Contextualizing candidate popularity: An analysis of the 2007 Norwegian local elections

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Contents

Summary

Previous research suggests a number of candidate-level influences on candidate popularity like position on the party lists, political experience and social background. Questions about how party- and district-level variables affect candidate performance has, however, received scant scholarly attention. This study examines candidate attachment by linking almost all the candidates in the 2007 Norwegian municipal elections to party lists and municipalities. The Norwegian local election system allows parties to decide how much influence voters should have in the candidate selection process, something that gives us a unique opportunity to test hypotheses about how list type affects candidate popularity. This study test for two such effects: First, we expect more personal votes on candidates running on open party lists. Second, we suggest voters to act more independently of the rank-ordering on the lists if parties refrain from restricting voter choice. We test the two arguments using a multi-level approach in which individual candidate support is modeled with explanatory variables at both the candidate- party- and municipal-levels. The results depicts that candidates running on an open party list receive more personal votes compared to other candidates. Candidates with a favorable position on the party lists also do worse on candidate centered party lists. When parties choose to control the ballots, the rank ordering on the lists is more important. The analysis further reveals that candidates running in municipalities with a high number of farmers receive more personal vote than candidates in other municipalities. High district magnitude, however, reduces the number of personal votes. On candidate-level the analysis show that voters and parties are very much in agreement as to the preferred ranking of the candidates. Candidates at the upper end of the list, especially candidates at the top spot, receive a disproportional amount of personal votes.

KEY WORDS *Candidate-popularity *Preference voting * Candidate-Centered Ballots * Party Ballots *Candidate-competition *Multi-level modeling * Contextual effects *Norway *Local elections

Sammendrag

Tidligere forskning har vist at oppslutningen om kandidater i form av personstemmer er betinget både av kandidatenes plassering på partilistene, deres politiske erfaring og sosiale bakgrunn. Spørsmål knyttet til hvordan egenskaper ved partier og kommuner påvirker kandidatoppslutningen har blitt viet adskillig mindre oppmerksomhet i forskningen. Denne undersøkelsen studerer kandidatpopularitet ved å koble nesten alle kandidatene i kommunestyrevalget 2007 til deres respektive partilister og kommuner. Det norske personvalgsystemet ved kommunestyrevalg gir partiene stor frihet til å bestemme hvor mye velgernes personstemmer skal ha å si for kandidatutvelgelsen, noe som gir oss en unik anledning til å teste hypoteser om hvordan partienes bruk av denne friheten påvirket kandidatoppslutningen. I undersøkelsen testes det for to slike effekter: Først, forventer vi større oppslutning om enkeltkandidater på lister der partiene i større grad overlater kandidatutvelgelsen til velgerne. Deretter, forventer vi at velgerne personstemmer uavhengig av kandidatenes listeplasseringer på de mer åpne partilistene. Vi tester de to argumentene ved å benytte oss av flernivåmodeller der individuell kandidatoppslutning modelleres med forklaringsvariabler på både kandidat-, parti-, og kommunenivå. Analysen viser at kandidater på mer åpne partilister får flere personstemmer sammenlignet med kandidater på lister der partiene tar med kontroll over kandidatutvelgelsen. Når partiene velger å kontrollere personvalget (i form av stemmetillegg til mange kandidater) blir rangering av kandidatene viktigere for kandidatoppslutningen. Videre viser analysen at kandidater som stiller til valg i primærnæringskommuner får flere personstemmer enn kandidater i andre kommuner. Et høyt antall representanter i kommunestyrene bidrar på den annen side til å redusere oppslutningen om kandidatene. På kandidatnivå viser analysen av velgerne og partiene er nokså enige om hvilke kandidater de foretrekker. Kandidater høyt opp på listene (spesielt toppkandidatene) og kandidater med tidligere politisk erfaring får høy uttelling i form av mange personstemmer.

1 Introduction

In multi-seat proportional systems (PR) both parties and candidates are potential agents of representation. The relative importance of these two actors of representation varies across electoral contexts (Shugart, Valdini and Suominen 2005:440). Even if the general trend in electoral reform is towards more open party lists, we «are only beginning to understand the consequences of such variations in electoral rules» (Ibid:446). The main question addressed in this study is how list type affects the performance of individual candidates. Previous research on individual candidate support has relied almost entirely on candidate characteristics in order to determine their popularity (Christensen and Midtbø 2007). Broader questions of how list type and campaign contexts shape candidate performance has been given scant attention in the political science literature. Furthermore, and as pointed out by Steenbergen and Jones (2002:234): «theory bridging the gap between micro and macro levels is still relatively scarce in political science». This study intends to explore this micro-macro gap by contextualizing the performance of individual candidates based on data from the 2007 Norwegian local elections. In addition to list type, we argue that social and cultural context are important sources of political information for voters about candidates. Hence, we estimate support for individual candidates by taking into account information at both the candidate-, party list- and municipal-levels.

