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Patterns of intra-election volatility: the impact of political knowledge*

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\textbf{ABSTRACT}

One key trend changing political environments across advanced industrial democracies is increasing electoral volatility. Despite extensive research, at the individual level we still know relatively little about the mechanisms behind electoral volatility during election campaigns, including the impact of political knowledge. Against this background and based on a four-wave panel study in the context of the 2014 Swedish national election, the purpose of this paper is to investigate (a) patterns of intra-election volatility and the impact of (b) political knowledge on patterns of electoral volatility. Distinguishing between party alienation, crystallization, wavering, reinforcement, and conversion, among other things, findings show some effects from political knowledge on patterns of electoral volatility but only for acquired political knowledge.

\textbf{KEYWORDS} Electoral volatility; campaign effects; political knowledge; election campaigns

One of the key trends changing political environments across advanced industrial democracies is increasing electoral volatility (Dalton, McAllister, and Wattenberg 2000; Drummond 2006; Mair 2008). The same holds true for Sweden, the case of this study. More and more voters are deciding which party to vote for during the election campaigns, and the share of voters switching parties between or during election campaigns has increased significantly. Between 1960 and 2014, the share of voters switching party between election campaigns (\textit{inter-election volatility}) increased from 11 to 36\%, while the share of voters switching parties during election campaigns (\textit{intra-election volatility}) increased from 7 to 17\% between 1968 and 2014 (Oscarsson 2016).

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In previous studies, scholars have mostly directed their attention to explaining inter-election volatility, focusing on social-structural predictors, such as education, age, personality traits, partisanship and political interest (e.g. Bakker et al. 2016; Dassonneville 2012; Lachat 2007; Söderlund 2008; Van der Meer et al. 2015). Yet, we know relatively little about the process of intra-election volatility and how people change their vote intention at the end of the funnel, while in fact many voters are still undecided during the campaign and change their mind at the last moment (Walgrave, Lefevere, and Hooghe 2010). This is partly because most studies on intra-election volatility rely on panel surveys with just two waves covering the “short” election campaign, usually with one pre- and one post-election wave.

The current study focuses on the dynamics of intra-election volatility and examines the patterns of change during the election campaign. It follows one of the first studies on voting behavior, which investigated the different types of campaign effects and types of changes during election campaigns (Lazarsfeld, Berelson, and Gaudet 1948). The current article distinguishes between five types of voting behavior during the election campaign: reinforcement, conversion, crystallization, wavering and alienation. This typology is partly based on the key distinction between activation, reinforcement, and conversion, made by Lazarsfeld, Berelson, and Gaudet (1948).

The distinction between different types of vote change allows for more detailed analyses of the dynamics of intra-election volatility and the impact of an important short-term factor, namely political knowledge. Understanding how low and high politically knowledgeable voters engage in the different types of voting behavior, is at the core of normative democratic theory (Strömbäck 2005). Although the impact of political knowledge (or sophistication) has received ample scholarly attention, current findings related to the impact of political knowledge are mixed and inconclusive (Albright 2009; Dassonneville 2014). Some studies find negative effects (Berelson, Lazarsfeld, and McPhee 1954; Dassonneville 2012; Lazarsfeld, Berelson, and Gaudet 1948), others find positive effects (Albright 2009; Dalton 2007), and a third line of studies proposes non-linear effects (Dassonneville 2014; Kuhn 2009; Van der Meer et al. 2015). One explanation for these different findings is that the difference between inter- and intra-election volatility has been neglected, while the mechanisms for both phenomena might differ (Dassonneville 2014). We argue that mechanisms might even differ for different types of vote change within the phenomenon of intra-election volatility.

Against this background, this paper seeks to contribute to extant research by investigating (a) patterns of (intra-election) volatility and the impact of (b) political knowledge on patterns of electoral volatility. Inspired by the classical study by Lazarsfeld, Berelson, and Gaudet (1948) on the different types of voting behavior during election campaigns, we will examine patterns of change during an election campaign, and test whether these patterns can be explained...
by political knowledge. Empirically, we will employ a four-wave panel study during the 2014 national elections in Sweden, which enables us to study patterns of vote change during the last five months of the election campaign.

**Electoral volatility: types of changes**

In Western democracies, voting behavior has become increasingly volatile over the past decades (Dalton and Wattenberg 2000; Mair 2008). This phenomenon of electoral volatility is generally defined as “the changes in party preference within an electorate” (Crewe 1985, 8). In Sweden, this trend towards increasing levels of electoral volatility has partly been explained by the greater supply of parties (Oscarsson 2016), indicated by the rise of the number of parties in parliament from five to eight between 1988 and 2010 (see also Dassonneville, Blais, and Dejaeghere 2015).

