Who is driving whom
The media, voters and the bandwagon
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Chapter 2:

More Interest in Interest:
Does Poll Coverage Help or Hurt Efforts to
Get Young Voters into the Ballot Box?
Abstract

Turnout in second order elections, like those for the European Parliament, is notoriously low, especially among younger voters. Previous media effects studies on turnout have looked at media modality or media frame effects, but not specifically at poll coverage. This paper investigates whether news reporting about polls can increase interest and turnout. Using matching and data from a four wave panel survey of young voters (N = 747) in the 2014 European Parliament Election, results show that exposure to polls in election coverage can stimulate interest and turnout among young voters. As both early life turnout and interest are important predictors for later life political involvement, this study shows promising potential for increasing young voter political involvement.

An earlier version of this chapter was presented at the Annual Conference of the International Communication Association, Fukuoka, Japan, as: Stolwijk, S.B. and Schuck, A.R.T. (2016). More Interest in Interest: Does Poll Coverage Help or Hurt Efforts to Get Young Voters into the Ballot Box?
More Interest in Interest: Does Poll Coverage Help or Hurt Efforts to Get Young Voters into the Ballot Box?

Declining turnout rates of young voters are a growing concern both in the academic literature and in political policy debates (see Phelps, 2005). Habit plays an important role in determining turnout, so starting that habit to vote at one’s first election is important for future electoral participation (Cutts, Fieldhouse, & John, 2009; Franklin, 2004; Möller, de Vreese, Esser, & Kunz, 2014; Plutzer, 2002). Many efforts to increase turnout of young voters have failed (Kaid, McKinney, & Tedesco, 2007; Nickerson, 2006). A large literature examines the effect media can have on turnout. The scholarly debate is situated between two opposing perspectives: media malaise theory which holds that the media have a negative effect (Robinson, 1976), and the virtuous circle thesis that media have a self-reinforcing positive effect (Norris, 2000). One prominent line of media research investigates the effect of strategic campaign coverage, with polls as a central characteristic (Cappella & Jamieson, 1997). Recently, Aalberg, Strömbäck, and de Vreese (2011) argued that the effect of polls per se might be more positive than other aspects of strategic coverage, therefore this study starts from a positive perspective and considers whether and how poll coverage can increase interest in the campaign and consequently turnout.

News media have shifted toward more strategic campaign coverage in order to make the campaign more exciting and attract more attention (Strömbäck & Dimitrova, 2011). Nowadays strategic news, such as coverage of opinion polls, dominate campaign news coverage (e.g., de Vreese & Semetko, 2002; Strömbäck, 2012b). Understanding poll coverage, as opposed to issue coverage or other elements of strategic coverage, requires less background information, so it might be more accessible for young voters who often complain they lack the proper resources to make a voting decision (Banducci & Hanretty, 2014; Bartels, 1988; Kaid, McKinney, & Tedesco, 2007). Polls could provide a starting point for further campaign interest, for example, by fueling a bandwagon effect and enticing enthusiasm for a candidate or party (Stolwijk, Schuck, & de Vreese, 2016; Robinson, 1937; Robinson & Sheehan, 1983). Still, many studies point out negative effects of exposure to strategic coverage in general. The media’s focus in such campaign coverage diverts attention away from issues, thus hampering rather than helping voters learn about party platforms (Moy & Rinke, 2012). On top of this, studies found how
strategic news increases political disengagement (Cappella & Jamieson, 1997). In these studies, strategic news is often defined to include polls and projections of election outcomes, but also the use of language of sports and wars and reports on the campaign strategic motives of politicians. Aalberg, Strömbäck and de Vreese (2011) argue that especially that latter aspect is likely to have a negative effect, while poll coverage could have a positive effect.

This study evaluates the effect of poll exposure on turnout of young voters in the 2014 European Parliament (EP) election. It contributes theoretically by theorizing a central role of campaign interest as a mediator for the effect of poll exposure on turnout. A growing literature finds a reciprocal relation between interest and media exposure, which might be especially relevant for young voters who have yet to develop their interest (Atkin, Galloway, & Nayman, 1976; Boulianne, 2011; Hillygus, 2005; Kruikemeier & Shehata, 2016; Strömbäck & Shehata, 2010). Higher interest is likely to contribute to more poll exposure, but poll exposure could in turn increase interest in a positive spiral (Norris, 2000; Slater, 2004, 2007). This process could increase the likelihood of turnout over time. Hence, the current research design should be especially sensitive to selection effects: those more interested are already more likely to be exposed to polls and have higher turnout. This study goes beyond previous field research in evaluating the causal effect of media exposure on turnout by using Covariate Balancing Propensity Score matching (CBPS) (Imai & Ratkovic, 2014)\textsuperscript{25}, in combination with a four wave panel survey, and supported by a media content analysis of poll coverage. Taking these analytical challenges explicitly into account, results show that young voters indeed become more interested in the campaign as a consequence of poll exposure, and this higher interest in turn increases their odds of voting.

**Theory**

There is little research explicitly examining the effect of exposure to media poll coverage on turnout.\textsuperscript{26} There is a strong literature investigating the effect of polls *per se* on turnout, but these are either mostly experimental studies and

\textsuperscript{25} See Appendix E for robustness checks using other forms of matching, such as Coarsened Exact Matching (CEM) and Entropy Balancing (EB), as well as a first difference model.

