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## Return on interactivity? The characteristics and effectiveness of Web sites during the 2010 Dutch local elections

Guda van Noort, Rens Vliegenthart, and Sanne Kruike-meier

### ABSTRACT

This article examines the use of interactive features (i.e., discussion and participation features) on the Web sites of Dutch political parties during the 2010 local elections campaign and investigates whether a relationship exists between interactivity and election results. A manual content analysis of 2,135 party Web sites demonstrates that Web sites from national parties that compete in local elections are more interactive than those of independent local parties. Furthermore, for elections in larger municipalities, the parties' Web sites use more interactivity. Most interesting, a positive association between interactivity and election results is established when controlling for previous elections and national trends.

### KEYWORDS

Content analysis; interactivity; Internet; local elections; political communication; Web sites

In recent decades, political campaigning in many Western countries has undergone fundamental changes, the Netherlands not being an exception. Whereas the political landscape 50 years ago was characterized by stable electorates and short, low-intensity campaigns that mainly focused on mobilizing people to vote, politics is now thought of as a continuous campaign in which a floating electorate guarantees landslide changes in every election (Brants & Van Praag, 2006). Recent years have witnessed the rise of a postmodern election campaign that has given public opinion a central place in the political process (Brants & Van Praag, 2015), and has increased the length, intensity, and competition of campaigns.

With the rise of the postmodern election campaign, it is not surprising that online media have become a topic that is widely discussed by scholars, journalists, and politicians (Boulianne, 2009, 2015; Vaccari, 2013). After all, online media, distinctive from traditional media because of its interactive features (e.g., Chung & Zhao, 2004; Sundar, Kalyanaraman, & Brown, 2003), allow politicians to be in continuous interaction with their electorate (e.g., Hacker & Todino, 1996; Stromer-Galley, 2000; Ward & Gibson, 2003) and circumvent journalists that stand in the way of disseminating an unfiltered and undistorted message to a large

audience (Blumler & Gurevitch, 2001; Golbeck, Grimes, & Rogers, 2010; Parmelee & Bichard, 2011). Also, for citizens, interactive media offer the opportunity for political discussion and active participation (for an overview, see Foot & Schneider, 2006).

Interactive media, including social networks and Web sites, are now widely adopted by political parties and politicians, especially during election campaigns (Boogers & Voerman, 2003; Jacobs & Spierings, 2016; Van Santen, 2009). Among these media, Web sites were the first and are the most widely used in political campaigns (Römmele, 2003), and also visited on a regular basis by the Dutch population, especially during elections (Calenda & Meijer, 2009). Specifically, for local parties and candidates, campaigning online is important because local parties (a) often receive little attention in national newspapers and television broadcasting and are thus less well known, (b) also receive increasingly less attention from local newspapers, because these are in decline (Bakker & Scholten, 2014), and finally, (c) have little resources to invest in other campaign tools. Online campaigning might offer, to some extent, a cost-effective way to reach potential voters.

Research did not keep pace with these developments because there has been little systematic research on the extent to which local political

parties actually make use of the interactive Web site possibilities. Yet, more important, only limited evidence exists on the (electoral) consequences of interactivity in political Web sites. These understudied issues will be addressed in this paper.

To date, only a few exploratory studies have been conducted to analyze the characteristics of political Web sites in general and the presence of interactive features in particular (e.g., see Conway & Dorner, 2004; Gulati & Williams, 2007; Kruikemeier, Aparaschivei, Boomgaarden, Van Noort, & Vliegenthart, 2015; Lilleker et al., 2011; Ward & Gibson, 2003). Although these studies provide important insights into the characteristics of political Web sites, knowledge about the extent to which interactive features differ across parties or contexts remains limited. Moreover, previous studies in this context mainly focused on national elections, neglecting local elections, in which online media might play an even larger role.