However, the key explanation behind increasing electoral volatility has been the declining importance of traditional cleavages and weakening attachment between parties and voters (Dalton 2000; Franklin, Mackie, and Valen 1992; Oscarsson and Holmberg 2016). Another source of dealignment is a process of cognitive mobilization (Dalton 1984, 2007; Schmitt-Beck, Weick, and Christoph 2006), which refers to a process whereby voters, due to rising levels of education, now possess the skills and resources to make independent political choices without reliance on traditional loyalties. Recent research on the causes of electoral volatility has also found evidence supporting this view of emancipated voters (Oscarsson 2016; Van der Meer et al. 2015), although extant research is not conclusive (see below). Nevertheless, considering the decreasing impact of long-term factors on voting behavior, short-term factors, like election campaigns, have become more important for explaining vote choice (Dalton 1984, 2000; Geers, Bos, and De Vreese 2017; Jennings and Wlezien 2016; Johann et al. 2017; Strömbäck 2016).

More insight in the short-term factors explaining vote choice requires more detailed analyses of the dynamics of voting behavior during election campaigns. Therefore, the current study focuses on intra-election volatility and distinguishes between five types of voting behavior during the election campaign: crystallization, conversion, reinforcement, wavering and alienation. In the remainder of this section, we provide a theoretical rationale for each type of voting behavior, which largely follows the typology of the classical study by Lazarsfeld, Berelson, and Gaudet (1948). In this classical study, the general view was that campaigns only have minimal effects to alter political attitudes and preferences. Since then, scholars have however broadened the definition of campaign effects, arguing that campaigns not only have a persuading role in changing voters’ party preferences, they may also have an activating and informational role helping undecided voters to acquire a vote choice (Arce-neaux 2006; Hillygus 2010; Hopmann et al. 2010; Nadeau et al. 2008).
The process of acquiring a vote choice during the election campaign is referred to as *crystallization*, “which is when a voter’s latent support for a party changes into an actual vote” (Geers, Bos, and De Vreese 2017). It is grounded in the theoretical idea of activation, which was in fact introduced already by Lazarsfeld, Berelson, and Gaudet (1948), who stated that “what the campaign does is to activate [voters’] political predispositions” (73). According to several studies (Andersen, Tilley, and Heath 1999; Lazarsfeld, Berelson, and Gaudet 1948), the most important campaign effect is in fact to activate existing predispositions. This means that while voters might be doubting their party preference before or at the beginning of an election campaign, their latent predispositions should transform into a manifest vote during the course of a campaign. Activation may thereby lead to *crystallization* (Geers, Bos, and De Vreese 2017; Lazarsfeld, Berelson, and Gaudet 1948; Strömbäck and Shehata 2013).

*Conversion* was originally considered as voting out of line with one’s predispositions (Lazarsfeld, Berelson, and Gaudet 1948). The results of early studies led to the conclusion that very few people actually are converted by the campaigns. On the one hand, the people who were most exposed to the campaign, were most resistant to conversion because of their strong predispositions. On the other hand, voters who were most open to conversion had low political interest and thus were exposed the least. The voters that were converted by campaign efforts, were exposed to campaign propaganda in opposition to their predispositions and voted “in line with the propaganda and out of line with their predispositions” (p. 96). There was only a small number of converters who were highly politically interested and confirmed to the ideal of the rational democratic voter, as they had weak predispositions and could “afford” conversion through thought. Since then, many studies have however shown that voters do switch from one party to another, either between or within election campaigns (Dalton, McAllister, and Wattenberg 2000; Dassonneville 2014; Mainwaring, Gervasoni, and Espina-Najera 2017; Mair 2008). Still, the question remains whether these converters are indeed highly interested in and knowledgeable about politics or rather uninformed floating voters.

This study also identifies *wavering* as a type of voting behavior, where people several times change voting intention or between having and not having a vote intention. In two-wave panel studies changing from one party to another is often identified as conversion. However, it is not always clear whether changes in party preferences should be classified as conversion, in the sense that respondents abandon a party and truly form a preference for another party. As noted by Kuhn (2009): “What is e.g. characterized as conversion is just as likely to represent ambiguity between two parties […] indicated by switching in and out of party preference”. It might also be the case that voters increasingly and for tactical reasons vote for another party than the
one they prefer the most (Oscarsson 2016), or waver between different parties and/or not having any voting intention.