\textsuperscript{26} For an exception see Niemi, Iusi, and Bianco (1983).
geared toward strategic voting behavior, or focus on exit polls rather than pre-election polls (e.g., Großer & Schram, 2010; Jackson, 1983; Klor & Winter, 2007; Morton, Muller, Page, & Torgler, 2015). Exit polls provide information about vote choices casted up to that point, and might influence the last minute decision making before oneself casting a vote. Voters can update their cost/benefit calculus from voting versus not voting in light of this new information, but are unlikely to change their preferences underlying those calculations in this very short time span. As pre-election polls also present information about the likely cost/benefit pay off of turnout, it is important to acknowledge possible turnout effects of these polls as well.

In contrast to these short term effects studies, attitude change is observed more consistently across the time frame of an election campaign. However, the many field studies that focus on the campaign effects of pre-election polls are measuring the effects of strategic/game/horse race frames and not the effects of poll coverage as such (Cappella & Jamieson, 1997; Aalberg, Strömbäck, & de Vreese, 2011). The present study situates itself at the intersection of these discussions as it investigates the effects of poll coverage rather than the broader concept of strategic coverage, but within the context of the effects of campaign coverage over time. Each of these literatures will thus be reviewed here shortly to evaluate what it can contribute to the purposes of this paper.

Starting with studies that look at the effects of polls per se, field studies mostly investigate the effects of exit polls. A good example is the study of Morton, Muller, Page, and Torgler (2015) which exploits a change in French electoral law. Before the change, some voters in overseas parts in different time zones of the French republic voted after the election result was already known. By carefully comparing voting before and after the law change, they find that exit poll information decreased turnout by about 11%, especially for the losing party. This strong effect is likely different from that for pre-election polls. In this experiment the election outcome is known, in some cases the losing candidates had even already publicly admitted their defeat before voting in these territories started. Pre-election polls, in contrast to exit polls, are only projections and one’s own voting behavior might still potentially alter the election outcome. What might be most noteworthy about the result of

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27 Various names are used for this kind of coverage, including horse race news and the game frame (see Aalberg, Strömbäck, & de Vreese, 2011). In this paper strategic news coverage is used as a generic term to refer to all of these.
this study by Morton et al. is that so many voters (between 40 and 60% of the electorate) still turned out, despite the fact that most of them likely knew with certainty that their votes were irrelevant to the election outcome. So although strategic considerations might be an important part of the effect of polls on turnout, there remains much to be explained.

Similar strategic voting effects are the main focus of most experiments on polls and turnout. Typical experimental studies let participants vote (or not) in sessions of many successive rounds of voting, manipulating their poll exposure, cost of voting and pay offs for election outcomes. During each voting round the costs and potential pay offs of voting are fixed and fully known, as they are expressed in monetary terms. Consequently, participants do not have to worry about which candidate best fits their preferences, which candidate is more trustworthy, or which is a rising star. As Großer and Schram (2010) note, the focus of such studies is thus on how voters act strategically to express their preference after it has formed, and they neglect the influence of campaigns and especially that of poll coverage on the preference formation process. Hardmeier (2008) concluded in her meta-analysis that the effects of polls on turnout in these studies cannot be statistically distinguished from zero. However, recent, more methodologically advanced studies, tend to show a slight increase in turnout for the majority candidate, but only in close races or under public voting rules (e.g., Klor & Winter, 2007; Morton & Ou, 2015). EP elections do not rely on public voting and, moreover, use a complex nation-tiered proportional system of voting which obscures the direct relation of a particular vote on the eventual outcome. These elections select members for a multi-party parliament in which each party consists of various national sub factions. The election outcome is also not related to the formation of a government, so, all in all, a close race between two clear parties/candidates is not probable. Strategic turnout considerations found in these experiments are thus unlikely to have much influence on the results of the current study, which focusses on EP pre-election poll coverage.

The classic work on the effect of poll-related (strategic) news coverage on political engagement is Cappella and Jamieson's (1997) “The Spiral of Cynicism”. They argue that a focus on strategic news over substantive issues leads to a greater attention for politician's self-interest, which in turn increases political cynicism and decreases political involvement. This seminal work has inspired much research into the effects of strategic news. Subsequent studies
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have offered mixed support, with some supporting the hypothesis that strategic news exposure decreases turnout, while others find a contrary or null effect (e.g., Adriaansen, Van Praag, & de Vreese, 2012; Lengauer & Höller, 2012; Valentino, Beckman, & Buhr, 2001).

To help clarify the findings, Aalberg, Strömbäck and de Vreese (2011) argue that scholars should separate the game frame from the strategy frame. While game frame coverage focuses on who will win, strategy coverage expands on the motives and tactics of politicians. The latter is conceptually closer to the kind of coverage that should lead to increased cynicism and decreased involvement. Poll coverage, on the other hand, might increase interest because of its appealing nature. Indeed, Iyengar, Norpoth and Hahn (2004) find that voters pay far more attention to such game frame news over issue and strategy news. Polls even appear to be so interesting that they suppress attention for issue news. Valentino, Buhr and Beckmann (2001) compared different parts of the strategy frame and find experimentally that including polls as such to an article distracts attention from the substantive issues also mentioned in that article. Over time, the attractiveness of poll coverage appears to have a positive effect on interest. In two of the few studies specifically on poll coverage, Zhao and Bleske (1998) found a positive relation between poll exposure and interest in other election messages, and Meyer and Potter (1998) find that knowledge of polls in one wave positively predicts issue knowledge in the next wave. Poll coverage could thus both be attractive and might stimulate future campaign interest. These findings suggest that the effect of poll coverage may very well be different from other forms of strategic coverage. Over time, poll coverage might increase both interest and involvement (Norris, 2000; Slater, 2007; Zhao & Bleske, 1998).

