

UNDERSTANDING CROSS-NATIONAL PATTERNS OF VAA-USAGE: INTEGRATING MACRO- AND MICRO-LEVEL EXPLANATIONS

Introduction

Voting Advice Applications (hereafter: VAAs) have nowadays turned into a widespread feature of electoral campaigns in Europe, thus attracting a growing interest from citizens/users. According to Walgrave et al., in 2007 there was (at least) one voting advisor running in 15 countries out of the 22 they surveyed.¹ A current assessment of the spread of VAAs based on the available literature and web-data collection finds at least one such tool in all but two countries of the EU27 (i.e., Malta and Slovenia). In some of these countries, VAAs developed into outstandingly popular websites. Suffice it to say that in the Dutch national election of 2006, the *StemWijzer* has been played some 4.7 million times.² Taken by the number of its usages, it might have reached about two Dutch voters out of five during that campaign. In absolute numbers, the German *Wahl-O-Mat* launched before the national elections in 2009 was used by the largest number of users ever: 6.7 million.³ VAAs have not only been deployed on the national level. Before the European elections of 2009, a supranational VAA was launched under the auspices of the European University Institute in Florence. In only six weeks, the EU Profiler was able to attract more than 2.5 million users from all around the continent.⁴

The establishment of VAAs in virtually all European countries – along with the growing number of users resorting to these tools at election time – has suddenly captured the interest of political scientists. In the early phase of VAA-related research, involved scholars attempted by and large to establish a common language for future studies.⁵ In more recent years, however, a new stream of quantitative research on VAAs has emerged. Scholars' concerns about the consistency and reliability of the voting advice provided by these applications has resulted in a rapidly growing body of literature. Most notably, this stream of research has fuelled a number of empirical works

¹ Walgrave, Stefaan, Peter van Aelsta, and Michiel Nuytemans (2008). 'Do the Vote Test': The Electoral Effects of a Popular Vote Advice Application at the 2004 Belgian Elections', *Acta Politica*, 43:1, 50-70.

² de Graaf, Jochum (2010). 'The Irresistible Rise of Stemwijzer', in Lorella Cedroni and Diego Garzia (eds.), *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptaWeb, 35-60.

³ Marschall, Stefan, Christian K. Schmidt (2010). 'The Impact of Voting Indicators: The Case of the German Wahl-O-Mat', in Lorella Cedroni and Diego Garzia (eds.), *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptaWeb, 65-104.

⁴ Breuer, Fabian (2010). 'The EU Profiler: A new way for voters to meet parties and to understand European elections', in Wojciech Gagatsek(ed.), *The 2009 Elections to the European Parliament - Country Reports*. Florence: European Union Democracy Observatory, 27-31.

⁵ Fivaz, Jan, and Giorgio Nadig (2010). 'Impact of Voting Advice Applications (VAAs) on Voter Turnout and Their Potential Use for Civic Education', *Policy & Internet*, 2, 7.

dealing with the process of statement selection,⁶ the way in which parties' positions on such statements are established,⁷ and the impact of VAAs on the logic of electoral competition.⁸ Also electoral researchers have worked intensively on VAA-generated data, and found that a small but significant proportion of VAA users (e.g., in a range from two to ten percent, according to the various national settings under analysis) declared to be willing to 'move' their vote in accordance with the advice obtained by the application.⁹

Despite the valuable contribution of previous works on our understanding of these applications and their potential impact on users/voters, no systematic and reliable assessment of the drivers of VAA-usage has yet been provided. Indeed, this topic appears to have been neglected by VAA scholars until very recently.¹⁰ Cross-national patterns of usage are hardly comparable throughout countries, and whereas in some instances VAAs can easily account for millions of advices provided to users (see above) this would seem to be the exception more than the rule.¹¹ Previous studies have begun shedding light on the correlates of VAA-usage from two major perspectives. At the micro-level, individual characteristics of users (such as age, educational level, and degree of political interest) seem to make a difference.¹² At the macro-level, VAA-usage is interpreted as a function of the structural context (e.g., size of the party system, proportionality of the electoral law, ballot structure) in which voting takes place.¹³