Our main argument is that candidate popularity in a list proportional system (PR) depends on the openness of the preference voting system. A candidate-centered voting system influences the viability of candidates in elections, and should therefore be on the top of the list of possible party list-level explanations of candidate performance. The Norwegian local electoral system gives local parties considerable freedom to decide how much influence voters should have in the candidate selection process. Therefore it provides an especially suitable case to test hypotheses about how actual use of this freedom affects the support of individual candidates. We argue that when parties can choose between restricting voters' choice possibilities or to leave the candidate selection up to the voters, the choices made will affect not only the number of personal votes cast, but also the support for specific types of candidates. We test the argument through two hypotheses. First, we expect stronger support for individual candidates on party lists that provide voters with an open opportunity structure. Restricting voter choice, on the other hand, will lead to less overall support for candidates running on such lists. Second, on party lists where parties refrain from restricting preference voting we suggest that voters act more independently of the rank-ordering on the lists. In order to isolate the impact of the openness of the preference voting system we control for both municipal context and candidate-level predictors in the analysis. Thus, when we account for the variance in personal votes (percentages) on individual candidates we consider information at the candidate -, party - and municipal-levels. The analysis draws on a register-based dataset (actual performance records) for nearly all the candidates in the 2007 Norwegian municipal elections. By matching them with parties and municipalities we locate candidates in their campaign environments.

The article proceeds as follows. After briefly sketching the local political setting in Norway as well the preference voting system, we further present our theoretical expectations. We then give an overview of the data sources. Finally, using multi-level modeling techniques, we test our propositions based on candidate-level data from the last local election in 2007, as well as on party-level and contextual data. The analysis addresses the topic by adding candidate characteristics to aggregate, cross-level models. Applying so-called *random slope models*, we also consider whether specific candidate effects themselves are influenced by how parties use the preference electoral system. Hence, our goal is to estimate candidate-level effects, party-level effects and their interaction.

2 Norway: Local political setting and preference voting

Norway has a long-standing tradition of local democracy and self-rule. Although Norway is a unitary state, municipal authorities are formally independent institutions governed by elected councils. Currently there is a two-tier system consisting of 430 municipalities (*kommuner*) and 19 counties (*fylker*). The average size of the Norwegian municipality is about nine thousand inhabitants.

In the European literature, elections are commonly perceived as contests between political parties (Grofman and Lijphart 1986; Farrell 1997). However, electoral systems still vary in terms of incentives to cast preference votes for individual candidates (Katz 1986; Carey and Shugart 1995; Karvonen 2004; Grofman 2005; Van der Kolk 2007). In Norwegian *local* elections (opposed to national elections) voters choose not only between parties, but between candidates as well. It is a number of ways to combine preferential voting with a list system (Ibid). The preference vote may be separate from, and additional to, the party vote. Alternatively, the party vote may simply be the total of individual votes cast for affiliated candidates.

In Norwegian municipal elections preferential voting is optional. Voters may cast a personal vote, but they are not obliged to do so. Second, although the voters can vote for as many candidates as there are candidates on the list, candidates cannot be ranked. Third, voters can cast a personal vote for a fixed number of candidates from other lists (up to ¼ of the seats to be filled in the council) (*panachage*). Each voter writes down the names on the preferred candidates from another list in a special section on the ballot. Fourth, voters can only vote for a single candidate once, not twice as pointed out by Van der Kolk (2007:171). Neither can voters delete candidates from the party lists, and option that was annulled prior to the 2003 local elections. Seats in the council are divided among the party lists in proportion to the parties' share of the votes and among the candidates of each list in terms of their personal votes. Van der Kolk (2007:173) concludes that Norway belongs to the free list system category and that the electoral system is «relatively open». The degree of openness, however, depends on how local parties/lists choose to present their candidates. To counteract the effects of the preference votes the political parties can favor a limited number of their top candidates (giving certain candidates a so-called *Stemmetillegg)*. Depending upon the number of seats

to be filled in the council, candidates may receive an additional 0, 25 personal vote for every party ballot cast. In councils with 11 to 23 representatives lists can give stemmetillegg to up to 4 candidates, between 25 and 53 council members allow them 6 while the potential maximum number of candidates with stemmetillegg is 10 in the largest councils. The names of candidates with stemmetillegg are written in italics on the ballot paper. Obviously, these chosen few have a much higher probability of getting elected compared to other candidates. Candidates with stemmetillegg from the party have 25 percent more votes than other candidates before the personal votes are taken into consideration. Note however, that parties are free not to favor any candidates at all and by doing this they leave the candidate selection in the hands of the voters. Thus, voters supporting certain parties have more to say in the candidate selection process compared to those voting on other party lists.