Exposure to poll coverage could increase campaign interest in a variety of ways. For one, it is less complicated to interpret compared to issue news and so lowers the accessibility threshold for news consumption (for a similar argument see Liu & Eveland, 2005). In this way it could provide a way into news consumption for the less sophisticated as it can help increase internal efficacy and make consequent coverage easier to understand (see Kaid, McKinney, & Tedesco, 2007; Möller, de Vreese, Esser, & Kunz, 2014). Poll coverage has also been associated with a bandwagon effect in which voters are drawn into the enthusiasm of the winning party (Robinson, 1937), and with inciting fear of the prospect of a liked party losing or a disliked party winning (Stolwijk, Schuck, & de Vreese, 2016;
Moy & Rinke, 2012). In addition, in their decision to cover pre-election polls journalists implicitly signal to the public that the outcome of that election is important, relevant and therefore interesting (Robinson & Sheehan, 1983).

Surprisingly, the large literature of campaign media effects on turnout pays only scarce attention to the role of interest as a potential mediator (e.g., Aarts & Semetko, 2003; Goldstein & Freedman, 2002; Wattenberg & Brians, 1999). Sure enough, interest is usually included in the list of control variables and accounts for a large share of the explained variance, but it is not discussed theoretically. This in contrast to findings that, when asked, people state the lack of interest as one of the most important reasons for not voting (Shaffer, 1981), and in empirical studies political interest is one of the variables most consistently found to have a positive influence on turnout (Smets & Van Ham, 2013). Many studies appear to assume that political interest is a trait-like characteristic, and stable over time (Prior, 2007). However, like turnout, it is only believed to be a stable variable after a voter reaches a certain age (Bhatti, Hansen, & Wass, 2012; Strömbäck & Johansson, 2007). From this perspective, how interest forms in young voters is extra important, as it is an important predictor of turnout which then persists throughout the life cycle. Consequently, several authors have argued for more research into the antecedents of political interest among young voters (Prior, 2007; Maier, Rittberger, & Faas, 2016). Election campaigns provide a good opportunity for young voters to develop such interest, as media carry richer political media content in campaign periods, and young voters are likely more motivated to start looking into this content as it is directly relevant in the light of the upcoming potential vote choice.

Taking up the challenge of exploring such antecedents, an increasing number of studies report findings that contradict the perspective of political interest as a constant factor (Atkin, Galloway, & Nayman, 1976; Boulianne, 2011; Hillygus, 2005; Strömbäck & Shehata, 2010). Instead, they point to a reciprocal relation between political interest and media use, with the more interested consuming more political media and consequently reinforcing their interest. They also show marked, but inconsistent, differences in the effect on interest of tabloid versus broadsheet media, and between TV, newspaper and online news. To help explain such differences, calls are made to move beyond the study of the effects of outlets, and look instead at the effects of specific content (Newton, 1999). In addition, Hillygus (2005) specifically recommends to take better account of the dynamics of campaign attention by looking at interest
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in the campaign rather than interest in politics in general. Campaign interest is conceptually closer to the specific election in question, compared to general political interest. It is also more likely to be related to attention, as interested people are more likely to be attentive to the news they are exposed to. Various studies find that news attention yields stronger media effects compared to news exposure (e.g., Chaffee & Schleuder, 1986; Möller & de Vreese, 2015; Moy, Torres, Tanaka, & McCluskey, 2005; Shehata, 2014; Slater & Rasinski, 2005; Strömbäck & Shehata, 2010). Taken together, this study will study whether campaign interest mediates the effect of poll exposure on turnout, yielding the following hypotheses:

H1: Exposure to poll coverage increases the likelihood of turnout of first time voters.

H2: Campaign interest positively mediates the relation between exposure to poll coverage and turnout.

Method

Case. Data from a representative four wave panel survey among Dutch voters between the age of eighteen and twenty years old at the time of the election was used. These young adults (age 18-19) were allowed to vote for the first time in the 2014 European Parliament (EP) elections. EP elections are second order elections and attract much less media attention and achieve lower turnout compared to national parliament elections (Hix & Marsh, 2011; Van der Brug, Gattermann, & de Vreese, 2016). Söderlund, Wass and Blais (2011) show that political interest is of extra importance for turnout in such low salience EP elections. In the 2014 EP elections only 42.6% of the European electorate went to the ballot box, the lowest figure in the history of EP elections. Average campaign interest among young voters in the current study directly before the campaign (wave 3) is only 2.9 on a scale from one (no interest at all) to seven

28 As some participants only reached the legal voting age of 18 years during the panel survey, a few participants were still 17 when the first survey wave was fielded.
29 See Franklin (2001) for an account of how declining turnout in EP elections is mostly due to EU enlargement bringing in countries with lower turnout.
(very interested) for young voters in our sample. As political interest plays such a large role in political behavior over the life span and is still developing among young voters, this is an ideal case to study the influence of poll exposure on turnout via campaign interest.