Another type of campaign effect that Lazarsfeld, Berelson, and Gaudet (1948) identified is *reinforcement*, which refers to the strengthening of the preference for the original voting decision. In terms of stability and change, reinforcement manifest in stability in voting intention, but nevertheless represents change in that people’s intention to vote for a particular party is strengthened during and because of election campaigns. The underlying mechanism is that voters who identify with a certain party are expected to selectively expose themselves to or pay attention to campaign information that is supportive of their preferred party (Kunda 1990; Lodge and Taber 2013), which reinforces their original voting intention and prevents them from changing voting intention during an election campaign.

The same logic applies if someone starts out without a voting intention and never forms one: that might also be conceptualized as a form of reinforcement, leading people to abstain from voting. In the current study, we refer to this process as *party alienation*. In previous studies, abstaining from voting has been related to a lack of political efficacy, increased political cynicism and overall political dissatisfaction (e.g. Dassonneville, Blais, and Dejaeghere 2015; Zelle 1995). Voters can either be dissatisfied with a particular party or with all parties and the political system at large (Gidengil et al. 2001), which leads voters to abstain from voting.

Summing up, theoretically it is thus possible to distinguish between five processes and types of voting behavior during an election campaign: *reinforcement*, where people start out with a voting intention and stick to that throughout an election campaign; *conversion*, where people start out with a voting intention but end up voting for another party; *crystallization*, where people go from having no voting intention to acquiring one; *waverning*, where people several times change voting intention or between having and not having a vote intention; and *party alienation*, where people start out without and never form a voting intention. The share of voters belonging to each of these categories is however uncertain, particularly when studied over a longer period than just the final weeks of an election campaign. Thus, our baseline research question is:

RQ1: What is the share of voters crystallizing, wavering, converting, staying with the same party, and remaining alienated from the parties over the course of an election campaign?

**Political knowledge and electoral volatility**

One of the short-term factors that plays a central role in the explanation of electoral volatility is political knowledge. One of the first empirical studies into voting behavior concluded that voters who switch parties are uninterested in and uninformed about politics (Lazarsfeld et al. 1948). However, later research
has claimed that the process of cognitive mobilization (Albright 2009; Dalton 1984, 2007) might stimulate voters to make independent informed political choices without reliance on traditional loyalties. The link between political knowledge and electoral volatility has also been established by various studies, although evidence is mixed. With respect to intra-campaign volatility, some studies claim that the least knowledgeable voters are the most likely to switch from one party to another (Berelson, Lazarsfeld, and McPhee 1954; Dassonneville 2012; Lazarsfeld, Berelson, and Gaudet 1948), whereas others claim that the most knowledgeable voters tend to make more independent vote choices, leading them to switch occasionally (Albright 2009; Dalton 2007). A third line of studies have found curvilinear effects (Dassonneville 2014; Kuhn 2009; Van der Meer et al. 2015), claiming that the less knowledgeable voters are less likely to receive political information while the highly knowledgeable are unlikely to accept the received political information if it challenges their beliefs, opinions or voting intentions. Hence, the group of voters which is most likely to be volatile are the moderately knowledgeable. Such findings are in line with Zaller’s RAS (receive-accept-sample) model, according to which opinion change is most likely among those who are moderately politically aware or knowledgeable (Zaller 1992).

In the context of this study, we are particularly interested in how political knowledge is related to each of the five categories of voter behavior outlined above: crystallization, reinforcement, conversion, wavering, and party alienation. We expect political knowledge to have a positive effect on crystallization. The underlying reason is that knowledgeable voters who are undecided at the start of the campaign might be searching for additional information until the last moment, in order to cast an informed vote (Irwin and Van Holsteyn 2008). Previous research has shown that voters with higher confidence in their political knowledge (i.e. political efficacy) are more likely to turn out (Möller et al. 2014) and crystallize their vote choice (Geers, Bos, and De Vreese 2017). The question remains whether this also applies to possessing actual political knowledge, besides having confidence in one’s own political knowledge. Based on the positive association between political efficacy and knowledge (Jung, Kim, and de Zúñiga 2011) the expectation is that:

H1: Political knowledge will have a positive effect on crystallization, in that highly knowledgeable voter are more likely to acquire a vote choice over the course of the election campaign.