3 Explaining individual candidate support

Previous research suggests a number of candidate-level influences on candidate choice like positions on the party lists, political experience and social background (Christensen and Midtbø 2007). For example, there is a strong and positive relationship between political experience and the number of personal votes. It can be argued that these candidate characteristics differ across locations and that this accounts for any apparent differences across parties and municipalities (Gainsbourgh 2005). However, we expect voters to relate their preferences for individual candidates also to the supply-side of politics, defined by what candidates and parties have to offer. We especially suggest that candidate popularity is conditional upon how local parties use the preference voting system to regulate voters' access to the candidates. In order to test our two main hypotheses we divide possible explanations of candidate attachment into three levels: influences on candidate-level, party-level and municipal-level. We start out by further discussing how parties can regulate the supply of viable candidates, before we look at possible municipal-level explanations. We end up with discussing the different candidate characteristics that have attracted most attention in the literature so far.

3.1 Party-level

At the party-level we propose that the support for individual candidates will depend on the number of viable candidates determined by the local party lists, the actual number of candidates on these lists and the type of list that the candidates run on.

First, c*andidate competition* should matter because Norwegian local parties/lists are in a position to choose either to control the ballot (issuing Stemmetillegg to many candidates) or to leave the candidate choice all up to the voters. We expect voters to be more stimulated to cast personal votes if their vote may have a significant impact on the outcome. We therefore suggest that candidate popularity is depended upon whether candidates run on a *relatively closed party ballot* or on a *candidate-centered ballot*. A relatively *closed ballot* indicates that the nomination and the rank-ordering of the candidates on the ballots are controlled by the parties/lists. On a *candidate-centered* ballot, on the other hand, voters choose candidates more freely. The more open the contest between the

candidates is, the more stimulated voters may become to cast personal votes and to choose candidates independent of how the parties have rank-ordered them. To measure the degree of voter influence, we include a variable that identifies how many candidates each party have given the initial advantage of 25 percent of party votes as personal votes. The variable should have a negative effect if relatively closed party ballots decrease individual candidate support. The total number of party lists in the analysis is 2876 and the average number of candidates with stemmetillegg on these lists is 12.3 per cent. 10.7 per cent of the lists did not issue stemmetillegg to any candidates at all.

Second, it can be argued that *a large number of candidates* on the ballots can make it more difficult for voters to pick their preferred candidate(s). The number of candidates varies from the minimum requirement of 7 to 84 candidates on the largest lists. We expect candidate choice to more difficult for voters on the larger lists. A variable measuring the number of candidates on the different lists is therefore included in the analysis.

A third characteristic factor that can be expected to influence personal voting is the *type of party lists* that the candidates run on. We consider the possibility that the electorate shows a greater interest for candidates on non-partisan local list. These lists continue to mobilize voters on a geographical basis, and provide outlets for voters who are primarily engaged in single (and local) issues (Aars and Ringkjøb 2005). We therefore expect more preference voting on candidates running on local lists. In the analysis candidates' running on local lists is therefore separated from the rest (4.3 per cent of the candidates).

3.2 Municipal-level

Gainsborough (2005:437) argues that voting research needs «increased attention to the political significance of place». Place (or context) is deemed important because it «influence what individuals learn and know about politics, and what can be recalled from memory for purposes of political judgment» (Cho et al 2006:158). Municipalities can affect the flow of information among voters, information that could be expected either to stimulate or to discourage individual candidate support. In the analysis we test for possible *cultural*, *social* and *campaign contextual* effects on candidate performance.

Based on the literature we include two possible municipal *cultural* explanations. Norris (2004) argues that social modernization affects the strength of social identities and party loyalties. The idea is that the shift from industrial to post-industrial society is associated with rising level of human capital. This has consequences for the political culture as can be seen in marked contrast in political behavior in industrial and postindustrial societies. Especially, in *traditional agrarian societies* Norris argue that voters are more rooted to local communities, while voters in post-industrial societies are characterized by more contingent patterns of party support. In other words: the modernization process has transformed the basis of individual voting behavior from the politics of loyalty towards the politics of choice (Ibid:19). In electoral research it is well documented that post-industrial societies have witness an ongoing trend in partisan and social dealignment (Dalton 2002). We therefore expect party loyalty to be stronger in less modernized municipalities, something that should lead to less preference voting.

However, voters in less modernized municipalities may cast more preference votes as a symbolic act of supporting their respective parties. That is, they cast personal votes for candidates favored by the parties (top candidates). As an indicator of modernization we include the number of people employed in the primary sector in each municipality. In addition to primary sector employment we also test for *population size*. Dahl and Tufte (1973), in their seminal work on size and democracy, argue that political participation tends to be higher in smaller communities compared to larger ones. The idea is that small size goes together with a more homogenous society, in which voters are more oriented towards individuals than collectives (here candidates rather than parties) (see Rose 2002). Previous Norwegian research has also shown that preference voting tends to decrease when the size of the municipalities increases (Christensen and Midtbø 2007). We therefore expect preference voting to be associated with small municipalities.