**Sample.** The study uses the 2014 European Parliament Election campaign study data (de Vreese, Azrout, & Möller, 2014). A four-wave panel survey was carried out in the Netherlands by TNS NIPO, a research institute that complies with ESOMAR guidelines for survey research and holds the relevant ISO approvals. Respondents were interviewed about six months prior, four months prior, and one month prior to the May 2014 elections for the European Parliament and immediately after the elections. Fieldwork dates were 13 December 2013 – 19 January 2014 for the first wave, 20 – 30 March 2014 for the second wave, 17 – 28 April 2014 for the third wave, and 26 May - 9th of June 2014 for the fourth wave. The survey was conducted using Computer Assisted Web Interviewing (CAWI).

A total of 1433 respondents participated in wave one, 1013 respondents participated in wave two, 836 participated in wave three, and 747 in wave four. The sample was drawn from the TNS NIPO database. The population was defined as born between 12 September 1994 and 22 May 1996. The database consists of 200,000 individuals that were recruited through multiple recruitment strategies, including telephone, face-to-face, and online recruitment. Quotas (on age, gender, and education) were enforced in sampling from the database. The average response rate was 65% in wave 1, the re-contact rate 70.7% in wave 2, 82.5% in wave 3, and 89.4% in wave 4. The sample shows a slight deviation in distributions in terms of gender, age and education compared to census data. Panel attrition did not lead to a significant difference in the composition of the panel with regard to age, gender, and education.

**Content Analysis.** In addition to the survey on which the analyses of this paper are performed, a content analysis of poll coverage was done (de Vreese, Azrout, & Möller, 2014). The subsample relevant to this study includes in total 2117 newspaper/online articles or TV news items were coded, which referred to the EU or EP election campaign and were published/aired between waves three and four. From four newspapers, two quality (NRC, Volkskrant), one tabloid (Telegraaf) and one online (nu.nl), all articles were coded that mentioned the EU or the EP campaign within the front page, political/news section or the editorial section. For TV news, all items were coded that mentioned the EU or
EP election within the main TV news broadcasts (NOS, RTL). As results will show that the amount of poll coverage was rather small, the subsample of media coverage included in the content analysis was too small to yield a representative individual level indicator of poll exposure. Instead, the content analysis is used to describe the context of the study in terms of campaign coverage. It will show the amount of poll coverage to which participants could have been exposed, and give an impression of the distinctiveness of poll coverage versus other kinds of coverage. By analyzing the overlap between poll coverage and other forms of strategic news coverage and issue coverage, results will illustrate whether those who have been exposed to poll coverage were therefore also more likely to be exposed to these other types of coverage. This content analysis is thus used to give a descriptive overview of poll coverage within the campaign.

**Approach.** As interest can be both a cause and consequence of media use (e.g., Boulianne, 2011), selection effects are likely to play a large role. Evaluating the effect of exposure to poll coverage on turnout by just comparing turnout between those who saw and those who did not see polls could be biased, as people, de facto, self-select into seeing polls. Those who are more likely to cast a vote are more interested in the campaign and more likely to see polls. Regression analysis with control variables is the most often used way of taking care of these selection effects. If certain characteristics predict whether an individual takes the treatment and these same characteristics also influence the dependent variable, then using panel data with lags of these variables as controls is an appropriate choice.

However, control variables are estimated to have the same effect on all people, but if the composition of treated (i.e. exposed to poll coverage) and untreated (i.e. not exposed to poll coverage) groups is inherently different, this assumption might not hold. In the present analysis the group of people who saw polls can on average be expected to be more interested in politics, higher educated etc. than those who did not. To remedy this problem and arrive at estimates of causal inference closer to those obtained in experiments, where randomization ensures similar characteristics of treated and untreated units, various matching procedures are being developed. These procedures have in common that they try to compose a control group of untreated units who are similar in background characteristics to the treated group, so that problems of non-linearity in expected outcomes are equal for treated and untreated groups and thus do not affect the relation between the treatment and the outcome.
This study will go beyond previous research in addressing these potential problems and report results using a Covariate Balancing Propensity Score (CBPS) (Imai & Ratkovic, 2014) (see Appendix E for an overview of pros and cons of various matching methods).

To test the mediating effect of campaign interest a SEM model is built in which selection effects are explicitly modeled, so their influence can be compared relative to the influence of actual exposure. The CBPS method is most suitable for this purpose as it represents the propensity for each participant to be exposed to polls based on her background characteristics. Incorporating this CBPS score as a control variable that predicts poll exposure, campaign interest and turnout, and comparing total effects of CBPS versus that of poll exposure alone, allows for a direct test of the relative size of the effect of poll exposure due to being more/less likely to see polls versus actually seeing them. In addition the SEM model will include alternative wave four mediators, like political cynicism, campaign cynicism, internal efficacy, external efficacy, amount of positive emotions felt towards parties, amount of negative emotions felt towards parties, passive campaign media exposure, active campaign media exposure, attention to campaign news and amount of talking about politics, in addition to campaign interest in order to increase confidence that the positive effect path of poll exposure to interest to turnout is the main mechanism, rather than, for example, a negative path of poll exposure to cynicism to turnout.

**Measures.** Turnout was measured directly after the elections (wave 4) by asking respondents whether they had voted (n = 319 / 43%) or not (n = 428 / 57%) in these elections. Turnout intention was measured in waves one to three on a scale from one (certainly will not vote) to seven (certain to cast a vote) (see Table 1 in Appendix D for descriptives for all variables used in this study). With regard to polls each participant was asked (both in wave 3 and 4) whether or not opinion poll results were seen in the last four weeks. Interest in the campaign was measured in both waves on a “not at all interested” (=1) to “very much interested” (=7) scale for the question: “In May 2014 the elections to the European Parliament will be held: To what degree are you interested in these elections?”

