6
External efficacy (M)	2.1	3.8	4.1		3.7
Intensity of campaign interest					
Very intense	17	11	38		21
Intense	23	25	37		29
Not very intense/none	60	64	25		51
Total	100	100	100		100
Percentage of each type	16	51	31		100
N					27,933

Overall, the similarities between elections are quite evident. The response pattern characterizing the checkers (relatively efficacious, interested, certain about their vote choice, checking agreement with their favorite party) can clearly be distinguished in each election. In Table 3.2 these are in the third column each time; we again labeled this type *checkers*. For this group the modal reason to use a VAA is “checking agreement with my favorite party”. This is true for all elections except the water authority elections, in which the modal reason is “gaining more insight into party positions”. They still do, however, indicate “checking agreement” much more often than other types, and “determining vote choice” much less often. On the other indicator variables their pattern also is consistent over elections: checkers are the most decisive about their vote choice, have the highest internal and external efficacy and most interest in the election campaign.

Responses that are typical for seekers are also clearly distinguishable: in all second-order elections one of the types consistently has relatively low internal efficacy but high external efficacy, is almost always undecided about their vote choice and is using the VAA mostly to determine which party to vote for. They are in the second column each time. The doubters, who are in the first column, are recognizable by their relatively low internal and external efficacy, while at the same time having already decided about their vote choice more often than seekers. In short, the data support our first hypothesis; the typology can convincingly be replicated in second-order elections. Another striking finding in this regard is that while the response category “to check if the VAA makes sense” was not included in the elections on which the original typology is based, the results for this category do fit the expectation that mostly checkers give this as a reason for their VAA use.

Hypothesis 2a states that overall levels of internal and external efficacy, interest in the campaign and vote certainty will be lower for second order elections. To test this hypothesis, we can look at the marginal distributions in Table 3.2 (the bold printed columns). For the categorical indicator variables, we calculated chi-squared tests (on observed frequencies rather than the percentages displayed in Table 3.2) to see whether these frequencies significantly differ between elections. They do: for vote certainty $\chi^2(8) = 15473, p < .001$, Cramer’s $V = 0.24$, indicating a medium difference between elections; for interest in the campaign (excluding the provincial elections) $\chi^2(6) = 4614.9, p < .001$, Cramer’s $V = 0.13$; a small to medium difference. Except for interest in the campaign, these results are in line with H2a. Internal and external efficacy and vote certainty are indeed lower in second-order elections than in first-order elections. Strikingly, in no election efficacy and vote certainty are as low as in the water authority elections. And for all second-order elections, vote certainty and external efficacy are highest for the provincial elections.

Contrary to our expectations, however, interest in the election campaign is higher

for second-order elections compared to the national elections. For the provincial elections, we measured *political interest* instead of *interest in the campaign*, so we unfortunately cannot include this election in the comparison. For all other second-order elections, twice as many users indicate they follow the campaign “very intensely” as compared to the national elections.

The differences between elections are also reflected in the proportions of user types that are observed, in line with H2b. Indeed, in second-order elections the proportion of checkers is lower than in first-order elections, and notably lower for the water authority elections. In these elections the proportion of doubters is higher than in any other election. For the provincial elections the proportion of checkers is relatively high. Concluding, we can say that VAAs in first-order elections serve a different function than in second-order elections. While in first-order elections many users appeared to be less dependent on VAAs for political information and used it more often for entertainment, in second-order elections users appear to be more interested in the information offered by VAAs overall.

3.7.1 User types and VAA use over time

Hypothesis 3a predicts checkers to be relatively more prominent early in the campaign as compared to seekers and doubters. Figure 3.1 shows the usage of VAAs over the course of the campaign for each election. Like in the 2012 national elections, the second-order elections have a small peak at the beginning of the campaign – when the VAA becomes available – and a large peak on and just before election day. Only in the water authority elections there was no peak at the campaign start. In line with H3a, the peaks at the beginning of the campaigns are mostly caused by checkers visiting the VAA website. The presence of seekers is more or less constant throughout the campaign until just before election day, when there is a huge increase in VAA use by seekers. The peak at the end of the campaign is primarily driven by seekers using the VAA, and to a lesser extent by doubters.