Furthermore, it is well known that *social conditions* may discourage participation (Cho et al 2006). Participation research shows that deprived neighborhoods are associated with lower participation rates. We expect this also to be the case in Norwegian municipalities, and that preference voting decreases when living conditions get worse. In order to measure local social and economic hardship (SES), we include an index of local SES in the analysis. Low scores on the index (closer to 0) indicates good living conditions, while higher scores (closer to 10) indicate poorer living conditions.

Preference voting may finally depend on the local *campaign context*. In municipalities with a *fragmented party system* it can be difficult for voters to choose their preferred candidate(s). The idea is that a lack of clear responsibility for policy outcomes makes it harder for voters to choose not only between parties, but between candidates as well. However, if a fragmented party system makes it difficult for voters to assess responsibility to parties, they may go for the candidate option instead. In the analysis we use Laakso and Taagepera's *effective number of electoral parties* as an indicator of party-system fragmentation (se Gallagher and Mitchell 2005:598–99). In 2007 the number of effective parties ranged from 1.6 to 6.9 in the municipalities (mean 4.5). Finally, we suggest that *district magnitude* affects personal voting. In Norwegian local elections the municipality is the electoral district, and the number of municipal council representatives varies from 11 in the smallest municipalities to 85 in the largest. We expect that competition between the candidates is more intense in the smaller municipalities compared to larger ones, something that should stimulate to more preference voting. Thus, high district magnitude should have a negative effect on individual candidate support. In order to measure this we simply include the number of council members elected from each municipality in the analysis.

3.3 Candidate–level

The analysis includes several candidate-level control variables, all variables that the literature on preference voting suggests are important for candidate popularity. The two most obvious reasons voters may have to support individual candidates are the candidate's position on the *party lists* and their *political experience* (Christensen and Midtbø 2007). Top candidates are more likely to get elected. They attract voters who do not want to waste their votes and the electorate should be more familiar with them through

the media. In the analysis we therefore separate top candidates from the others. In addition both Norwegian and international literature documents a strong correlation between candidates' position on the party ballot and their share of the personal votes, independently of the type of the personal election system (Norris et al. 1992; Rallings et al. 1998:123; Johansson 1999; Pedersen 1995; Elklit and Jensen 1997; Kjær 1997; Farell 1997; Christensen and Midtbø 2007). The candidate's position on the party list (1, 2, 3… etc.) are therefore included in the analysis. Also *political experience* seems to increase voter's willingness to support such candidates (Hazan 2002:115; Norris 2004:189). As a rough indicator of political experience, we include a variable that identifies candidates with previous experience as a mayor.

Finally, *age* and *gender* are included as control variables. The idea of a gender discriminating electorate goes back to Duverger's (1955:89) classical analysis of Norwegian municipalities. His conclusion was not clear-cut, but this «anti-feminist» element has lived on in Norwegian research where the preference vote system has been portrayed as one of the culprits behind the skewed gender representation in local politics (Hellevik and Skard 1985; Hellevik and Bjørklund 1995). Recent Norwegian and international research, however, questions not only the scope, but also the sheer existence of gender bias in preference voting (Christensen and Mitbø 2007; Norris et al. 1992:497-498; Rule and Shugart 1995; Welch and Studlar 1988:280; Caul 1999; Black and Erickson 2003; Karvonen 2004; Wängerud 1999, 2000). When it comes to *age* an analysis of the Swedish personal election reform concludes that younger candidates receive *more* personal votes than older candidates (Håkansson 1999:207). Age is measured through a dummy variable which distinguish candidates under the age of 35 from the rest. All variables included in the analysis together with their definitions are shown in table 1.

Table 1: *Independent variables and definitions*

Variable name	Variable description
Candidate-Level	
List position	The candidate's position on the list
Top candidate	Dummy=1 for candidate on top of the list, 0 otherwise
Male	Dummy=1 for male candidates, 0 for female
Young	Dummy=1 for candidates aged 35 or younger, 0 otherwise.
Mayor	Dummy=1 for mayors in the previous period.
Stemmetillegg	Dummy=1 for candidates with stemmetillegg, 0 otherwise.
Party-level	
Favoured candidate	Percent candidates favoured by local parties (stemmetillegg)
Number of candidates	The number of candidates on each party/local list
Non-partisan lists	Dummy=1 for candidates running on non-partisan lists, 0 otherwise
Municipal-Level	
Population size	The number of inhabitants
Primary sector	Percent of population employed in the primary sector of the economy
Number of parties	The effective number of electoral parties in the municipality
SES	Social economic hardship (index)
District magnitude	The number of council members in the municipalities