Second, still, limited knowledge exists about the actual political impact of online political campaigns (e.g., Carlson, Strandberg, & Djupsund, 2009). Previous studies used survey data to predict the relation between Web site use and voting behavior (Porten-Che , 2013), not examining the impact of the use of interactive Web sites, or they used experimental data (e.g., Kruikemeier, Van Noort, Vliegenthart, & De Vreese, 2013; Lee & Shin, 2012; Warnick, Xenos, Endres, & Gastil, 2005), not examining the impact on actual voting (though some studies on the effects of Twitter do exist, see Kruikemeier, 2014; Spierings & Jacobs, 2014). Specifically, despite strong claims about the importance of interactive communication tools (mainly in the U.S. context and most notably in Obama's successful presidential campaign), only a few (mostly experimental) studies have demonstrated that higher levels of interactivity in online political campaigning positively affect responses among potential voters (Kruikemeier, 2014; Sundar et al., 2003; Utz, 2009). It was demonstrated that owning a party Web site increased the party's chance of success in an election (Sudulich & Wall, 2010). However, as virtually all local (branches of) Dutch political parties have party Web sites, the mere presence of a Web site becomes irrelevant and the question arises whether

differences in Web site content (e.g., interactivity) might explain party success as well.

This study fills these gaps in the literature. The first aim of this study is to examine whether the level of interactivity in online political campaigns differs across different local (branches of) political parties and across municipalities. Therefore, the (differential) level of interactivity is investigated through content analyses of political party Web sites in the context of the 2010 Dutch local election campaign. A local election campaign in a multi-party context offers an excellent opportunity to study differences across parties, making it possible to account for structural differences that occur between parties, such as differences due to the size of the municipality. The second aim of this study is to gain insight into the political impact of interactivity in political Web sites by examining whether the level of interactivity affects actual election results. To achieve this we link the content analysis to actual voting data.

### *Interactivity in political Web sites*

Interactivity, the key difference between traditional and new media (Chung & Zhao, 2004; Sundar et al., 2003), is claimed to be the principal variable in studying the effects of new media. Unsurprisingly, a primary theme in Web site research is the examination of the effect of interactive Web site features on Web site users (Ha, 2008; Kim & McMillan, 2008). Although interactivity is regarded as a central attribute of so-called new media in computer-mediated communication literature, the concept has been widely debated. To date, there is little consensus among researchers about the definition of interactivity (e.g., Liu & Shrum, 2002; Song & Zinkhan, 2008). A thorough literature review of interactivity research in the marketing literature, conducted by Liu and Shrum (2002), indicates that interactivity is studied as a multidimensional construct consisting of three dimensions: two-way communication, active control, and synchronicity. Other scholars classify the interactivity construct differently. For example, Warnick et al. (2005) distinguish between text-based and campaign-to-user interactivity. Text-based interactivity features refer to rhetorical techniques that

communicate “a sense of engaging presence” to a Web site’s visitor, whereas campaign-to-user interactivity refers to features that enable political parties or campaigns and citizens to communicate with or act on each other. This second dimension reflects the two-way communication dimension, as suggested by Liu and Shrum (2002). McMillan (2002) uses another classification and distinguishes between user-to-user, user-to-document, and user-to-system interactivity dimensions, in which the user-to-user dimension corresponds with the two-way communication suggested by Liu and Shrum (2002). Although interactivity is categorized in many ways, scholars agree that interactivity consists of at least the dimension of two-way communication. Although much previous research has considered nonpolitical Web sites, the various functions of a party Web site, such as informing citizens, creating involvement, making contact and mobilizing, indicate that interactivity plays an important role (Foot & Schneider, 2006; Lilleker et al., 2011).

Given our interest in the interaction between politicians and citizens in the context of online political campaigning, the two-way communication dimension of the interactivity construct is especially suitable for the purpose of the current research. Web site features that reflect this dimension enable citizens and political parties to react to one another (i.e., interactivity as a process; online interaction between two or more people, Stromer-Galley, 2004). In line with Gulati and Williams (2007) and Lilleker et al. (2011), we further distinguish between functions that enable citizens’ acts of communication with the party and the act of political participation (interactivity as a product of the characteristics of a medium, Stromer-Galley, 2004). Thus, we distinguish between interactive functions that enable communication or conversation between the party and the citizen, which we call *discussion* features, from functions that allow citizens to engage with the political party other than through conversation, which we call *participation* features. Functions that aim to join online conversations promote continuous online discussion and communication and potentially reinforce political deliberation. Examples of such features are options to reply to messages or to contact the party directly. Functions that aim to engage with the party are called political participation features

and aim to mobilize citizens to patronize the political party. Examples of such participation features are buttons that facilitate financial support and allow citizens to register as volunteers (Lilleker et al., 2011; Park & Perry, 2008; Stromer-Galley, 2004).