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30 Originally poll exposure was measured on a 5-point scale from “never seen any polls in the last four weeks of the campaign” to “saw six or more polls”. However the distribution was rather skewed as 59% reported to see no poll at all, and another 30% reporting to see only “one or two polls”. Therefore it was decided to recode this into exposure to “zero” versus “one or more” polls.
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For the operationalization used for the control variables, see the results of the full SEM model in Appendix C.

To compute the CBPS score of seeing polls, the covariates were used that were likely to be related to either the treatment of poll exposure or the dependent variable of turnout. All predictors included for the matching procedure are from wave one, two or three, so from before the campaign to avoid endogeneity with the treatment. The results found by the matched data analysis are dependent on which selection effects were found to be present and relevant. In this respect results of analyses using matching are superior to experimental data. Matching methods take the empirically found selection effects into account. Their results show the effects of exposure specifically with regard to those people who are actually exposed in real life, rather than the effects of exposure for random people. In randomized experiments everyone is equally likely to be in the exposure condition, and information about self-selection is typically lost. Some people are very unlikely to be exposed in real life, but might respond differently to exposure compared to people who are more likely to be exposed. As every individual is weighed equally in such experiments, these cases are unrepresentative of actual exposure outside of the laboratory, and thus could compromise the external validity of experimental results.

To estimate the mediating effect of campaign interest, the CBPS score was used as a control variable. In addition a number of potential alternative mediators were specified. For each of these alternatives the wave 3 variable was used as a control and the wave 4 variable as a parallel mediator. To check whether the operationalization of the various latent constructs was reliable and has sufficient discriminant validity, a confirmatory factor analysis (CFA) was performed in AMOS 21, to achieve adequate model fit some indicators were removed and relevant covariances were added between indicators of the same construct. The final CFA has a good model fit (N = 747, $\chi^2 (1889) = 4850.53$; CFI

31 The covariates used to calculate the propensity score are: vote intention for PvdA, VVD, PVV, D66, SP (wave 3), age, education (wave 1 and 2), gender, income (wave 1 and 2), interest in opinion polls (wave 3), amount of TV exposure (wave 1,2,3), amount of newspaper exposure (wave 1,2,3), amount of internet exposure (wave 1,2,3), interest in the election campaign (wave 1,2,3), amount of talking about politics (wave 1,2,3), amount of talking about the EU (wave 1,2,3), amount parties associated with negative emotions (wave 3), amount of parties associated with positive emotions (wave 3), knowledge about politics (wave 1,2,3), knowledge about politics and the EU (wave 3), political efficacy (wave 1,2,3), political cynicism (wave 1,2,3), cynicism towards the EP election campaign (wave 3), political participation (wave 1,2,3), seen polls or not (wave 3), turnout intention (wave 1,2,3), attention to campaign news (w3).
Based on these results a structural regression model was built, featuring the hypothesized effects of the CBPS score on poll exposure, campaign interest and turnout, as well as the various potential mediating effects of poll exposure on turnout. If appropriate, covariances were added between error terms of related mediators. See Figure 1 for a schematic depiction of the final SEM model. The following alternative mediators were considered: internal efficacy (see Kaid et al., 2007; Möller et al., 2014), external (in)efficacy, number of parties associated with positive emotions, number of parties associated with negative emotions (Stolwijk, Schuck, & de Vreese, 2016), political cynicism, cynicism about campaign (see Cappella & Jamieson, 1997), self-reported paper/TV/radio use about campaign, amount of talk about EP elections/politics, active campaign information use and attention to campaign news (Chaffee & Schleuder, 1986). The final model had a good model fit (N = 747, $\chi^2$ (2057) = 5337.23; CFI = .91; TLI = .90; RMSEA = .046 (CI: .045, .048)) (for model fit measure thresholds, see Kline, 2011).

Figure 1. Schematic full SEM model.

A full correlation/covariance matrix of all variables used in the model can be obtained from the authors upon request.
Results

The content analysis shows that the media attention for the EP campaign was modest. From the 2117 coded articles/items which mentioned the EU or EP election, only 136 (6%) discussed the EP campaign. From those 136 articles, 35 (25%) included some sort of prediction of the outcome of the election. From these 35 poll articles, 28% mention winners or losers, 37% mention tactical/strategic motives of politicians or parties, 37% say the election is boring and turnout is likely to be low, and 31% discuss at least one substantive campaign issue. Poll coverage of the EP campaign was thus modest, and those exposed to this coverage were likely to also be exposed to at least some tactical/strategic and issue coverage.

To test H1 on the effect of self-reported poll exposure on turnout, Table 1 shows the results of logistic regressions with and without control variables using a standard model, and with CBPS as a control. All models estimate the effect to be significant at p<0.01, though the size of the effect varies between 1.25 for the basic logit model down to 0.57 for the CBPS controlled model. The results uniformly support hypothesis 1: poll reporting exposure increases turnout.

Table 1 Logistic regression of poll exposure on turnout.