4 Data and method

The analysis draws on three types of data sets. The first set provides information on external characteristics for almost all of the candidates in the 2007 local elections, the second captures the party list-level variables while the third compromises the data at the municipal-level. The first dataset (collected by two Norwegian computer firms, ErgoEphorma and EDB Business partner), comprises 58600 candidates from 423 of the 430 municipalities.1 It contains information about the candidates' personal votes, gender, age, party attachment, party support, the position on the list before the voters' corrections, and the candidate's political experience. Candidates who have been given an additional vote (Stemmetillegg) by their party are also identified. In order to examine how list type (candidate competition) and context affects candidate performance the data from the candidate lists are linked to the party- and municipal- levels by geographic identifiers and list numbers. The party-level dataset includes information on candidate competitiveness (per cent candidates favored with Stemmetillegg), the number of candidates on each list and a dummy-variable (coded 1) for non-partisan lists. The municipal-level dataset includes information about the local party system (the effective number of electoral parties), district magnitude, population size, the number of employees in the primary sectors and an index measuring local social economic hardship (local SES). Descriptive statistics for all variables in the analysis is shown in table 2.

The dependent variable is the percentage personal votes for individual candidates. This includes both within-party preference votes and between-party preference votes (*panachage)*. Before presenting the models tested, we take a closer look at the distribution

[1] The seven municipalities omitted from the analysis are all small, and did not report their electoral results trough the databases provided by the two computer firms.

of the personal votes. Table 2 depicts the relative number of personal votes in the 2007 municipal elections. The average municipal council candidate received 6.2 per cent of the party votes as personal votes (sd. 10.6 percent). The personal votes were unequally distributed between the candidates. Several candidates running on small party lists even turned out to be far more popular than their own party (receiving more than 100 per cent of the party vote as personal votes). Detailed analysis shows that among the larger established parties, candidates from the Christian Democratic Party attracted the most personal votes, while the candidates from the Progress Party received the lowest share of personal votes (not shown). The average female candidate received 5.6 per cent personal votes, and male candidates turned out to be more popular than female candidates in all the established parties.

Table 2: *Descriptive statistics*

Candidate-level descriptive statistics					
Variable name	**N**	**Mean**	**SD**	**Minimum**	**Maximum**
Personal votes (per cent)	58600	6.22	10.62	0	225
List position	58600	14.20	10.59	1	85
Top candidate	58600	0.04	0.19	0	1
Male	58600	0.58	0.49	0	1
Mayor	58600	0.01	0.08	0	1
Young (under the age of 35)	58600	0.19	0.39	0	1
Party-level descriptive statistics					
Variable name	**N**	**Mean**	**SD**	**Minimum**	**Maximum**
Number of candidates	2876	21.53	10.62	7	90
Candidates with stemmetillegg (per cent)	2876	12.38	9.05	0	75
Non-partisan list	2976	0.04	0.20	0	1
Municipal-level descriptive statistics					
Variable name	**N**	**Mean**	**SD**	**Minimum**	**Maximum**
District magnitude	423	30.95	12.85	11	85
Population size	423	11023.83	32304.40	356	548617
Local social and economic hardship (SES)	423	5.47	1.91	1	9.70
Primary sector employment	423	8.43	6.28	0.20	29.10
The number of parties	423	4.21	1.08	1.63	6.95

The data we use are nested (clustered) and therefore not sampled independently of each other. The candidates represent distinct party lists and run in distinct municipalities. There are several ways to deal with this type of data-structure, but the literature recommend to specify multilevel models (Steenbergen and Jones 2002; Hox 2002; Snijders and Bosker 2004). This is also the approach followed here. The empirical analysis is made through five steps (Hox 2002:51–54). We start out by estimating so-called empty (also called «unconditional» or «null») models to determine the size and significance of the intraclass correlations. The latter is determined by Likelihood Ratio tests comparing varying intercept models with single intercept models. Next, we proceed to present a model with only candidate-level independent variables. The intention at this point is to see how much of the variance at the party- and municipal-

levels that can be explained by candidate-level variables. We then proceed to add the party-level variables, before we turn to the municipal-level explanatory variables. These last three steps are usually denoted as *variance component models* (Ibid:52). This means that so far our interest is to study the *intercept variance* in light of the different variance components for the candidate - party- and municipal levels. In other words: we assume that the intercept vary across party lists and municipalities (the level of individual candidate support), while the actual slope coefficients are fixed. In the final stage we move on to investigate if the slope for the list-position variable at the candidate-level has a significant variance component between the lists (*random coefficient model*). Thus, do the effects of list-position vary between the party lists? The fifth (and final) step is to test for the hypothesized cross-level interactions between list-position (candidate-level) and the number of favored candidates at the party-level.