Other interactivity dimensions, such as active control and synchronicity, are less suitable for this study because they may increase opportunities for users to adjust Web sites to their preferences (active control), but they do not address the real interaction between politicians and citizens. Furthermore, these features may differ from occasion to occasion and therefore cannot be studied as a stable characteristic of the party’s communication (synchronicity). These features may also contribute more to the visual appeal of the Web site (e.g., reflecting technical sophistication) rather than increasing the possibility of interaction between the party and citizens (see Lilleker et al., 2011). In addition, the degree of synchronicity depends on the quality of Internet bandwidth; it is not necessarily characteristic of the communication process between political parties and citizens. For this reason, the political party and its (conscious) choices for interactivity that allow for direct interactions with citizens are central to this study.

Thus, in sum, the present research focuses on interactivity within political campaign Web sites by analyzing the presence of features that enable political *discussion* and political *participation* and examining the relationship between these features and election results. First, we examine factors that explain differences in the levels of Web site interactivity between political parties.

### **Differences in Web site interactivity**

In examining the level of interactivity in political campaigning, we investigate the use of interactive (deliberative) features on Web sites for local elections. More specifically, we compare (a) local branches of national parties with independent local parties, and (b) parties in smaller and larger municipalities. Comparing truly local parties and local branches of national parties is important, because in the Netherlands, an important share of the vote goes to parties that are truly local and exist only in one municipality (Boogers &

Voerman, 2010). These local parties, as previous research shows, seem to perform better. They are more “rooted” in society and they are likely to be able to increase involvement among audiences, given that they are not tied to party politics (Boogers & Voerman, 2010). It is therefore interesting to examine how they use online media to engage with audiences.

Considering levels of Web site interactivity between parties, it is important to focus on the *equalization* versus *normalization* debate (Gibson & Ward, 2000). The idea of equalization stems from the notion that the Internet is a fundamentally different medium. Smaller and more marginal parties use the Internet more often to communicate with citizens than larger ones and thus profit more from it. The normalization approach suggests that the Internet is not significantly different from other media (and other forms of party communication) and thus favors larger parties that have more experience and resources. Because the Internet has quickly developed into a “standard” campaigning tool, the normalization approach seems to be more applicable. Therefore, we expect that local parties will have less interactive Web sites than local branches of national parties. In the case of local parties and branches, a party’s resources may explain the level of interactivity in their Web sites; local parties have fewer resources, both financially and in terms of expertise. In line with Gulati and Williams’ (2007) argument, we can expect that local parties have limited resources because they cannot rely on financial support from the national party organization or on the organizations’ expertise in facilitating the creation of an interactive Web site. Thus, we expect local parties without a national party organization to have less interactive Web sites than parties with a national party organization.

**H1:** The Web sites of local branches of national parties are more interactive than the Web sites of local parties.

Differences between municipalities are likely to be found as well. We expect that in smaller municipalities, parties have less sophisticated Web sites compared to parties in larger municipalities, because parties that participate in elections in larger municipalities have both the need and opportunity to make

their Web sites more interactive. In smaller communities, the need for online communication is expected to be lower because people are likely to know their politicians personally and people encounter them in real life more frequently. Thus, the distance between the representative and the voter is smaller. In larger municipalities, communication between representatives of the party and the electorate is less likely to occur through face-to-face communication.