Following Zaller’s RAS model, and in line with the studies which found curvilinear effects, we expect that voters who are moderately political knowledgeable are more likely to change their opinion and consequently convert from one party to another (Dassonneville 2014; Kuhn 2009; Van der Meer et al. 2015; Zaller 1992). In line with this reasoning, both the less knowledgeable and the highly knowledge voters – albeit for different reasons – are less likely
to change their opinions and preferences. The less knowledgeable voters are less likely to receive the political information necessary to make opinion and preference change possible. The highly knowledgeable voters, on the other hand, are more likely to receive this information, but unlikely to accept it if it challenges their opinions and preferences. Therefore, both the less and highly knowledgeable voters are more likely to remain stable in their party preference during the election campaign. This leads to the following hypothesis:

H2: Political knowledge has a curvilinear effect on reinforcement and conversion, in that (a) both less and highly knowledgeable voters are likely to reinforce their vote choice and (b) moderately knowledgeable voters are likely to convert from one party to another.

Based on findings that there are positive linkages between political knowledge or sophistication, party identification, and stability in vote choice (Albright 2009; Dalton 2007; Dassonneville 2014; Kuhn 2009; Schmitt-Beck, Weick, and Christoph 2006), we expect that political knowledge will have a negative effect on party alienation and wavering. This expectation might seem to contradict our expectation in hypothesis 1a that less knowledgeable voters are likely to reinforce their vote choice. However, whereas partisanship has weakened among the highly knowledgeable voters due to a process of cognitive mobilization (Albright 2009; Dalton 2007), habitual party loyalties might still influence the less knowledgeable leading to reinforcement for those who already have a party preference at the start of the campaign. Yet, less knowledgeable voters who start out without a voting intention at the beginning of the election campaign are less likely to receive and process the political information necessary to form a party preference (Price and Zaller 1993), leading to party alienation. Following the floating voter hypothesis (Berelson, Lazarsfeld, and McPhee 1954), another possible expectation is that – due to a lack of knowledge about and interest in politics – less knowledgeable voter randomly switch from one party to another over the course of the campaign. Rather than abandoning a party and truly converting to another party based on an informed decision, they might simply waver between different parties. Against this background, we hypothesize that:

H3: Political knowledge will have a negative effect on party alienation and wavering, in that less knowledgeable voters are more likely to (a) abstain from voting or (b) randomly change their vote intention several times.

Case selection, methodology, and data

To answer the research question and test the hypotheses above, this study will focus on the case of Sweden and the election campaign in 2014. While the political system used to be characterized by stability in terms of what parties were represented in parliament, that has changed (Aylott 2016). The
most obvious illustration of this is that the number of parties in the Swedish parliament has risen from five to eight between 1988 and 2010.

Since the 1990s, the Swedish political system has thus been characterized by greater instability. At the same time, research shows that party identification has weakened while both inter-election and intra-election volatility has increased. As mentioned above, between 1968 and 2014, the share of voters identifying with a particular party decreased from 68 to 25%, while intra-election volatility increased from 7 to 17% (Oscarsson 2016; Oscarsson and Holmberg 2016). These developments are of course related, with weakening party identification opening up for increasing volatility and new competitors and an increasing supply of parties further eroding party identification and increasing volatility (Oscarsson 2016; Oscarsson and Holmberg 2016). Taken together, this makes Sweden an interesting case to study electoral volatility per se and the impact of political knowledge and media use on electoral volatility.

Panel survey

Empirically, we will use a four-wave panel survey conducted in 2014. The sample was drawn using stratified probability sampling from a database of approximately 35,000 citizens from a pool of Web survey participants. Those included in the pool are recruited continuously using random digit dialing. The recruitment is thus based on random probability samples, and no self-selection is allowed. Of those invited to be part of the pool of respondents, approximately 7.8% agree. The pool of Web survey participants covers different segments of the population and is largely representative for the population in terms of sociodemographic characteristics. The probability sample of 6,899 respondents, ages 18 to 75, from this pool was stratified by gender, age, and county of residence. They were asked to complete a Web survey several times during a period of about five months. Only those who completed the first wave of the survey (52%) were invited to take part in the following three waves. The first wave was in field from April 11–22, wave 2 from May 26 to June 4, wave 3 from August 1–13, while wave 4 was in field immediately following the national election, from September 15–24. In total, 2,281 respondents participated in all four waves, yielding a total cooperation rate of 33% (Cooperation Rate 2, American Association for Public Opinion Research). This sample is largely representative in terms of key sociodemographic characteristics such as age, gender, and education, albeit with some overrepresentation of those with higher education.