5 Analysis

Is there significant variation in support for individual candidates at both candidate-, party- and municipality-levels? Model I in table 3 estimates the *empty model* and reveals the answer. The first column provides us with information on the variance at the candidate-, party- and municipal-levels. The results depicts that there is significant variability around the intercept when it comes to individual candidate support at all three levels (Level-1 variance=90.83, Level-2 variance=5.12 and Level-3 variance=22.21). To get an idea of how much of the overall variance in candidate support that is attributed to either the candidate-level, the party-list level or the municipal-level, the intraclass correlations (ICC) are calculated. The ICC measures the proportion of the variance of the dependent variable between candidates, party lists and municipalities. Since the dependent variable is measured at the candidate-level (Level-1) this level should also have the highest ICC score (Steenbergen and Jones 2002:231). The proportion of variance in candidate popularity between candidates is 77 per cent (that is 100 times 90.84/(5.12 + 22.21 + 90.84). More interesting, however, is that the party list and municipal-levels together account for 23 per cent of the variance in candidate support. The ICC scores also show that the two higher levels of analysis do not seem to play an equally important role. The party-level accounts for 4.3 percent of the variation, and seems to be less important for the variation in personal votes compared to the municipal-level which account for 18.8 percent of the variation in candidate support. Note, however that even quite small ICC scores can indicate considerable variation in the dependent variable (Ibid.). In our case 95 per cent of the party lists have a plausible value range when it comes to the number of personal votes between 3.5 and 12.3 per cent (i.e. 7.909776 ± 1.96 * sqrt(5.12195)). Thus, whilst candidates on some lists get a considerable amount of personal votes, candidates on other lists do not. Hence, the analysis so far confirms that it is worth to look closer at our hypothesis about possible party list effects on individual candidate support. The ICC scores also reveals that we cannot ignore the multilevel nature of candidate popularity, doing this would lead to incorrect statistical inferences (Ibid).

Table 3: *Multi-level regressions: Percent personal votes (Norwegian local elections in 2007). Random intercept models with robust standard errors.*

	MODEL I **Empty model**	**Model II** **Candidate-level**	Model III **Party-level**	Model IV **Municipal-level**	Model V **Final model**
Fixed Effects					
Constant	7.90*	5.55*	5.45*	5.49*	5.50*
Male		0.74*	0.73*	0.73*	0.73*
Young		-0.24*	-0.23*	-0.24*	-0.24*
Stemmetillegg (favoured)		4.94*	5.27*	5.26*	5.26*
List position		-0.18*	-0.17*	-0.17*	-0.17*
Top candidate		23.55*	23.37*	23.38*	23.38*
Mayor		3.88*	4.00*	3.97*	3.96*
Party-Level					
Local list			1.09*	1.04*	1.03*
Number of candidates			-0.09*	-0.08*	-0.08*
Candidates with stemmetillegg			-0.09*	-0.08*	-0.08*
Municipal-Level					
Primary sector employment				0.27*	0.25*
Population size				0.00*	0.00*
District magnitude				-0.12*	-0.12*
Number of parties				0.21	
Local SES				-0.31*	-0.31*
Random effects (variance components)					
Candidate-Level variance (σ^2)	90.84*	52.77*	52.77*	52.77*	52.77*
Intraclass correlation (ρ)	0.770				
Party-Level variance (τ_{00})	5.12*	5.67*	5.10*	5.10*	5.10*
Intraclass correlation (ρ)	0.043				
Municipal-Level variance (w_{00})	22.21*	18.08*	15.17*	9.48*	9.53*
Intraclass correlation (ρ)	0.188				
Deviance	433784.929	403005.222	402770.552	402594.655	402596.268
Deviance compared to previous model		30778.707*	234.670*	410.568*	408.955*
N Candidate-Level	*58 600*	58 600	58 600	58 600	58 600
N Party-Level	2876	*2876*	2876	2876	2876
N Municipal-Level	423	423	423	423	423

Note: Table entries are maximum likelihood estimates * P<0.01

The next question to address is whether the variance at the party- and municipal-levels holds when we the candidate-level explanatory variables are introduced in the model. Model II in the second column reveal the answer and show the ML estimates of the fixed effects and again we report the variance components at the three levels. First, model II clearly represents a significant improvement compared to the empty model (the difference in deviance is 30778.707, p<0.01). Furthermore, we see that all candidate-level variables are significant, but not equally decisive for the number of

personal vote. One step up on the party list gives around 0.18 percent more personal votes, and the top position itself is worth nearly 23.55 per cent personal votes. The extra vote from the party (stemmetillegg) is worth about 5 percent in personal votes. Previous experience as mayor also has a strong effect on the number of personal votes (3.88 per cent). According to model II female candidates receive 0.74 percent less personal votes than men, controlled for the other explanatory variables. Also young candidates (under 35) receive less personal votes, compared to older candidates (0.24 per cent).