Additionally, parties in larger municipalities will have the opportunity to create interactive Web sites because they can be expected to have more (financial) resources to organize campaigns and to establish professional Web sites. Gulati and Williams (2007) conducted a content analysis of the campaign Web site of every U.S. Senate and House candidate in 2006. Their results indicated that major-party House candidates were more likely to campaign online, and major-party candidate Web sites were more informative and contained more interactive features to engage citizens. They argued that part of this difference might be explained by the difference in financial resources between parties: more money is needed for more sophisticated Web sites. Building a complex Web site and communicating with citizens costs money, and personnel that responds to the questions and comments of Web site visitors must be paid. In terms of our study, it is likely that parties in larger municipalities have the financial resources to pay for these expenses. Thus, we expect that the Web sites of smaller municipalities, in terms of the number of inhabitants, will be less interactive than Web sites in larger municipalities. Our hypothesis reads as follows:

**H2:** The Web sites of parties in larger municipalities are more interactive than the Web sites of parties in smaller municipalities.

### ***Is it worth the effort?***

The most intriguing question, and the most difficult one to answer, is whether all attempts to develop a strong online profile translate into greater sympathy toward the party and, ultimately, to better election results. Prior research in diverse domains has demonstrated that Web site interactivity positively affects affective, cognitive, and behavioral responses. More specifically, in the field of



political communication, several studies have demonstrated that Web site interactivity affects the responses of potential voters. For example, Sundar et al. (2003) demonstrated that increased interactivity on political Web sites leads to a more positive evaluation of political candidates and higher levels of agreement with the candidate's position on policy issues. In this study, interactivity was manipulated using more or less hyperlinks on a Web site. Thus, structural interactivity features were studied rather than features that enable parties and citizens to communicate directly. Although their study examined interactivity from a different perspective, their findings indicate that higher levels of interactivity lead to positive outcomes. In an experimental study, Wise, Hamman, and Thorson (2006) demonstrated that participants were more inclined to participate in a political online discussion when this discussion was interactive (compared to not interactive). Utz (2009, experiment 2) demonstrated that politicians who interact with Web site visitors are evaluated more positively. Also Kruikemeier et al. (2013), who use an experimental design, showed that interactivity used on party Web sites affects political involvement. Finally, interactivity used on Twitter can yield positive outcomes, such as higher intention to vote for a candidate (or actual voting, see Kruikemeier, 2014), or evaluating a political candidate in a positive way (Lee & Shin, 2012). The rationale behind the effects is as follows: due to interactive communication, people feel as if politics is close to them (i.e., social presence), and due to this closeness, they feel more connected with a political party, which might affect their intention to vote for a party (Lee & Shin, 2012). On the basis of these studies, we expect that higher levels of interactivity on Web sites during the Dutch local elections positively affect the key dependent variable in political campaigning, electoral results.

**H3:** The higher the level of interactivity on a party's Web site, the better the election results of the party will be.

## Method

To test our hypotheses, we first conducted a content analysis of political party Web sites to investigate the level of interactivity on the Web sites of the (local

branches of) political parties participating in the Dutch local elections of 2010. Next, we collected information from several databases to obtain the figures for municipality size and election results. After we identified the presence of interactive features on the Web sites of all participating parties and retrieved the additional data, we linked the two data sets to identify differences in Web site interactivity and to determine whether the level of Web site interactivity can be linked to election results.

## Sample

On February 17, 2010, more than two weeks before the election, we downloaded all home pages (i.e., the first-level page) of Web sites of parties that participated in one of the 394 municipalities that would hold elections on March 3. Because Web sites change quickly due to being regularly updated, comparing the interactivity of these sites can be difficult. Therefore, it was important to download and save the Web sites on one particular day. The download was performed automatically by using the Web site *volgdeverkiezingen.nl* ("follow the elections") as a starting point. This Web site collected all online activities of local parties and politicians. Focusing the analyses on the home page, and not the hyperlinked pages accessible from the home page, is in line with previous studies (e.g., McMillan, 2000). Weare and Lin (2000) argue that analyzing the home page is suitable for an analysis of the structural features (such as interactive features) embedded in a Web site. Furthermore, "[g]iven its attention-grabbing and organizational roles, a home page is likely to contain many central elements of [the Web site]" (Weare & Lin, 2000, p. 281). In this sample, nine parties that participated in multiple municipalities were included (i.e., CDA, ChristenUnie, D66, GroenLinks, PvdA, SGP, SP, VVD, and FNP) as well as a wide range of independent local parties.