When comparing the overall use of VAAs over the course of the campaign between first- and second-order elections, the difference is striking. Supporting H3b, the concentration of usage around election day is much stronger in second-order elections. This is also reflected in the correlations between overall frequency of usage and time; for second-order elections the number of visits increases much stronger with time in the run up to the elections. Most extreme in this regard are the water authority elections, and least extreme among the second-order elections are the provincial elections. Concluding, in second-order elections we observe information-seeking activity relatively much later than in first-order elections. This finding seems to be at odds with the fact that the reported interest in the election campaign is much lower for the national

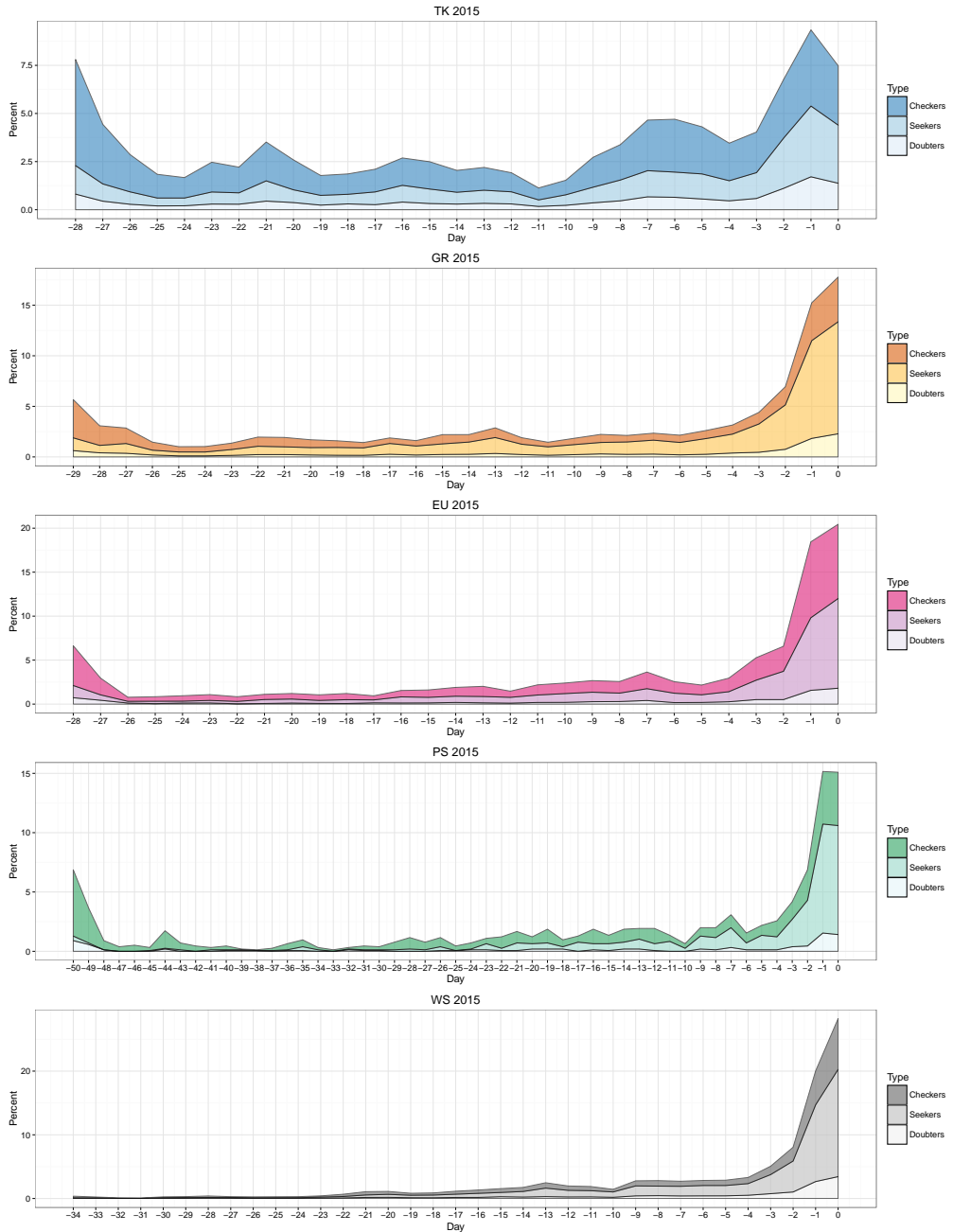


Figure 3.1: Frequency of visits per day of the campaign, for each election. Correlations between number of days until election day and the total frequency of visits are shown in the legend.

elections than for all other elections.

3.8 Conclusion and Discussion

This study demonstrates that the election context matters for the use of Voting Advice Applications. In this study we looked at all types of elections – a supranational, a national and three subnational elections – and found substantive differences in VAA usage between first- and second-order elections. More specifically, we can draw three general conclusions. First, in each election we can distinguish the same three types of VAA users: checkers, seekers and doubters; corroborating the typology developed in Chapter 2. Their distinctive usage patterns are similar across elections: checkers are most certain about their vote choice, most interested in the campaign and most efficacious about politics. They hardly use VAAs with the purpose of learning something new. Seekers do use VAAs for that purpose: they are generally less interested, less internally efficacious and less decisive about their voting decision, so they mostly consult VAAs to determine their vote choice or learn about party positions. Doubters are relatively less efficacious as well, but especially about the responsiveness of the government. More often than the seekers they already decided which party to vote for and they use the VAA mostly to determine their vote choice.