Measures

The dependent variable is based on one variable in the panel dataset measured at four points in time. In wave 1, 2 and 3, respondents were...
asked which party they would vote for if an election to Riksdagen (the national parliament) was held today. In wave 4, the post-election wave, respondents were asked which party they voted for in the election to Riksdagen. Based on this variable, we constructed a dependent variable with five possible outcomes: (1) reinforcement: staying loyal to the same party throughout the election campaign, (2) conversion: starting out with a preference for one party and ending up voting for another party, (3) crystallization: changing from “don’t know” to acquiring a party preference during the course of the election campaign, (4) wavering: changing between parties or between don’t know and having a party preference several times, (5) party alienation: never indicating a party preference, i.e. responding “don’t know” in the first three waves, and “not voted” in the fourth, post-election, wave.

Turning to our independent variables, one key independent variable is political knowledge. Such knowledge might be stored or acquired during an election campaign. In this study, we take both types into account. Stored political knowledge is measured at wave 1 with a battery of ten knowledge questions (e.g. “How many parties form part of the Swedish government?”), resulting in a stored political knowledge index ranging from 0 to 10. Acquired political knowledge is measured in each subsequent wave with a battery of six knowledge questions asking about event that took place between panel waves (e.g. “Who was recently appointed as new President of the European Commission?”). This resulted in an acquired political knowledge index ranging from 0 to 6 for the average level of acquired political knowledge across wave 2 to 4.

We also included several control variables, starting with the usual socio-demographic variables, measures at wave 1: age (M = 47, SD = 17) and gender (52% male, 48% female. In addition, we controlled for various individual predispositions measured at the first wave: political cynicism, ideological extremity, and internal political efficacy. Political cynicism is measured by an item asking people to what extent they agree with four statements about Swedish politicians (e.g. “Swedish politicians usually keep their election promises”). In our analysis, we will use the average score of those four statements, measured on a 5-point scale ranging from “do not agree at all” to “agree completely” (Cronbach’s alpha = 0.78, M = 3.38, SD = 0.88. Ideological extremity was measured a question asking people where they would place themselves on an 11-point ideological left-right scale. This variable was recoded so that 1 denotes being in the middle of the political spectrum, while 6 denotes being either at the left or right extreme end. Internal political efficacy, finally, represents the average score of 4 items (e.g. “I think I know enough to participate in politics”) measured on a 4-point scale ranging from “completely disagree” to “fully agree” (Cronbach’s alpha = 0.74, M = 3.13, SD = 0.72). Scores were converted so that all high scores meant high efficacy and low scores meant low efficacy. The exact wordings of the dependent and independent variables are included in the Online Appendix.
Data analysis

We will start with a descriptive analysis of the different patterns of vote change. After an analysis of the descriptive results, the findings of an explanatory model for the effects of political knowledge and political news exposure on vote change will be presented. To analyze the effects of political knowledge and thereby test our hypotheses, the different patterns of vote change will serve as the dependent variable in the explanatory model. In these analyses, the dependent variable has four categories: (1) reinforcement, (2) conversion, (3) crystallization, and (4) wavering. These are compared against a fifth base category – party alienation – in a multinomial logistic regression model. Besides the estimates of the multinomial logistical regression model, we will also present the predicted probabilities of the key independent variables.

Results

In order to look at patterns of intra-election volatility, we only include respondents who participated in all four panel waves in our analyses (N = 2,281). First of all, we will address RQ1 and examine individual patterns of vote change over the course of the campaign. In order to do so, we classified the individual patterns of vote change during the election campaign into one of the following categories: reinforcement, conversion, crystallization, wavering and party alienation.

In Figure 1, the frequencies of the different patterns of vote change over the course of the election campaign are shown.

As can be seen, the results show that the largest share of respondents (58%) stayed with the same party throughout the election campaign. If anything, the

![Figure 1. Patterns of vote change over the course of the election campaign (%).](image-url)
election campaign served to reinforce the voting intention of those in this category. The second largest share of respondents (19%), in contrast, was waver-
ing and changed party preference or between having and not having a voting
intention several times. The third largest share of respondents also changed
voting intention, but only once. These are the converters, and this group
encompasses 15%. This is a larger share than the group of crystallizers (7%),
who changed from having no voting intention to acquiring one during the
course of the campaign. In contrast, only 1% of respondents started out
without a voting intention and never forming one, thus remaining alienated.

In terms of conversion and crystallization, where people changed party
once or acquired a voting intention during the campaigns, we also analyzed
the timing of the change. These results (not shown) suggest that most
changes took place towards the end of the election campaign. More speci-
fically, 64% of those who crystallized did it between the last two panel waves,
while the corresponding share among converters was 52%. These results
suggest that both the “long” and the “short” election campaign matters,
while also confirming that people increasingly make their vote choice
during the “short” election campaign (Oscarsson and Holmberg 2016).