⁶ Nuytemans, Michiel, Stefaan Walgrave, and Kris Deschouwer (2010). 'Do the Vote Test: The Belgian Voting Aid Application', in Lorella Cedroni and Diego Garzia (eds.), *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptaWeb, 125-156. Walgrave, Stefaan, Michiel Nuytemans, and Koen Pepermans (2009). 'Voting Aid Applications and the Effect of Statement Selection', *West European Politics*, 32:6, 1161-1180.

⁷ Trechsel, Alexander H., and Peter Mair (2011). 'When parties (also) position themselves: An introduction to the EU profiler', *Journal of Information Technology & Politics*, 8:1, 1-20.

⁸ Ramonaite, Aine (2010). 'Voting advice applications in Lithuania: Promoting programmatic competition or breeding populism?', *Policy & Internet*, 2:1, 117-47.

⁹ Boogers, Marcel (2006). 'Enquete bezoekers Stemwijzer', unpublished paper, Tilburg: Universiteit van Tilburg. Ladner, Andreas, Gabriela Felder, and Jan Fivaz (2010). 'More than toys? A first assessment of voting advice applications in Switzerland', in Lorella Cedroni and Diego Garzia (eds.), *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptaWeb, 91-123. Marschall, Stefan (2005). 'Idee und Wirkung des Wahl-O-Mat', *Aus Politik und Zeitgeschichte*, 55:51-52, 41-46. Mykkänen, Juri, Tom Moring, and Juhani Pehkonen (2007). *Tutkimus vaalikoneiden käytöstä ja suhtautumisesta vaalikoneisiin: Vaalikoneet koetaan hyödyllisiksi*. Helsinki: Helsingin Sanomain säätiö. Ruusuvirta, Outi, and Martin Rosema (2009). 'Do online vote selectors influence electoral participation and the direction of vote?', Paper presented at the European Consortium for Political Research (ECPR) General Conference, Potsdam, September 10-12.

¹⁰ As an exceptions, see: Vassil, Kristjan (2011b). 'Voting Smarter? The Impact of Voting Advice Applications on Political Behavior', unpublished manuscript.

¹¹ On this point, see the various country chapters in Lorella Cedroni and Diego Garzia (eds.) (2010), *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptaWeb.

¹² Boogers, Marcel, and Gerrit Voerman (2003). 'Surfing citizens and floating voters: Results of an online survey of visitors to political web sites during the Dutch 2002 General Elections', *Information Polity*, 8:1-2, 17-27. Hooghe, Marc, and Wouter Teepe (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. Wall, Matthew, Maria L. Sudulich, Rory Costello, and Enrique Leon (2009). 'Picking your party online : An investigation of Ireland's first online voting advice application', *Information Polity*, 14:3, 203-218.

¹³ Ruusuvirta, Outi (2010). 'Much Ado About Nothing? Online Voting Advice Applications in Finland', in Lorella

One of the major problems with this literature, however, lies with its almost exclusive reliance on national case studies alone. Clearly, the lack of an integrated framework for analysis made previous research unable to serve the scientific goal of knowledge accumulation. Furthermore, the employment of widely different operational measures led to hardly comparable results.

As an attempt to tackle the lack of comparative evidence on the subject matter, this chapter will provide a reassessment of both macro- and micro-level explanations based on the most recent empirical evidence from cross-national VAA research. The next section presents the major data sources employed in this chapter and outlines the macro-level conditions that seem to foster the spread of VAA-usage among the electorate. The section that follows moves from macro- to micro-level factors, with particular regard to the rise of issue voting as a way to interpret what leads voters to resort to VAAs at election time. The findings are briefly discussed in the last section along with their foremost implications for future research on VAA-usage and impact.