<table>
<thead>
<tr>
<th></th>
<th>Logit turnout</th>
<th>Multivariate Logit turnout</th>
<th>CBPS Logit turnout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poll exposure</td>
<td>1.25***</td>
<td>0.69**</td>
<td>0.57**</td>
</tr>
<tr>
<td></td>
<td>(3.50)</td>
<td>(1.99)</td>
<td>(1.77)</td>
</tr>
<tr>
<td>Propensity to see polls</td>
<td>1.98***</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(7.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.82***</td>
<td>0.85</td>
<td>-1.35***</td>
</tr>
<tr>
<td></td>
<td>(7.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covariates included</td>
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<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.07</td>
<td>0.28</td>
<td>0.10</td>
</tr>
<tr>
<td>N</td>
<td>747</td>
<td>747</td>
<td>747</td>
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</tbody>
</table>

Note. Logistic regression on turnout, odds ratios in brackets * p<0.05; ** p<0.01; *** p<0.001. Logit = regular logit model. The covariates used are: age, education, gender, income, interest in opinion polls (wave 3), amount of TV exposure (wave 1,2,3,4), amount of newspaper exposure (wave 1,2,3,4), amount of internet exposure (wave 1,2,3,4), interest in the election campaign (wave 1,2,3), political efficacy (wave 1,2,3), political cynicism (wave 1,2,3), seen polls or not (wave 3), turnout intention (wave 1,2,3) and attention to campaign news (wave 3). Pseudo R² of the base model including only poll exposure is 6.57%.
The first column of Table 1 shows the difference in turnout between those who did and did not see polls. The odds ratio shows that seeing polls can make someone up to 3.5 times as likely to cast a vote compared to someone who did not see polls. Poll exposure explains about seven percent of the variance in turnout. As argued above, this effect is likely driven by differences in sample composition of those who did and did not see polls. The logit models in the second and third columns confirm the presence of selection effects. The effect size shown explicitly by CBPS in the third column shows that young voters who were very likely to see polls (CBPS = 1) are over seven times as likely to turnout as those who were very unlikely to see polls (CBPS = 0) to begin with. The second column of Table 1 shows the estimate that would usually be reported: that of a multivariate regression with control variables. More precise (matching) approaches for correcting sample composition yield estimates which are a little lower (third column, also see Appendix E). The various approaches to control for these selection effects all show that seeing polls makes a young voter around two times as likely to turn out. In those models, poll exposure still explains between one and two percent of the variance in turnout. Given how modest poll coverage was, this can be considered a substantial effect.

The second hypothesis on the mediating role of campaign interest is tested via SEM models. The models are estimated using maximum likelihood and yields regression estimates based on a 95% bias-corrected 5000 bootstraps interval. As a first test, a basic model is tested which exactly represents the one displayed in Figure 2. The figure shows the direct effects between the propensity to see polls (CBPS), actual poll exposure, campaign interest and turnout. The hypothesized positive relations are all significant and confirmed. Young voters who are more likely to see polls (CBPS), are exposed to them more often. This poll exposure makes them more interested in the campaign, controlling for their higher pre-campaign likelihood to become interested in the campaign (CBPS). As a result of this increased interest, young voters who are exposed to polls turnout more often than those who were not exposed to polls.

Evaluating the nature of selection effects (CBPS) on turnout, a few things stand out. Table 2 shows the direct, indirect and total effects of CBPS and poll exposure on turnout. The top two rows, referring to the basic model, illustrate that selection effects are strongly present and that when effects of CBPS on poll exposure and campaign interest are included, the total indirect effect of CBPS on turnout is over five times (0.69 vs 0.13) the size of the total effect of actual
poll exposure on turnout. The major part of the effect of being exposed to polls is thus due to background characteristics of this young voter, which made her more likely to be exposed to polls to begin with and also made her more likely to become interested in the campaign and eventually turnout. Still, actual poll exposure also makes a significant difference, as noted above. In addition, the negative (small and non-significant) direct effect of CBPS on turnout illustrates that the effect of the propensity to see polls (i.e. the selection effect of poll exposure) on turnover is fully mediated by campaign interest. Controlling for poll exposure and campaign interest in wave 4, the effect of being more likely to see polls (CBPS) on turnout is actually negative: those more likely to see polls, who then not see polls during the campaign and not become more interested are even less likely to turnout, compared to those who were less likely to see polls to begin with.

![Figure 2. SEM results of the (selection) effects of exposure to poll reports on turnover via campaign interest. N = 747, *** = p<0.001, ** = p<0.01, * = p<0.10. Fit: This basic model is just identified, fit measures are unavailable.]

As this model is rather simple and the mediation effect of campaign interest might pick up effects of other potential mediators, a second, full structural regression model is estimated as outlined in the methods section, which includes predictors and latent variables for the other potential mediators internal efficacy, external (in)efficacy, number of parties associated with positive emotions, number of parties associated with negative emotions, political cynicism, cynicism about campaign, self-reported paper/TV/radio use about campaign, amount of talk about EP elections/politics, active campaign
information use, and attention to campaign news. Figure 1 and Table 1 in Appendix C show a schematic depiction of this SEM model and list the estimates and standardized estimates for each separate effect. The results show that the effects found in Figure 2 are robust. In addition, the results give information about the antecedents for selection effects, and the added value of modeling the influence of selection effects (CBPS) explicitly rather than only including control variables.