## Measures

### Interactivity

A codebook was developed that included a description of the items on which the Web sites were coded. In total, six coders were trained to code the Web sites. The interactive features were first selected according to the conceptual

interactivity dimension of two-way communication (Liu & Shrum, 2002), which is defined as campaign-to-user interactivity by Warnick and colleagues (2005). Second, features were selected that were identified in prior content analyses of political Web sites (Lilleker et al., 2011) and on the basis of prior research that demonstrated that these features contributed to users' perceptions of the interactivity of the Web site (Voorveld, Neijens, & Smit, 2010). We coded whether 16 interactive features were present (coded as 1) or absent (coded as 0). We differentiated between features that enable conversation between the party and citizens, so-called *conversation* features, and features that enable citizens to act on the political party in ways other than by communicating, so-called *participation* features (Gulati & Williams, 2007; see Table 1 for features and descriptives). For the participation subdimension, nine features were coded, and for the discussion subdimension, seven features were coded. The two subdimensions are correlated, but not strongly ( $r = .36$ ). To analyze the differences in levels of interactivity between parties, the number of features of these subdimensions was calculated (ranging from 0 to 9 and 0 to 7, respectively). To analyze the relation between interactivity and election results, both indices are used as independent variables.

### **National or independent local party**

A dummy variable captures whether the Web site is from a local branch of a national party (0) ( $n = 1664$ ) or from an independent local party (1) ( $n = 471$ ).

### **Municipality size**

We took the number of inhabitants as a measure of municipality size. These numbers were retrieved from the Web site of the Dutch statistical office CBS and divided by 1,000 to improve the readability of the tables.

### **Election results**

The election results for 2010 were collected using the online information provided by the news organization ANP. To increase comparability across municipalities, we used percentage scores (instead of, for example, the number of seats).

### **Control variables**

Collecting data of other factors that influence election results at the local level is not easy; detailed and comparable data are not often available. We make use of three different control variables to examine the relation between interactivity and election results: first, whether the party was a member of the local government when the election was held (*coalition*); the

**Table 1.** Coded web site features and descriptives.

Web site characteristic	Feature	Presence % of sites	
Interactivity <i>Participation</i>	Comments of readers	1.8	
	Call to volunteer	2.3	
	Call to donate money	9.8	
	Call to support the campaign	10.6	
	Online poll	13.6	
	Integrated agenda	21.2	
	Subscribe to RSS-feed	40.7	
	Invitation to become a party member	69.0	
	News items	77.9	
	<i>Discussion</i>	Ability to respond to a Weblog	0.7
		"Share" links to social media (Twitter, Hyves, Facebook, LinkedIn)	1.7
		(Ability to respond to) Twitter conversations	3.3
		A Weblog	5.5
		Invitation to respond to/rate news messages	7.2
Ability to share a YouTube video		17.6	
"Follow us" links to social media (Twitter, Hyves, Facebook, LinkedIn)		27.4	

Note.  $N = 2,135$

*election results of 2006* (the previous local elections), again in percentages and obtained from ANP; and the *overall results of the 2010 elections* (also from ANP), the total number of seats the party won at the national level, for which we group all results from different local parties. The latter variables control for national trends that we cannot explain with the other variables.

### Procedure

In total, six coders were familiarized with the definitions of each interactive feature and were trained to code the Web sites. Five coders received a random subset of the Web site sample and a recording sheet, on which they coded whether each interactive feature was present or absent. All coders worked independently. To assess inter-coder reliability, the sixth coders double-coded a subsample ( $N = 30$ ) of the Web sites coded by the other coders. Krippendorff's alpha was calculated for the *participation* (.75) and *discussion* (.67) features. Both alphas were considered more than acceptable (Krippendorff, 2003).