To find out whether respondents belonging to the category “reinforce-
ment” indeed strengthened their preference for their original voting inten-
tion, we also examined the degree to which respondents describe
themselves as convinced supporters of the party they intended to vote for.
Figure 2 displays the degree of support for the mentioned party throughout
the campaign in the reinforcement subsample. It shows that most respon-
dents in the reinforcement subsample are either somewhat or very convinced
supporter of their mentioned party. In addition, the results also show that the

![](image.png)

**Figure 2.** Degree of support for the preferred party in the reinforcement subsample (%)
share of respondents who describe themselves as very convinced supporters of the party first decreases (in wave 2) and then increases toward the end of the campaign. Therefore, it seems that the voting intention of these voters indeed was reinforced during the election campaign.

Altogether then, the results confirm two key findings from previous research: that contemporary election campaigns are characterized by a high degree of volatility, and that many decide which party to vote for only towards the end of the election campaigns (Oscarsson and Holmberg 2016). Since crystallization, conversion and reinforcement mostly occur towards the end of the election campaign, one could assume that these changes are influenced by the election campaign and that election campaigns in that sense matter. The question is whether these changes can be explained by respondents’ political knowledge and political news exposure.

Explaining vote changes: the effect of political knowledge

In Tables 1 and 2 the estimates of the multinomial logistic regression models testing the impact of political knowledge on vote change are presented. H1 predicted that political knowledge will have a positive effect on crystallization. We found no significant effect of stored political knowledge, but we did find a positive effect of acquired political knowledge on crystallization. This means that political knowledge that is acquired during the campaign, leads to acquiring a party preference during the campaign. Given the relative nature of the multinomial logit coefficients, we also present the effects in terms of predicted probabilities. In that way the effects of variables on a certain outcome can be interpreted more straightforwardly, irrespective of the particular reference category that is chosen. Table 3 shows that among voters with a low level

Table 1. Multinomial logistic regression for the effect of political knowledge on different types of volatility (base category is “party alienation”).

<table>
<thead>
<tr>
<th></th>
<th>Reinforcement</th>
<th>Conversion</th>
<th>Crystallization</th>
<th>Wavering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.034 (0.019)†</td>
<td>0.022 (0.019)</td>
<td>0.017 (0.019)</td>
<td>0.024 (0.019)</td>
</tr>
<tr>
<td>Gender</td>
<td>−0.196 (0.585)</td>
<td>−0.157 (0.593)</td>
<td>0.236 (0.602)</td>
<td>0.066 (0.589)</td>
</tr>
<tr>
<td>Political cynicism</td>
<td>−0.012 (0.338)</td>
<td>0.086 (0.342)</td>
<td>0.314 (0.347)</td>
<td>−0.005 (0.340)</td>
</tr>
<tr>
<td>Political efficacy</td>
<td>1.555 (0.514)**</td>
<td>1.500 (0.519)**</td>
<td>0.559 (0.524)</td>
<td>1.100 (0.516)**</td>
</tr>
<tr>
<td>Ideological extremity</td>
<td>1.141 (0.316)***</td>
<td>1.087 (0.317)***</td>
<td>0.678 (0.319)*</td>
<td>0.935 (0.316)***</td>
</tr>
<tr>
<td>(Storred) pol. knowledge</td>
<td>−0.092 (0.127)</td>
<td>−0.099 (0.129)</td>
<td>−0.082 (0.130)</td>
<td>−0.071 (0.128)</td>
</tr>
<tr>
<td>(Acquired) pol. knowledge</td>
<td>0.737 (0.378)†</td>
<td>0.674 (0.382)†</td>
<td>0.842 (0.385)*</td>
<td>0.761 (0.380)*</td>
</tr>
<tr>
<td>Intercept</td>
<td>−4.207 (2.216)</td>
<td>−4.843 (2.248)</td>
<td>−3.333 (2.276)</td>
<td>−3.369 (2.228)</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>−2426.063</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nagelkerke $R^2$</td>
<td>0.145</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

†p < 0.10.
* p < 0.05.
** p < 0.01.
*** p < 0.001.

Note: N = 2,281. Entries are unstandardized regression coefficients from a multinomial logistic regression model. Standard errors are reported in parentheses.
of (acquired) political knowledge, the predicted probability of crystallization was .06. By comparison, among respondents with a high level of (acquired) political knowledge, the predicted probability of crystallization was 0.10. Therefore, H1 is supported.

H2 predicted that political knowledge will have a curvilinear effect on reinforcement and conversion. The results in Table 2, however, show no significant curvilinear effects of either stored political knowledge or acquired political knowledge on any of the types of electoral volatility. Therefore, neither H2a nor H2b are supported. We do however find a positive significant effect of internal political efficacy on reinforcement and conversion.