Macro-level explanations

Table 1 presents information on a selection of European VAAs to which the present chapter will devote attention. The choice of featured VAAs is restricted to versions that have been developed for national elections, and takes into account the amount of voting advices provided by each VAA in that specific election as a function of the national electorate size (last column in Table 1). For the sake of clarity, only VAAs exceeding the 1 percent ratio have been included.¹⁴ In the case of The Netherlands, all these criteria are fulfilled by more than one VAA, i.e., *StemWijzer* and *Kieskompas*. In order to keep the analysis as simple as possible, I only included the former in the light of its longer tradition (in terms of age) and success (in terms of users).

Cedroni and Diego Garzia (eds.), *Voting Advice Applications in Europe. The State of the Art*. Napoli: ScriptaWeb, 47-77.

¹⁴ It must be noted that the « advice issued/size of the electorate » ratio is a rather imperfect indicator for the spread of VAAs among users/voters. Indeed, it should be clarified that the amount of **advices** provided does not necessarily correspond to the number of users that the VAA has been able to attract. Previous research **shows** that, on average, VAA users perform the test at least **than** twice. As it has been suggested, a rather more reliable measure of VAA-usage would be the number of single user sessions based on the IP address. However, this measure was not available **for with respect to** the majority of VAAs surveyed. For the sake of cross-national comparability, I therefore resorted to the more imperfect measure employed throughout this chapter.

Table 1 – A selection of Voting Advice Applications in Europe

Country	VAA	First Implem.	Year of Best Score	Best Score (mln.)	Country Electorate (mln.)	Advices/ Electorate (%)
Netherlands	<i>StemWijzer</i>	1994	2006	4,7	12,3	38
Finland	<i>Vaalikone</i>	1996	2007	1	4,3	23
Belgium (VL)	<i>Doe de Stemtest!</i>	2002	2004	1	4,6	22
Switzerland	<i>smartvote.ch</i>	2003	2007	1	4,9	20
Luxembourg	<i>smartvote.lu</i>	2009	2009	0,04	0,22	17
Austria	<i>wahlkabine.at</i>	2002	2008	0,85	6,3	13,5
Germany	<i>Wahl-O-Mat</i>	2002	2009	6,7	62	11
United Kingdom	<i>Vote Match</i>	2008	2010	1,2	45,6	3

Sources: for The Netherlands: de Graaf (2010); for Finland: Ruusuvirta (2010); for Belgium: Walgrave et al. (2008); for Switzerland: Ladner et al. (2010); for Luxembourg: www.smartvote.lu; for Austria: Mayer and Wassermair (2010); for Germany: Marschall and Schmidt (2010); for the United Kingdom: www.votematch.org.uk.

A preliminary observation of the data presented in Table 1 reveals that not all VAAs share a “common history”. Many of them were first launched in the mid-2000s. Others, however, highlight a much longer history that traces back to the mid-1990s. It is the case, for instance, of the Dutch and Finnish VAAs. Not by chance, these are also those VAAs that in terms of our operational measure (i.e., amount of advice provided as a function of the national electorate size) rank highest on the list. Age clearly matters in this respect: having been on stage for almost two decades has in fact allowed the respective national electorates to get familiar with these applications, thus enhancing the likelihood for voters to resort to these increasingly reliable tools. Yet familiarity would not make much of a difference if it was not matched by visibility. Indeed, the three countries on top of the list (i.e., The Netherlands, Finland, and Belgium) are also the only ones in which VAAs are the protagonist of a prime-time national TV show.¹⁵ For instance, during the Dutch election campaign of 2006, a 90 minutes StemWijzer TV show was broadcasted on a national TV channel: all party leaders took part and tested the brand-new version of the Dutch VAA in front of the cameras for the first time.¹⁶

On these bases, it would thus appear that factors inherently related to the specific

¹⁵ Walgrave, Stefaan, Peter van Aelsta, and Michiel Nuytemans (2008). Op. Cit. ¹⁵ Ruusuvirta, Outi (2010). Op. Cit.