Turning to the variance components model II show that all three remain significant after controlling for the candidate-level predictors. Comparing the candidate-level variance component with that of the empty model shows that the difference is 90.84 – 52.77=38.07. Relative to the size of the ANOVA variance this is a reduction of 38.07/90.84= 0.419. This means that the candidate-level variables explain about 42 percent of the candidate-level variance in personal votes. Thus, there are more left to explain at the candidate level. When it comes to the party list-level the candidate-level predictors explain around 11 per cent of the cross party list level variation in personal votes (that is 5.12–5.67/5.12=-0.107). This indicates that the model is not very successful at the party list-level, in which much of the variance in personal votes is still unaccounted for. Turning to the municipal-level the corresponding figure is 18.6 per cent (22.21–18.08/22.21). Thus, the candidate-level predictors contribute more at the municipal-level compared to the party list-level, but also here more variation is left to be explained.

The next step is to introduce the party list-level predictors in the analysis. Model III show the results after entering the three party list-level variables. Here we seek to explain why support for individual candidates varies between party lists controlling for determinants at the candidate-level. All three party list-level variables are considered simultaneously, and all have explanatory power. Comparing the deviance scores with the previous model again shows that model III represents a significant improvement compared to the previous model with candidate-level predictors only. Turning to our explanatory variables we see that candidates representing non-partisan local lists get (as expected) more personal votes compared to candidates on other lists.[2] The model also depicts that the number of candidates leads to less support for individual candidates. One additional candidate on a party list reduces the number of personal votes with 0.09 per cent. Importantly, however, model III confirms our first hypothesis, namely that candidates running on semi-closed list receive less personal votes compared to candidates running on more open party lists. A one per cent increase in the number of candidates with stemmetillegg reduces the number of personal votes with 0.09 per cent. Apparently, then, the way parties choose to present their candidates make a difference for how the candidates perform. Finally, model III reveal that the variance components at the two higher levels remains significant. Comparing the variance components with those of the empty model shows that the party lists-level variables (and the candidate-level predictors) explain about 39 per cent of the cross party variation in personal votes (i.e. 5.12–5.10/5.12). Taken together, the candidate- and party-level predictors reduce

[2] We have also tested the possibility that candidates on larger, well-established party lists received more attention from the media and the electorate and thus more personal votes. The variable failed to reach significance.

the cross municipal variation in candidate popularity by 29 per cent compared to the empty model. The variance component at the candidate–level is, as it should be, unchanged.

The two final columns in Table 3 show the results after adding our municipal-level predictors. Model IV reveal that the number of parties has no significant effect on individual candidate support, and is therefore omitted from the final model presented in the last column. The three other municipal-level variables, however, seems to be important for candidate popularity. Culture, at least the way it has been defined here, seems to affect the number of personal votes. In municipalities with a high number of farmers candidates are more likely to receive personal vote compared to other municipalities. Model V also suggests (as expected) that personal voting in poor municipalities tend to be lower than in the richer municipalities. Hence, personal voting requires not only resources at the individual level, but also at the municipal level as such. Limited resources should reduce the amount of political information which in turn should reduce the amount of personal voting. Turning to the local campaign context, we see that district magnitude reduces the support for individual candidates. One additional candidate in the council reduced individual candidate support by 0.12 per cent. Finally, the variance-components show that introducing the municipal-level variables lead to a further reduction in the variance on the municipal-level (from 15.17 in model III to 9.95). The variance component at the two other lower levels remains unchanged.

Finally, we turn to discuss the second basic argument. Do voters voting on party lists which do not restrict their opportunity structure act more independently of the rank-ordering on these lists? Table 4 addresses the argument through two stages. In the first column, we simply seek to explore whether the list-position variable at the candidate-level varies at the party list-level. Thus, we add a random slope coefficient to our model. The result reported in the first column indicate that the effect of list position at candidate-level do vary significantly across the party lists. Having a high position on a party list has different effects across the lists. Note also that the previous significant effect of the number of candidates at the party list-level is no longer significant, and therefore deleted from the final model. Also population size at the municipal-level moves closer to being a borderline predictor (t-value 2.505), which is somewhat surprisingly considering results in other studies. On reflection, though, it can be argued that any effect of municipal size on personal voting is likely to be in large part spurious or at least indirect. Size does say something about the degree of transparency in local politics. That said, size is included also in the final model. Nonetheless, the social and demographic composition of municipalities - which do vary with municipal size – might be even more important for personal voting than size as such. Indeed, this is what our analysis seems to indicate.