### Analysis

Our data set has a multilevel structure: it includes local branches that are nested in national parties because observations are not independent. For example, local branches of the same parties sometimes use similar Web site templates, and election results of local branches are also determined by the performance of the party at the national level. For this reason, we rely on multilevel modeling that explicitly accounts for those dependencies. In this paper, we present the results of various multilevel models with random intercepts. Because we do not anticipate that any of the effects will differ across parties, we keep slopes (i.e., the effects of independent variables) fixed across parties. The first models address the first aim of our study, which is to identify differences in levels of Web site interactivity using the indices for *discussion* features and *participation* features as dependent variables and the number of inhabitants, the election results of 2006, and party dummies as independent variables. The second model addresses the second aim of this study, which is to test the

consequences of Web site interactivity for election results using the election results of 2010 as a dependent variable and the election results of 2006, the overall national election results, coalition results, and the index for Web site interactivity as independent variables. For some municipalities and parties, information on some of the control variables was not available. In the end, the first analyses include 1,822 cases and the latter ones 1,703 cases. In all analyses, both local parties and local branches of national parties were included.

### Results

First, [Table 1](#) presents the descriptive results of the various separate interactivity items included in the content analysis. As shown in the table, some features appear more frequently on local sites than others. News items and the opportunity to become a party member are explicitly offered on more than half of the Web sites (77.9% and 69.0%, respectively), while the opportunity to subscribe to an RSS feed is offered on 40.7% of the Web sites. Furthermore, links to social media are present on roughly one third of the Web sites (27.4%), whereas the other features do not pass the 20% threshold.

Turning to our first hypothesis, we compare the levels of interactivity between local branches of national parties and independent local parties. On average, the first group scores significantly higher on both the participation,  $M = 3.00$  compared to  $M = 1.54$ ;  $t(2133) = 18.73$ ,  $p < .001$ , as well as the conversation,  $M = .69$  compared to  $M = .45$ ;  $t(2133) = 5.09$ ,  $p < .001$ , features. These findings are in line with hypothesis 1.

A second source of variation was the size of the municipality where the elections took place. We expected that municipalities with large numbers of inhabitants would have more interactive features on their Web sites (H2). As expected, bivariate correlations seem to confirm this relation; the number of inhabitants is positively correlated with participation subdimension ( $r = .129$ ,  $p < .001$ ) and especially with the discussion subdimension ( $r = .237$ ,  $p < .001$ ).

The multivariate analyses presented in [Table 2](#) only partly confirm the findings from the bivariate analyses. In the model explaining variation in interactive-participation, we find that independent local parties indeed score lower (coefficient of



**Table 2.** Explaining levels of interactivity and nationalization.

	Interactivity-participation		Interactivity-discussion	
	Empty model	Full model	Empty model	Full model
Constant	2.7905*** (.3148)	2.7780*** (.3065)	.7255*** (.1065)	.5818*** (.1108)
Election 2006		-.0003 (.0044)		.0017 (.0028)
Coalition		.0421 (.0754)		-.0065 (.0484)
Inhabitants		.0020*** (.0004)		.0020*** (.0002)
Local		-1.3340 (.9881)		-.2643 (.3250)
Variance level 1	1.0784	.8811	.1099	.0928
Variance level 2	1.7774	1.7532	.7606	.7222
Log likelihood	-3132.04	-3118.52	-2351.37	-2303.56

Notes. Estimations are unstandardized coefficients from fixed-effects multilevel models, standard errors in parentheses.  $N = 1,822$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

-1.3340), but also that this difference is not significant when controlling for alternative explanations. Thus, H1 needs to be rejected. In support of H2, however, the number of inhabitants increases the presence of interactive-participation element; for every 1,000 inhabitants, the index goes up .002 points. The log-likelihood decreases significantly compared to the empty model, with 14 points, while especially the unexplained variance at both the party and Web site level decreases.

Second, for the discussion dimension, results are largely similar. Again, we find a negative coefficient for the independent local parties (-.2643) that is not significant, thus failing to confirm H1. In line with H2, the number of inhabitants increases the presence of interactive discussion elements on the Web sites; every 1,000 inhabitants increase the number of elements by .002. We find the model improvement to be significant, and again unexplained variance at both levels is reduced. Thus, in sum, we found no support for H1, but we found support for H2.