¹⁶ de Graaf, Jochum (2010). Op. Cit.

applications (i.e., age, media exposure) are those that make the difference. However, patterns of VAA usage look strongly related to a number of macro-political factors too. The structural conditions under which voting takes place seem to play a crucial role in fostering VAA-usage among different national electorates. At first, the strong association between VAA popularity among the electorate and the proportionality of the electoral system in a country ought to be highlighted. As a matter of fact, proportional representation systems offer a fertile ground for this kind of applications. Suffice it to say that besides British Vote Match, all the VAAs reported in Table 2 were developed within proportional systems. The fifth column in Table 2 presents the value of the Gallagher's Index of Disproportionality with respect to each VAA/country under analysis. Once again, the country scoring highest is The Netherlands, with its almost perfectly proportional electoral system. Moreover, and with the only exception of the UK, also the other countries featured in the table highlight rather low values on the index, ranging from 2.16 (Germany) to 3.37 (Belgium). By means of comparison with those European countries not included in the table, we observe that the aforementioned values are way lower not only with respect to countries where a two-ballot system is in place (e.g., France; Index of Disproportionality = 13.58), but also if compared to other (less) proportional countries such as Italy (5.73) or Spain (4.49).

Table 2 – The Macro-Level Correlates of VAA-usage in Europe

Country	VAA	Advices/ Electorate (%)	Ballot Structure	Gallagher's Index of Proportionality	ENEP
Netherlands	<i>Stem Wijzer</i>	38	Open PR	1.03	5.80
Finland	<i>Vaalikone</i>	23	Open PR	3.20	5.88
Belgium (VL)	<i>Doe de Stemtest!</i>	22	Open PR	3.37	9.04
Switzerland	<i>smartvote.ch</i>	20	Open PR (M)	2.56	5.61
Luxembourg	<i>smartvote.lu</i>	17	Open PR	3.36	4.26
Austria	<i>wahlkabine.at</i>	13,5	Open PR	2.92	4.79
Germany	<i>Wahl-O-Mat</i>	11	Closed PR	2.16	4.46
United Kingdom	<i>Vote Match</i>	3	FPTP	16.73	3.59

Sources: for Ballot Structure: Gallagher, Laver and Mair (2000); for Gallagher's Index of Disproportionality and Effective Number of Electoral Parties (ENEP): Michael Gallagher's Website

Why then would proportional systems matter for VAA popularity? To put it down simply, they do because proportionality enhances the chances for the representation of a greater number of parties and, in turn, the need on the behalf of the voters to be guided in their understanding of a more complex political offer.¹⁷ The last column in Table 2 presents the ENEP (Effective Number of Electoral Parties) index for each country. As expected, more proportional countries report higher values on the index. What matters most to our purposes, however, is the observation that VAAs are mostly used in countries where parties are more numerous (e.g., The Netherlands, Finland, Belgium, and Switzerland), while countries with lower scores on the index are not even featured in the table (e.g., Spain, ENEP = 2.79).

A third contextual factor that appears strongly related to VAA-usage is to be found in the ballot structure of the election system. By allowing voters to express multiple candidate preferences, open list systems foster the usage of candidate-centered VAAs in countries such as Finland and Switzerland. The latter country in particular provides a bold case for the use of VAAs. Suffice it to say that in large cantons (e.g., Zurich) voters are asked to express their preference on up to 34 (!) individual candidates.¹⁸ In this respect, VAAs make it extremely easy for voters to simultaneously assess the competing policy offers on the behalf of such a vast pool of candidates.