H3 predicted that political knowledge will have a negative effect on party alienation and wavering. We found no significant effect of either stored or acquired political knowledge on party alienation. With regard to wavering, the results presented in Table 1 suggest a significant effect of political knowledge, but opposite to the hypothesized effect. Thus, H3a and H3b are not supported. Instead, Table 1 shows that acquired political knowledge has a significant positive effect on wavering. In terms of predicted probability Table 3 shows that among voters with a low level of (acquired) political knowledge, the predicted probability of wavering was .18. By comparison, among respondents with a high level of (acquired) political knowledge, the predicted probability of wavering was 0.20.

Altogether then, the results suggest somewhat limited effects of political knowledge on reinforcement, conversion, crystallization, wavering, and party alienation. To the extent that there are effects, the results furthermore show that it mostly applies to acquired political knowledge. More specifically,
the findings show that there are differences between the effects of stored and acquired political knowledge, in that we do not find any effects for stored political knowledge, while we do find effects for acquired political knowledge. Thus, if reinforcement, conversion, crystallization, wavering and party alienation are influenced by political knowledge, these forms of voter behavior appear to be affected only by knowledge which is acquired during the election campaign.

**Discussion**

Increasing electoral volatility is without doubt one of the key trends changing political environments across advanced industrial democracies (Dalton, McAllister, and Wattenberg 2000; Drummond 2006; Mair 2008). This includes Sweden, where more and more voters are deciding which party to vote for and switch parties during the election campaign. Yet, we know relatively
little about the mechanisms behind intra-election volatility, partly because existing panel studies usually only examine changes between one pre- and one post-election wave.

In contrast, the current study focused on more detailed analyses of the dynamics of intra-election volatility and examined patterns of change during the 2014 Swedish election campaign. We aimed to examine whether these patterns can be explained by political knowledge and political news exposure. First of all, we distinguished between five types of voting behavior during the election campaign: reinforcement, conversion, crystallization, wavering and alienation. The results show that the largest share of voters stay with the same party throughout the election campaign. Additional analyses showed that most voters who have a stable party preference are either somewhat or very convinced supporter of their mentioned party. The ones who describe themselves as very convinced supporters even increase towards the end of the campaign. It thus appears as if the election campaign mainly served to reinforce the voting intention of those who started out with a preference for a specific party. The second largest share of voters was wavering and changed party preference or between having and not having a voting intention several times. This finding highlights the need to examine patterns of vote change throughout an entire campaign instead of examining change between just two waves. In two-wave panel studies, changes in party preferences might be wrongly classified as conversion (or crystallization) if a voter once change voting intention and/or not having a voting intention. What is characterized as conversion might however instead represent ambiguity between two parties (Kuhn 2009) or indicate that voters – presumably for tactical reasons – vote for another party than the one they prefer the most (Oscarsson 2016).

The results also show that a share of voters can truly be classified as converters, in the sense that they change their vote intention once and end up voting for another party than the one they intended to in the early phase of the campaign (Lazarsfeld, Berelson, and Gaudet 1948). There is also a group of voters that change from having no voting intention to acquiring one during the course of the campaign, and that can be described as crystallizers.

In the second part of this study we aimed to find out whether these changes can be explained by voters’ political knowledge. Based on previous theory and research, we expected political knowledge to have a positive effect on crystallization, a negative effect on party alienation and wavering, and a curvilinear effect on conversion and reinforcement. The results indeed show a significant positive effect of political knowledge on crystallization, in line with our expectations. More specifically, we found that political knowledge which is acquired during the election campaign increases the chance of acquiring a vote choice towards the end of the campaign. The
campaign thus matters. Further investigation is necessary to understand how political knowledge is acquired during the campaign, i.e. what are the predictors of acquired political knowledge? Previous research has shown that specific forms of media coverage, like news on issues, leads to crystallization (Geers, Bos, and De Vreese 2017). Possibly, voters acquire political knowledge through exposure to issue related coverage, which in turn leads to acquiring a vote choice. This hypothesized mediated relationship would be interesting to test in future studies. At least, the finding that political knowledge increases the chance of crystallization complements findings from previous research which have shown that voters with higher confidence in their political knowledge (i.e. political efficacy) are more likely to turn out (Möller et al. 2014) and crystallize their vote choice (Geers, Bos, and De Vreese 2018).