Secondly, in second-order elections, VAA users are generally less certain about their vote choice, feel less efficacious about politics and therefore more often use VAAs to learn about party positions and to determine their vote choice. These differences are also reflected in the proportional presence of each user type: seekers and doubters relatively more often consult VAAs in second-order elections. These findings are in line with the second-order election literature: because less is at stake in these elections, voters are less engaged (Heath et al., 1999; Hobolt & Wittrock, 2011).

The pattern that we observe in the data fits nicely with the importance of each election in the Netherlands. Because the provincial elections also indirectly determine the composition of the national Senate, relatively more is at stake in these elections compared to other sub-national elections. Hence, in these elections, checkers are almost as prominently represented as in the first-order elections. On the other hand, in the water authority elections, even less is at stake than in other second-order elections, since the policy area in which these authorities operate is relatively limited (flood control and water resources management). In these elections general levels of efficacy are lowest, people are most unsure about their vote, and the percentages of seekers and doubters are highest.

Not in line with our expectations is the fact that in second-order elections users reported to be substantially more interested in the campaign than in the national elections. This unexpected finding might be explained by the fact that media attention in

second-order elections is scarce compared to the election campaign in national elections. As a result, those who want to know more about the elections will have to put more effort in finding information, and hence they indicate to follow the campaign more intensely than with the general elections. At the other hand, we do find that for the national elections VAAs were used quite constantly throughout the campaign, while in all second-order elections relatively more voters visited the VAA website only closely before election day.

Our third main conclusion is that, as expected, checkers use VAAs relatively early in the campaign and seekers relatively late, while doubters' use of the tool is quite stable over time. In addition to these differences between users, we found large general differences between elections. During second-order elections, voters use VAAs much later in the campaign than during first-order elections. Again, we observe this difference at its extreme for the water authority elections, where more than 50% of all traffic happens in the last three days of the campaign.

Our finding that in second-order elections, more than in national elections, VAAs are used for the purpose of gratifying informational needs – finding out about party positions and determining one's vote choice – suggests that their mobilizing capacity is stronger in second-order elections. Previous findings that VAAs are mostly used by those who are politically interested and engaged already (e.g., Marschall, 2014; Marschall & Schultze, 2015) do not apply to second-order elections, where the checkers are in a minority – except for the provincial elections. Since VAA users in second-order elections are generally less politically sophisticated, probably there is a larger opportunity for beneficial VAA effects in these elections, like increased political efficacy and electoral participation. These VAA effects, after all, are stronger for less politically interested citizens (cf. Zaller, 1992), especially the seekers. The mobilizing potential of VAAs is strongest in the final days of the election campaign, when VAA usage increases sharply and relatively most users are seekers.

This is the first study to focus on a comparison of VAA users between first- and second-order elections. Yet, it has two limitations. In order to achieve the highest possible response rate in the exit survey – on which our analyses are based – we needed to be concise and could only measure internal and external efficacy with one item, while they are usually measured with more items. In the trade-off between more reliable measurement and a larger sample of VAA users, we prioritized the latter. We selected the items that were most suitable to the subject. Related, unfortunately there were some inconsistencies in the measurement of these indicators between elections, preventing us from testing a more sophisticated multi-group latent class model for all elections. However, we could establish measurement equivalence for two elections (see footnote 1), and for the other elections we observe highly similar patterns across elections, allowing us to give them the same labels. Secondly, it has to be noted that this

sample of respondents who answered the exit survey is a non-random, self-selected group of VAA users. While the size of this sample is modest judged by the response rate, its composition does not differ much from the population of VAA users in terms of gender, age and education (see the appendix).

For future research we suggest to compare the indicators used in this study between VAA users and non-users, who were not taken into account in these analyses. This way, more can be said about the likelihood of less politically engaged citizens to still use VAAs, and hence whether VAAs successfully reach less informed segments of society. The current study could also serve as a starting point to research effects of VAAs in second-order elections, to find out whether VAAs contribute to knowledge, efficacy and participation more in second-order elections than in national elections. For now, we demonstrated the value of VAAs for informational demands in campaign times, which is largest in the ‘most’ second-order elections.