Micro-level Explanations

Although valuable, and to some extent robust, macro-level explanations do not tell the whole story. Indeed, the structural context in which voting takes place cannot possibly account for all the variance in cross-national patterns of aggregate VAA-usage. Moving from these considerations, this section will attempt to develop a theoretical framework for linking individual characteristics of users to the rise of VAAs in Europe. In the previous section, I have argued that the complexity of the political offer is a key to understanding why an increasing number of voters is resorting to VAAs at election time. Yet an alternative (and to some extent complimentary) way of looking at the matter is through the partisan dealignment paradigm, brought forward in the seminal 1984 article by Russell Dalton.¹⁹

The point of departure of this theoretical digression rests on the widespread notion of political parties as central actors of democratic politics. From a voter's point of view, almost all

¹⁷ Ruusuvirta, Outi (2010). Op. Cit.

¹⁸ Ladner, Andreas, Gabriela Felder, and Jan Fivaz (2010). Op. Cit.

¹⁹ Dalton, Russell J. (1984). 'Cognitive Mobilization and Partisan Dealignment in Advanced Industrial Democracies', *The Journal of Politics*, 46: 1, 264-284.

political phenomena can be evaluated within a partisan framework.²⁰ Classic theories of voting behavior are themselves based on the pivotal role played by long-term feelings of partisan identification on the behalf of voters.²¹ According to the social-psychological paradigm, party identifications act to filter individuals' views of the political world, providing them not only with a means for making voting decisions, but also with a means for interpreting issues and candidates. On these bases, voting can easily be interpreted as a function of voters' stable political predispositions, whereas (favorable) assessments of individual candidates and issue stances are to be understood as a result of the 'perceptual screen' of partisanship at work.

By the 1970s, however, dramatic changes began to affect Western societies, and in particular the stable social cleavages on which they were based. In political terms, this process has resulted in a sharply reduced ability of stable social cleavages to structure individual-level patterns of party identification and voting choice.²² Dalton linked this pattern of dealignment to a process of cognitive mobilization among Western electorates due to social modernization, and in particular to rising levels of education and the spread of television as a source of political information.²³ Building on a functional model of party identification²⁴ which implies the need for partisan ties to be a function of voters' political skills and information, he showed that the dramatic spread of education along with a generalized information explosion in these countries significantly improved the average citizen's political and cognitive resources. This cognitive mobilization entails that "citizens possess the skills and resources necessary to become politically engaged with little dependence on external cues".²⁵ It follows that a pattern of partisan dealignment should be accentuated among the better educated and those more exposed to the information flow of the media (that is, the young).

These profound changes in the sources of political and electoral cues from a vast majority of voters led to what some authors named the individualization of politics, which involves "a shift away from a style of electoral decision-making based on social group and/or party cues toward a more individualized and inwardly oriented style of political choice. Instead of depending upon party elites and reference groups...contemporary publics are more likely to base their decision on policy

²⁰ Miller, Warren E. (1976). 'The Cross-National Use of Party Identification as a Stimulus to Political Inquiry, in Ian Budge, Ivor Crewe and Denis Farlie (eds.), *Party Identification and Beyond*. New York and London: John Wiley & Sons, 21-31.

²¹ Campbell, Angus, Philip E. Converse, Warren E. Miller, Donald E. Stokes (1960). *The American Voter*. Chicago and London: The University of Chicago Press.

²² Franklin, Mark N., Thomas T. Mackie, and Henry Valen (1992). *Electoral change: Responses to evolving social and attitudinal structures in Western societies*. Cambridge: Cambridge University Press.

²³ Inglehart, Ronald (1977). *The Silent Revolution: Changing Values and Political Styles among Western Publics*. Princeton: Princeton University Press.