The final model (model VII) moves one step further by trying to explain the varying list position coefficient (again Table 4). In order to do this we include a cross-level interaction effect in the model to see whether the individual effect of list position is influenced by the number of candidates favoured at the party list-level. The results depict that the effect of list position is affected by the share of initial votes given to the candidates at the party list-level. This effect is not difficult to explain: If parties take

control of the lists through giving many candidates initial personal votes (stemmetillegg), then list position should be less important for voters as a tool to select candidates. Thus, the positive and significant interaction effect yields support to our initial argument. The effect of list position at the candidate-level is moderated when the party lists provides voters with an open opportunity structure.

Table 4: *Multi-level regressions (robust standard errors): Percent personal votes. Final model with random slope and cross-level interaction effect (Norwegian local elections in 2007).*

	MODEL VI: **Random slope**	**Model VII:** **Full model with cross-level interaction**
Fixed Effects		
Constant	3.73*	3.77*
Male	0.82*	0.82*
Young	-0.34*	-0.34*
Stemmetillegg (favoured)	5.30*	5.40*
List position	-0.45*	-0.45*
Top candidate	20.72*	20.69*
Mayor	5.58*	5.55*
Party-Level		
Local list	0.60**	0.61**
Number of candidates	-0.00	
Candidates with stemmetillegg	-0.09*	-0.8*
Municipal-Level		
Primary sector employment	0.16*	0.15*
Population size	-0.00**	0.000004**
District magnitude	-0.09*	-0.09*
Local SES	-0.23*	-.0.23*
Cross-Level interaction effects		
List position * candidates with stemmetillegg		0.01*
Random effects (variance components)		
Candidate-Level variance (σ^2)	43.38*	43.38*
Party-Level variance (τ_{00})	0.69**	0.71*
List position	0.29*	0.29*
Municipal-Level variance (w_{00})	4.84*	4.83*
Deviance	395149.797	395143.531
Deviance compared to previous model	7446.470*	25.509*
N Candidate-Level	*58 600*	58 600
N Party-Level	2876	*2876*
N Municipal-Level	423	423

Note: Table entries are maximum likelihood estimates. *P<0.01 ** P< 0.05

6 Conclusion

Elections are not only a contest between political parties. Many PR electoral systems allow voters a say in the election of individual candidates. Since the Norwegian local

electoral system gives parties considerable freedom to decide how much influence voters should have in the candidate selection process, it provides an especially suitable context to test hypotheses about how list type affects candidate popularity. Two basic arguments about how list type affects candidate support has been developed and tested in this analysis. First, we expected stronger support for individual candidates on party lists that provided voters with an open opportunity structure. Second, we suggested voters to act more independent of the rank-ordering on the party lists if provided with an open list. In order to test these arguments we have controlled for a wide range of predictors at both the candidate-, party list- and municipal-levels. The results reveal that the analysis supports both arguments. That said, several other contextual characteristics are important for the success of individual candidates within the framework of a partisan political system.

The most interesting finding is that the way which parties use the electoral system to determine voters influence matter for how individual candidates perform. The more candidate centered ballots, the stronger support for individual candidates. On party lists in which they take a stronger control over the candidate-selection process candidates receive fewer personal votes. The results also indicate that the strong effect of list position at the candidate-level is moderated by the number of candidates favoured at the party list-level. Introducing a cross-level interaction between list position (candidate-level) and favoured candidates at the party list-level shows that individual candidate effects are influences by how parties use the electoral system at the party list-level. The effect of the list position variable decreases when parties loosen their control over the party ballots, and let voters choose candidates in the order they prefer on a more open list.

Furthermore, the analysis finds support for the hypothesis that personal voting is lower in poorer municipalities. On the other hand, voters in municipalities with a high number of farmers are more likely to give a personal vote compared to voters in other municipalities. Population size, also affects personal voting with fewer personal votes on candidates running in larger municipalities. Finally, high district magnitude reduces the number of personal votes on the candidates. At candidate-level the result squares well with recent (but limited) international research. We find that list position has a decisive effect on the personal votes. Candidates on top of the list receive more personal votes than candidates at the bottom, and candidates at the very top receive more votes than anyone else. Candidates given priority by the parties in terms of stemmetillegg, also get numerous personal votes. That candidates with previous political experience tend to be more popular than inexperienced candidates is also as expected. The analysis also suggests that young candidates are less popular than older candidates, and that female candidates receive less personal votes than men. In sum the analysis reveals that list position and experience are the most important determinants of personal voting at the candidate-level. Our finding has implications for voter research seeking to explain candidate popularity both within and between countries. Candidate popularity is not merely a question of who the candidates are, but also on which party list they run and on constituency characteristics.

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