First of all, Table 1 in Appendix C shows which wave three variables contribute most to selection effects (CBPS), from the wave 3 antecedents for the potential mediators included in the model, amount of talking about (EU) politics, passive EP news exposure, and internal efficacy have the largest standardized effect on selection (see Figure 1). Interestingly, campaign interest (wave 3) does not significantly contribute to the odds of seeing polls (CBPS).

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Direct, indirect and total effects of CBPS and poll exposure on turnout.</th>
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<tbody>
<tr>
<td></td>
<td>Direct effect on turnout</td>
</tr>
<tr>
<td>Basic model</td>
<td>CBPS</td>
</tr>
<tr>
<td>Poll exposure</td>
<td>0.05</td>
</tr>
<tr>
<td>Full model</td>
<td>CBPS</td>
</tr>
<tr>
<td>Poll exposure</td>
<td>0.08</td>
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</tbody>
</table>

Note. N = 747. NA = Not Applicable. SEM model 3 estimated with only the path through campaign interest as a potential mediator and removing covariances between campaign interest and other potential mediators, but still including all other possible mediators as controls.

To illustrate how modeling CBPS explicitly improves the results compared to using control variables only, the bottom two rows of Table 2 show the direct, indirect and total effects of CBPS and poll exposure on turnout for this model. As AMOS does not report p-values for indirect and total effects, significances are not displayed in this table. The same model was estimated using STATA 13, which showed that all these effects are significant at $p < 0.001$ except for the direct effect of poll exposure on turnout which is significant at $p = 0.10$.\(^{33}\) The results again support H2, campaign interest mediates the effect of poll exposure on turnout. However, the results also show that CBPS still strongly

\(^{33}\) The STATA 13 model was estimated using maximum likelihood estimation, but the latent variables were imputed from the CFA instead of incorporating the full measurement model to help STATA fit the model. As AMOS 21 had no problems fitting the full structural regression model, those results are reported here.
contributes to both campaign interest (wave 4) and turnout even when controlling for covariates, which suggests that these covariates fail to control for the full selection effect. The total effect of CBPS on turnout is much smaller compared to the basic model without control variables, as it drops from 0.59 to 0.17, however it still has a larger total effect on turnout than poll exposure (0.17 vs 0.13). The total effect of poll exposure on turnout remains unaffected by the inclusion of control variables, which shows that controlling for CBPS indeed sufficiently corrects for selection effects.

To get a better idea of the relative size of the effect of campaign interest with respect to the various other potential mediators included, a variant of the full SEM model (Model 3) is estimated in which the only indirect path from poll exposure to turnout is that via campaign interest. The last two columns of Table 2 show the indirect and total effects of CBPS and poll exposure on turnout for this model. The indirect effect of poll exposure via campaign interest on turnout is still 0.07 and nearly equal to the 0.08 and 0.07 effects found in the basic model and the full model (Model 1 and Model 2). So even controlling for the indirect effects of CBPS and the various control variables via campaign interest (wave 4) as well as via the other mediators, the size of the indirect effect of poll exposure on turnout remains unaffected by removing its alternative indirect paths: Campaign interest accounts for as good as all of the indirect effect of poll exposure on turnout. The absolute size of this mediating effect should be interpreted with care as the estimates are based on a linear SEM, whereas the logistic regressions presented in Table 1 take the dichotomous nature of the dependent variable, turnout, better into account. The value of the SEM analysis is rather to show the relative contribution of campaign interest as a mediator. Campaign interest is by far the dominant mediator for the effect of exposure to poll coverage on turnout: All three models presented here show that it accounts for over half of the total effect (0.07 vs 0.13).

Discussion

Poll exposure significantly improved the likelihood of turnout for young voters in the 2014 EP elections by increasing campaign interest. The study makes three main theoretical and one methodological contribution. First, the potential difference in young voter turnout after exposure to pre-election poll
coverage rather than strategic coverage more broadly, or exit poll information more specifically, is evaluated in a field setting. Results show that exposure to strategic coverage and poll coverage likely overlapped, but still a positive effect of exposure to poll coverage on turnout is found. Second, the empirical and theoretical value of looking at campaign interest rather than political interest is proposed, and results confirm that young voter campaign interest is indeed malleable over the course of a campaign and consequential for turnout. Third, analyses in this paper have compared the relative contribution of campaign interest versus other mediators identified in past research. Campaign interest is found to be the most important mediator by far, and its effect is stronger than that of other possible mediators such as internal efficacy (see Kaid et al., 2007; Möller et al., 2014), external (in)efficacy, number of parties associated with positive emotions, number of parties associated with negative emotions (Stolwijk, Schuck, & de Vreese, 2016), political cynicism, cynicism about the campaign (see Cappella & Jamieson, 1997), self-reported paper/TV/radio use about the campaign, amount of talk about EP elections/politics, active campaign information use and attention to campaign news (Chaffee & Schleuder, 1986). Its methodological contribution is to evaluate these claims more thoroughly using matching (CBPS) explicitly integrated within a SEM model and based on four-wave panel data. Selection effects were found to have a strong influence on each of the main variables: exposure to poll coverage, campaign interest and turnout. Explicitly modeling selection effects illustrated how more traditional approaches such as control variables in multivariate regression or lag (in) dependent variables in a SEM panel model can fail to account for as much as half of the selection effects and so lead to an overestimation of the treatment effect. The integration of CBPS within the present SEM model thus allowed for a more stringent test of the hypotheses.