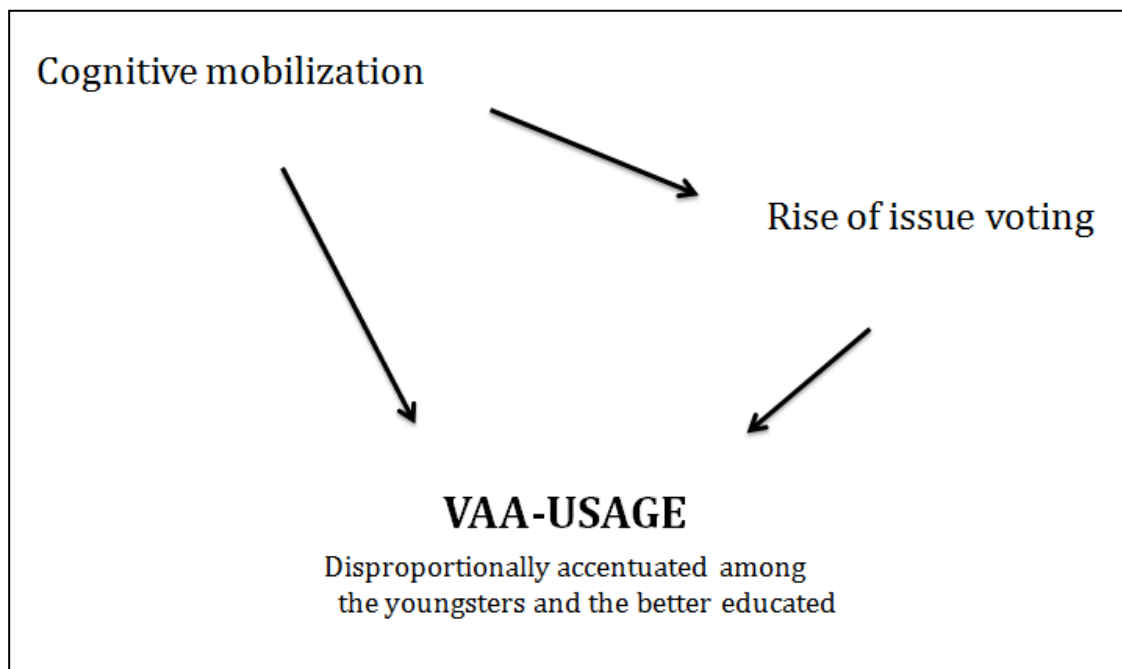
²⁴ Shively, W. Phillips (1979). 'The Development of Party Identification among Adults: Exploration of a Functional Model', *American Political Science Review*, 73, 1039-54.

²⁵ Dalton, Russell J. (1984). *Op. Cit.*, p. 267.

preferences”.²⁶

In other words, cognitive mobilization has ignited a progressive dealignment on behalf of voters. As a result of the dealignment, an increasing number of voters have moved their focus from long-term partisan allegiances to short-term political factors (i.e., issues) within their electoral calculus. However, and based on cognitive mobilization theory itself, the proportion of such issue voters should be disproportionately accentuated among the ‘mobilized’ – i.e., the young, better educated, and those more interested in political matters. Finally, we have a link between issue voting and VAA-usage itself. Given the limited scope of this chapter, I will not delve deeper into the link between the two.²⁷ For the present purposes, however, I assume that the connection between issue-based political reasoning on behalf of voters and their likelihood to resort to issue-centered applications such as VAAs will be apparent to the reader. The theoretical argument is graphically summarized in Figure 1.