For reinforcement and conversion we found no significant curvilinear effects of political knowledge. Whereas Zaller’s RAS model predicts that the moderately knowledgeable voters are most likely to change their opinion and thus are most likely to switch parties, we do not find such effects in this study (Zaller 1992). The other expectation we inferred from this reasoning, namely that the least and most knowledgeable voters are most likely to reinforce their vote intention, was also not supported by the data. A possible explanation for these non-significant findings is that turnout in Sweden is high – 86% in the 2014 national elections – and a large share of the Swedish voters are highly interested in politics (Strömbäck 2016). Furthermore, in this specific panel survey the higher educated respondents were slightly overrepresented. Due to the high level of turnout, education and political interest, which is often used as a proxy for political knowledge, differential effects are less likely to occur. Therefore, the relationship between political knowledge and the different patterns of vote change should also be tested in other electoral contexts for a better understanding of the effects. Although we do not find effects of political knowledge on conversion and reinforcement, the results show that internal political efficacy contributes to both types of vote change. These results suggest that voters’ subjective beliefs in their own competence to understand and participate in politics matters more than their actual level of political knowledge (Geers, Bos, and De Vreese 2017). The implications of these findings are discussed below.

In either case, while stored political knowledge does not have any effects on reinforcement, conversion, crystallization, and wavering, acquired political knowledge matters. Acquired political knowledge leads to crystallization among the voters who are undecided during the campaign and dampens wavering. It thus seems that higher levels of acquired political knowledge leads to less random vote switching. For voters who convert or reinforce their party preference it is their confidence in their own political knowledge that seems to matter. From a normative democratic perspective, these are optimistic findings. The importance of an electorate that is informed on
political issues and that participates in the political process is stressed in most models of democracy (Strömbäck 2005). It required that citizens have confidence in their own political knowledge, but also possess a certain level of political knowledge in order to reach a “correct” voting decision. This study shows that (acquired) political knowledge and political efficacy both have an effect on the voting decision process, albeit on different types of decisions, implying that voters are, at least to a certain extent, are making informed vote choices.

Considering that there is virtually no previous research on the effects of political knowledge on reinforcement, conversion, crystallization, alienation and wavering, this study should be perceived as exploratory. Most important are the findings suggesting that political knowledge does – in some cases – matter. Since we find that especially acquired political knowledge matters, it is necessary to understand the antecedents of political knowledge that is acquired during the election campaign. Based on previous research, we expect that exposure to political news during the campaign is an important predictor of acquired political knowledge and political efficacy, and thus indirectly predicts vote change (e.g. Geers, Bos, and De Vreese 2017; Hopmann et al. 2010; Johann et al. 2017; Kleinnijenhuis et al. 2006). Since our data did not allow for studying the impact of media exposure, testing this expectation is an important avenue for future research.

Nonetheless, this study succeeded in revealing patterns of vote change over the course of the campaign and highlights the need to move beyond two-wave panel studies in order to rightly classify changes in party preferences as conversion, or crystallization. Much more research is however needed to understand the extent to which political knowledge influence electoral volatility in general or the different patterns of vote change during election campaigns. That also holds for the mechanisms that can help explain why and when – or why and when not – political knowledge matters. From that perspective, we hope this study will encourage more research into different patterns of vote change during election campaigns and the differential effects of political knowledge on electoral volatility. That question will only become more important as electoral volatility continues to increase and as the transformation into high-choice and ever more fragmented political information environments continues.

Notes
1. While it could be considered problematic using a Web panel when investigating – among other things – Internet use, in Sweden 93% of the population has access to Internet in their homes, and it is primarily among those older than 76 years that Internet penetration is lower (Internetstiftelsen i Sverige 2016). As our sample does not include those older than 75 years old, this is less of a problem.
2. In 2014, the mean age in the population was 41.2 years, the gender distribution 50% male and 50% female, while 12% had finished grammar school, 46% high
school and 39% had college or university education. For 2%, the educational level is unknown. Among those who participated in all waves, the mean age was 46.7 years, the gender distribution 52% male and 48% female, while 9.7% had only finished grammar school, 42.9% high school, and 49.2% college or university education. In terms of vote choice the respondents in the final sample are largely representative of the Swedish electorate.

3. Random vote switching not only depends on whether voters waver between different parties, but also depends on whether voters switch to ideologically similar or dissimilar parties. In which switching to ideologically dissimilar parties might be considered more random (Van der Meer et al. 2015).

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References


Internetstiftelsen i Sverige. 2016. “Svenskarna Och Internet 2016: Undersökning Om Svenskarnas Internetvanor. [Sweden and The Internet 2016: Study of Sweden’s Internet Habits].”