3.9 References

- Alvarez, R. M., Levin, I., Mair, P., & Trechsel, A. H. (2014). Party preferences in the digital age: The impact of Voting Advice Applications. *Party Politics*, 20(2), 227–236. doi: 10.1177/1354068813519960
- Anderson, J., & Fossen, T. (2014). Voting Advice Applications and Political Theory: Citizenship, Participation, and Representation. In D. Garzia & S. Marschall (Eds.), *Matching voters with parties and candidates. Voting Advice Applications in Comparative Perspective* (pp. 217–226). Colchester, UK: ECPR Press.
- Bimber, B., Cantijoch Cunill, M., Copeland, L., & Gibson, R. (2014). Digital Media and Political Participation: The Moderating Role of Political Interest Across Acts and Over Time. *Social Science Computer Review*, 33(1), 21–42. doi: 10.1177/0894439314526559
- De Graaf, J. (2010). The irresistible rise of Stembijzer. In L. Cedroni & D. Garzia (Eds.), *Voting Advice Applications in Europe: The state of the art* (pp. 35–46). Naples, Italy: ScriptaWeb.
- De Vreese, C. H., Lauf, E., & Peter, J. (2007). The media and European Parliament elections: Second-rate coverage of a second-order event? In W. Van der Brug & C. Van der Eijk (Eds.), *European elections and domestic politics: Lessons from the past and scenarios for the future* (pp. 116–130). Paris: University of Notre Dame Press.
- De Vreese, C. H., & Semetko, H. A. (2004). News matters: Influences on the vote in the Danish 2000 euro referendum campaign. *European Journal of Political Research*, 43(5), 699–722.
- Deschouwer, K. (2003). Political Parties in Multi-Layered Systems. *European Urban and Regional Studies*, 10(3), 213–226. doi: 10.1177/09697764030103003
- Dinas, E., Trechsel, A. H., & Vassil, K. (2014). A look into the mirror: Preferences, representation and electoral participation. *Electoral Studies*, 36, 290–297. doi: 10.1016/j.electstud.2014.04.011
- Ervik, B. (2012, feb). Second-Order Arguments for Second-Order Elections? Measuring “Election Stakes” in a Multilevel Context: The Case of Norway. *Journal of Elections, Public Opinion & Parties*, 22(1), 27–50. doi: 10.1080/17457289.2011.642241
- Garzia, D., & Marschall, S. (2014). The Lausanne declaration on Voting Advice Applications. In D. Garzia & S. Marschall (Eds.), *Matching voters with parties and candidates. Voting Advice Applications in Comparative Perspective* (pp. 227–228). Colchester, UK: ECPR Press.
- Gemenis, K., & Rosema, M. (2014). Voting Advice Applications and electoral turnout. *Electoral Studies*, 36, 281–289. doi: 10.1016/j.electstud.2014.06.010

- Hagenaars, J. A., & McCutcheon, A. L. (2002). *Applied latent class analysis*. Cambridge, UK: Cambridge University Press.
- Heath, A., McLean, I., Taylor, B., & Curtice, J. (1999). Between first and second order: a comparison of voting behaviour in European and local elections in Britain. *European Journal of Political Research*, 35, 389–414. doi: 10.1111/1475-6765.00454
- Hirzalla, F., Van Zoonen, L., & De Ridder, J. (2010). Internet use and political participation: Reflections on the mobilization/normalization controversy. *The Information Society*, 27(1), 1–15. doi: 10.1080/01972243.2011.534360
- Hix, S., & Marsh, M. (2011). Second-order effects plus pan-European political swings: An analysis of European Parliament elections across time. *Electoral Studies*, 30(1), 4–15. doi: 10.1016/j.electstud.2010.09.017
- Hobolt, S. B., & Spoon, J.-J. (2012). Motivating the European voter: Parties, issues and campaigns in European Parliament elections. *European Journal of Political Research*(51), 701–727. doi: 10.1111/j.1475-6765.2012.02057.x
- Hobolt, S. B., & Wittrock, J. (2011). The second-order election model revisited: An experimental test of vote choices in European Parliament elections. *Electoral Studies*, 30(1), 29–40. doi: 10.1016/j.electstud.2010.09.020
- Hooghe, M., & Teepe, W. (2007). Party profiles on the web: An analysis of the logfiles of non-partisan interactive political internet sites in the 2003 and 2004 election campaigns in Belgium. *New Media & Society*, 9(6), 965–985. doi: 10.1177/1461444807082726
- Jeffery, C., & Hough, D. (2003). Regional Elections in Multi-Level Systems. *European Urban and Regional Studies*, 10(3), 199–212. doi: 10.1177/09697764030103002
- Kamoen, N., Holleman, B. C., Krouwel, A., Van de Pol, J., & De Vreese, C. (2015). The Effect of Voting Advice Applications on Political Knowledge and Vote Choice. *Irish Political Studies*, 30(4), 595–618. doi: 10.1080/07907184.2015.1099096
- Kaye, B. K., & Johnson, T. J. (2004). A Web for all reasons: Uses and gratifications of Internet components for political information. *Telematics and Informatics*, 21(3), 197–223. doi: 10.1016/S0736-5853(03)00037-6
- Krouwel, A., Vitiello, T., & Wall, M. (2012). The practicalities of issuing vote advice: A new methodology for profiling and matching. *International Journal of Electronic Governance*, 5(3/4), 223–243. doi: 10.1504/IJEG.2012.051308
- Marschall, S. (2014). Profiling Users. In D. Garzia & S. Marschall (Eds.), *Matching Voters with Parties and Candidates. Voting Advice Applications in Comparative Perspective* (pp. 93–104). Colchester, UK: ECPR Press.
- Marschall, S., & Schultze, M. (2015). German E-Campaigning and the Emergence of a ‘Digital Voter’? An Analysis of the Users of the Wahl-O-Mat. *German Politics*, 24(4), 525–541. doi: 10.1080/09644008.2014.949681