Figure 1 – Cognitive Mobilization, Issue Voting, and VAA-usage



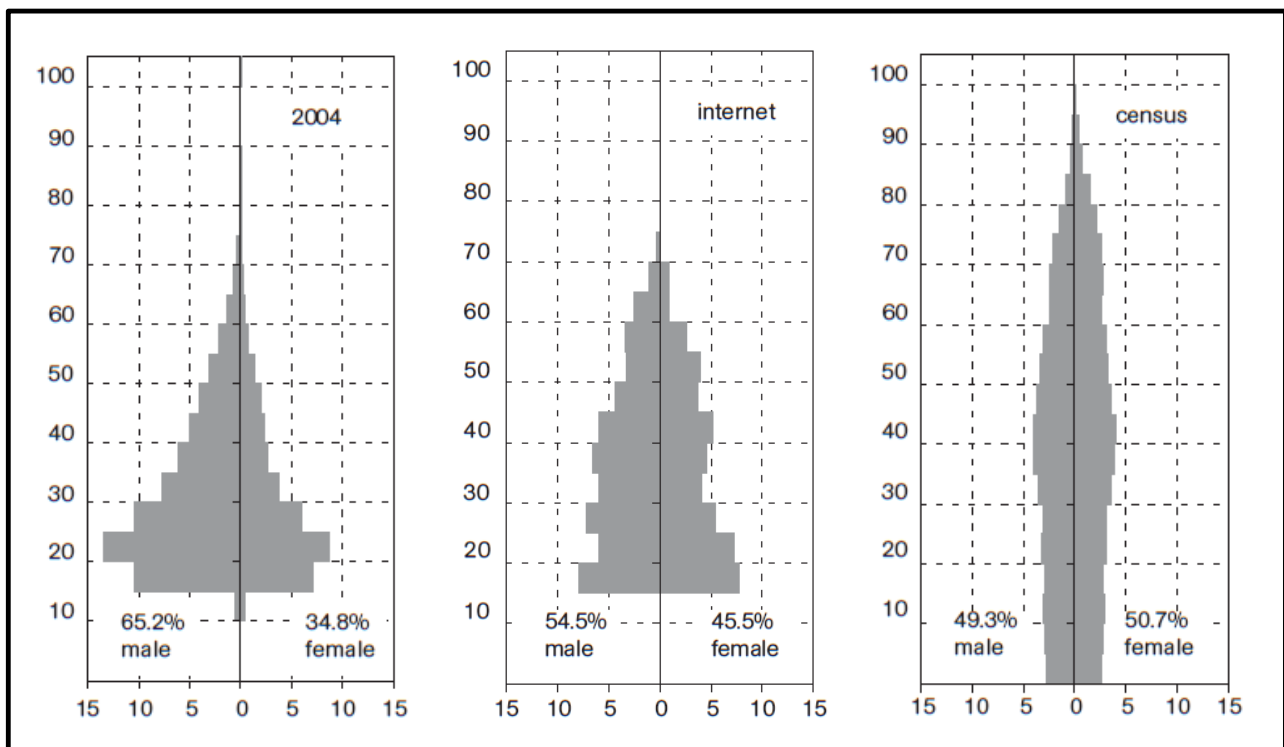
Empirical research on VAA-usage shows that the average user is indeed young, male, and highly educated (see above: “Introduction”). This identikit resembles to a substantial extent that of

²⁶ Dalton, Russell J. (1996). ‘Comparative Politics: Micro-Behavioural Perspectives’, in Robert E. Goodin and Hans-Dieter Klingemann (eds.), *A New Handbook of Political Science*. New York: Oxford University Press, 346.

²⁷ For a better discussion on this point, see : Garzia, Diego (2010). *Op. Cit.*

the average onliner. This occurrence raises a possible criticism to the argument brought forward here: namely, that VAA-usage should be interpreted as a mere function of being online. However, the available evidence would seem to disconfirm this argument quite clearly. Let us consider, for illustrative purposes, the data reported in Figures 2 and 3. Although bound to a single-case study (i.e., Belgium) these figures are in line with those from more recent studies performed across Europe and, in this respect, widely representative.²⁸

Figure 2 – Age and Gender: VAA users vs. Onliners and General Population (Census)