The results of this study touch on the general debate on media effects. Media malaise theories, such as that by Cappella and Jamieson's (1997) “The Spiral of Cynicism”, which stress the negative impact of exposure to (strategic) campaign coverage on political involvement, are not supported by the results. The total effect of poll exposure on turnout is positive, even controlling for selection effects and the effects of political cynicism. The suggestion of Aalberg, Strömbäck and de Vreese (2011) that the effects of poll coverage as such, can be different from that of strategic coverage more generally is one probable explanation for this finding, future studies can further compare
different parts of the strategy frame to examine further how each may have a distinct effect. However, the results of the large media content analysis of the Dutch EP campaign presented here showed that those exposed to polls were also very likely to be exposed to at least some of the other elements of the strategy frame. Either the positive media effects of polls outweigh those of other strategy frame elements for the context of this study, but it appears more likely that further research is needed on the conditions under which (different aspects of) strategic coverage have a more positive or a more negative effect on involvement.

The results do support the growing literature on the reciprocal relation between interest and media exposure (Atkin, Galloway, & Nayman, 1976; Boulianne, 2011; Hillygus, 2005; Strömbäck & Shehata, 2010) and the perspective of a virtuous circle between media exposure and political involvement (Norris, 2000; Slater, 2007). The second part of the virtuous circle argument, that media exposure can increase interest is especially supported by the findings presented here. Within the data presented in this paper, preceding campaign interest (wave 3) is also positively correlated with likelihood of poll exposure (CBPS), but after controlling for other likely antecedents this effect is no longer significant. The results support a reciprocal relation between political involvement more generally and media exposure, but also suggest that this relationship works in more complex ways than just interest and media exposure feeding of each other. Future research can look at the conditions under which different aspects of involvement, such as interest, efficacy or talking about politics, influence consecutive media exposure and when media exposure influences each of these aspects of involvement.

A positive effect of media on political involvement has been found in experiments (Adriaansen, Van Praag & de Vreese, 2012), and in heavily covered campaigns, such as the Danish referendum on the introduction of the Euro (de Vreese & Semetko, 2002). Still, there might also be something specific about the second order election context studied here, which makes a positive effect more likely. According to Moy and Rinke (2012) the effects of polls as a consensus heuristic, i.e. indicating the popularity of a party, is most likely in "rare" situations such as low-profile elections were little substantive issue information is available. As argued above young voters generally have difficulty understanding the complex issues in election campaigns, and the difficulty of the European institutions and electoral system likely exacerbate
these problems. These conditions might help explain the positive effect of poll exposure on turnout. This is all the more probable as many other explanations found in the literature for the effect of polls on turnout, like the closeness and competitiveness of the election race, do not seem applicable in the context of EP elections (Kriesi, 2008; Moy & Rinke, 2012).

So although the results support the perspective of positive effects of media exposure for civic participation and democracy, it should be noted that campaign interest and turnout alone are only one particular aspect of democratically desired behavior. Valentino, Buhr and Beckmann (2001) found that including polls as such to an article distracts attention from the substantive issues also mentioned in that article. Indeed, the main role of campaign interest as a mediator for the effect of exposure on turnout found here might give the impression of an “empty” kind of political involvement. An involvement driven by interest, but unsupported by increased information search or substantive knowledge gains. Maybe turnout is increased, but do these votes reflect meaningful, reasoned choices? The results of this study do not lend much support for this skepticism. Although, campaign interest is the main mediator, it is positively correlated with passive and active media use, as well as with attention to campaign news. The results of this study rather support the findings of Zhao and Bleske (1998) and Meyer and Potter (1998): Even though exposure to poll coverage might distract from issue news within the same article, it can stimulate campaign interest, attention and exposure over time.

In fact, the strong effect found for campaign interest as a mediator is partly related to its effect on attention, as both mediators have a positive covariance (see Table 1 in Appendix C), confirming results of earlier studies that attention plays an important role in media effects (Liu & Eveland, 2005; Möller & de Vreese, 2015; Moy, Torres, Tanaka, & McCluskey, 2005; Strömbäck & Shehata, 2010). However, when controlling for campaign interest, the effect of attention on turnout becomes non-significant. Increasing campaign interest explains the effect of attention on political involvement. The two variables co-evolve, but attention does not add to the explanatory power of campaign interest, while campaign interest does explain attention. Future research can investigate whether the stronger effect found of campaign media attention versus media exposure in other election contexts can also be explained by campaign interest.
Selection was found to play an important role within the effects of exposure to poll coverage. Some young voters are much more likely to both see polls and vote than others. When comparing various methods to account for selection effects the estimates vary, but are unanimous in indicating the effect of poll exposure on turnout is less strong than it would appear when disregarding selection. Experiments with random selection are needed to fully account for selection effects, as there could be variables other than those included in the present model driving both poll exposure and turnout. Still, using a field study has its own advantages as it allows analyzing both the drivers and size of selection effects, and as field study results have improved external validity as no one is forced to see polls who would not otherwise have seen them and all stimuli and behavior are real rather than constructed for/related to the study.

Low levels of turnout among young voters are a concern for the future of representative democracy as scholars warn that the current dip is likely to persist across the lifespan of this generation (Putnam, 2000). Whereas many other efforts to increase turnout have failed, this study shows that more poll coverage in secondary elections can be a good way to initiate the habit of voting through stimulating campaign interest, for this critical group within the electorate. As campaign interest is associated with various civic values, such as political participation and knowledge in addition to turnout, the result of this study presents an optimistic note for the future of civic engagement.