- Morrell, M. E. (2003). Survey and experimental evidence for a reliable and valid measure of internal political efficacy. *The Public Opinion Quarterly*, 67(4), 589–602. doi: 10.1086/378965
- Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge, UK: The Cambridge University Press.
- Reif, K., & Schmitt, H. (1980). Nine second-order national elections: A conceptual framework for the analysis of European election results. *European Journal of Political Research*, 8(1), 3–44.
- Schultze, M. (2014). Effects of Voting Advice Applications (VAAs) on political knowledge about party positions. *Policy & Internet*, 6(1), 46–68. doi: 10.1002/1944-2866.POI352
- Sudulich, M. L., Garzia, D., Trechsel, A. H., & Vassil, K. (2014). Matching voters with parties in supranational elections: The case of the EU Profiler. In D. Garzia & S. Marschall (Eds.), *Matching voters with parties and candidates. Voting Advice Applications in Comparative Perspective* (pp. 175–182). Colchester, UK: ECPR Press.
- Van der Brug, W., Gattermann, K., & De Vreese, C. H. (2016). Introduction: How Different Were the European Elections of 2014? *Politics and Governance*, 4(1), 1–8. doi: 10.17645/pag.v4i1.591
- Van der Eijk, C., Franklin, M., & Marsh, M. (1996). What voters teach us about Europe-Wide elections: What Europe-Wide elections teach us about voters. *Electoral Studies*, 15(2), 149–166. doi: 10.1016/0261-3794(96)00009-1
- Wall, M., Krouwel, A., & Vitiello, T. (2012). Do voters follow the recommendations of Voter Advice Application websites? A study of the effects of Kieskompas.nl on its users' vote choices in the 2010 Dutch legislative elections. *Party Politics*, 30(3), 416–428. doi: 10.1177/1354068811436054
- Westle, B., Begemann, C., & Rütter, A. (2014). The “Wahl-O-Mat” in the course of the German Federal Election 2013 – Effects of a German VAA on users' election-relevant political knowledge. *Zeitschrift für Politikwissenschaft*, 24(4), 389–426. doi: 10.5771/1430-6387-2014-4-389
- Zaller, J. R. (1992). *The Nature and Origins of Mass Opinion*. New York, US: Cambridge University Press.

3.10 Appendix

External validity of samples for the population of VAA users: socio-demographic characteristics

Elections	National (2012)		Municipalities (2014)		Europe (2014)		Provinces (2015)		Water authorities (2015)	
	Population	Sample	Population	Sample	Population	Sample	Population	Sample	Population	Sample
% Female	41.1%	31.6%	47.0%	42.9%	42.6%	34.6%	45.9%	37.0%	47.3%	43.4%
Age										
<i>M</i>	39.02	45.80	41.70	49.38	40.70	47.62	43.61	51.01	42.59	51.74
<i>SD</i>	15.02	14.89	15.38	15.02	15.51	16.22	15.94	15.47	15.27	15.37
Education										
Low	7.8%	7.1%	7.4%	8.5%	5.0%	5.3%	5.7%	6.7%	5.3%	8.6%
Middle	34.1%	29.1%	33.4%	30.6%	30.6%	28.5%	26.5%	24.4%	31.8%	31.3%
High	58.1%	63.8%	59.3%	60.9%	64.3%	66.1%	67.8%	68.8%	62.9%	60.1%