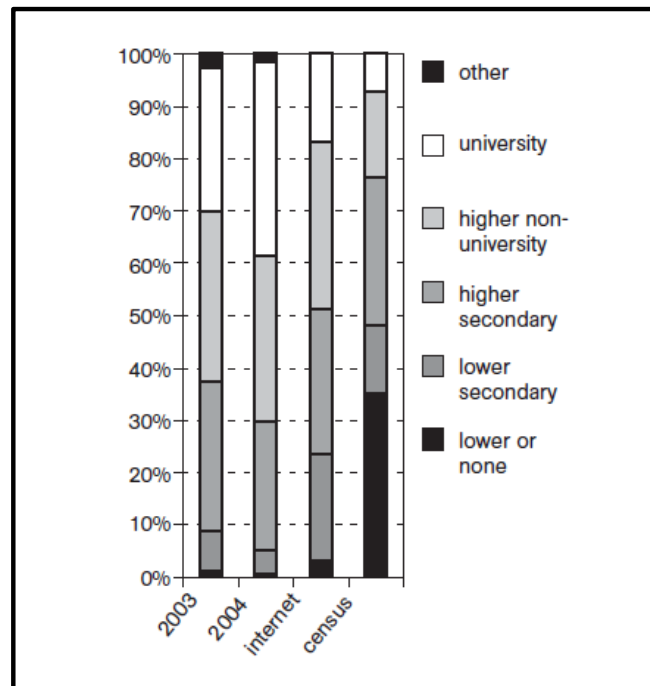


Source: Hooghe and Teepe (2007)

As it appears, the digital divide hypothesis does not hold to empirical scrutiny. Overall, VAA users emerge as younger and more educated not only with respect to the average population (census data, right panel) but also as compared to the online population. In other words, being online would seem a precondition of VAA-usage. As to actual usage, however, it appears to pertain to the more cognitively mobilized substrata of onliners – thus providing ground for an interpretation postulating cognitive mobilization as the key driver of VAA-usage at the individual level.

²⁸ On this point, see the various country chapters in : Lorella Cedroni and Diego Garzia (eds.) (2010), Op. Cit.

Figure 3 – Educational Level: VAA users vs. Onliners and General Population (Census)



Source: Hooghe and Teepe (2007)

A Few Concluding Remarks

The last years have witnessed the burgeoning of Voting Advice Applications around Europe. In turn, the growing number of users/voters resorting to these web-based applications at election time has captured the attention of social, and especially political scientists. In this chapter, I tackled what can be considered an underdeveloped topic within the available VAA-research, namely, the cross-national correlates of VAA-usage. A careful review of the literature suggests that a clearer understanding of the subject matter requires the integration of multiple perspectives. In particular, this contribution has focused on both contextual factors (e.g., electoral system, size of the party system) and individual-level factors (e.g., users' socio-demographic characteristics).

As it appears, the electoral context does matter. By enhancing the chances for the representation of a greater number of parties, proportional systems foster the usage of VAAs on behalf of voters confronted with a more scattered political offer. Yet users' own characteristics matter too. In the last section, I tried to develop a theoretical argument linking a number of socio-political trends going on in post-industrial societies (e.g., cognitive mobilization, partisan dealignment) to the spread of VAAs among the respective electorates. Due to their focus on policy issues, VAAs have attracted a growing number of (potential) issue voters that aim at a clearer understanding of the issue stances of the competing parties. Preliminary empirical evidence has

been presented, and it would seem to point in the direction of cognitive mobilization as the key driver behind VAA-usage at the individual level.

Despite the impressive number of users resorting to VAAs throughout Europe, academic research in the field is still rather scant and disconnected. As of now, no systematic explanation of cross-national variations in aggregate patterns of VAA-usage has been provided yet. Considering this state of affairs, more comparative research is in urgent need. In this sense, scholars moving on from here could benefit from planning well in advance the use of standardized cross-national measures as made available, for instance, by supranational VAA projects such as EU Profiler (www.euprofiler.eu) or VoteMatch Europe (www.votematch.eu). In turn, findings from VAA research will in all likelihood contribute to more general debates on voting behavior, party formation and organization, and to normative assessments about the quality of representative democracy in the Western world.