Table 3 presents the results of our final analysis that addresses the election result as a dependent variable (H3). Not surprisingly, the model shows highly significant effects from previous election results on current results. Being a member of the local government results in a significant decrease in support. What is most interesting, however, is the influence of the level of interactivity on the election results. The analysis partly confirms our expectations that the more interactive features a party has on its Web site, the higher it scores in the elections. But this

**Table 3.** Explaining election outcomes.

	Empty model	Control model	Full model
Constant	13.5520*** (1.0540)	2.1636 (1.3704)	2.1976 (1.3807)
Seats nationally		.0010 (.1139)	.0009 (.1132)
Coalition		-.5310*** (.2219)	-.5287*** (.2217)
Election 2006		.8352*** (.0138)	.8351*** (.0138)
Participation			-.0703 (.0747)
Discussion			.2320* (.1145)
Variance level 1	10.4119	6.4791	6.4016
Variance level 2	51.7379	15.0432	15.0070
Log likelihood	-5792.80	-4744.64	-4742.53

Notes. Estimations are unstandardized coefficients from fixed-effects multilevel models, standard errors in parentheses.  $N = 1,703$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

is only true for the discussion dimension. The participation dimension turns out to be insignificant. Each discussion feature adds .23 percentage points to the election results. We will discuss the logic behind this finding in the conclusion, although this is a relatively small difference, given the standard deviation of the discussion index of .90. However, when moving from a minimum (0) to a maximum (7) on this scale, a party can gain 1.6 percentage points in votes, which is substantial. The model improvement for the model including both variables compared to a model including none is not significant ( $Chi\text{-squared} = 4.20, df = 2, p = .16$ ), but a model that only includes the discussion feature is marginally significant ( $Chi\text{-squared} = 3.32, df = 1, p = .07$ ), while the effect of the discussion feature remains

intact. Furthermore the unexplained variance at both level one and two decreases slightly. We thus find a small yet substantial influence. Therefore, H3 was partly supported.

We additionally tested whether a subset of features would result in a better prediction of the election outcome. One could, for example, argue that those discussion features that enable sharing of information outside of the party Web site (via social media and YouTube) have a particularly strong effect, given that they offer the opportunity to spread information more widely. This idea, however, was not confirmed by our analyses.

## Conclusion and discussion

Our study contributes to the understanding of the use and implications of online communication in local election campaigning. The aim of this study was twofold. First, differences in Web site interactivity were identified to gain a better understanding of whether political parties take the opportunities for interactive campaigning that the Internet offers them. On the basis of a content analysis of the presence of interactive features on political Web sites during election times, we compared the level of interactivity between local branches of national parties and independent local parties, and for political parties in different municipality sizes. The second aim was to examine whether interactivity in political Web sites has a political impact. Therefore, we linked the level of Web site interactivity identified in the content analyses to the election results.

Based on these analyses, several important conclusions can be drawn. First, it is difficult to determine whether the relative levels of Web site interactivity can be considered high in the election period for which we analyzed the political Web sites because there have been no studies conducted during other election periods in the Netherlands that can be used as benchmarks. However, we can evaluate whether previous claims about the use of interactive features by (Dutch) political parties are valid. Van Santen (2009), for example, argues that during the campaign for the national elections of 2006, political parties did not use the opportunity to communicate interactively with their audience. Also Vergeer, Hermans, and Sams (2013) found that political candidates are reluctant to use

interactive social media in their campaign (i.e., Twitter). In addition, a literature review of the use of interactivity on Twitter shows that candidates do not often engage in an interactive dialogue with citizens (Jungherr, 2016). These conclusions support our findings: parties did not use the wide range of interactive features available extensively on their Web sites in 2010.

Second, although the use of interactive features is limited, there exists considerable variation across parties. First, local parties' Web sites are less interactive than the Web sites of local branches of national parties. This finding seems to be in line with Gulati and William's (2007) *normalization* thesis, suggesting that local parties, compared to local branches of national parties, have limited resources to facilitate interactive advanced Web sites. However, it is important to realize that these differences are not significant in a multivariate model that, for example, controls for size of the municipality. It might, in the end, not be so much about the differences between national parties and local parties per se, but rather about the different contexts in which they appear (i.e., independent local parties are more common in smaller villages). Second, parties in larger municipalities used more interactive communication than parties in smaller municipalities. This finding was in line with our expectations and underlines the claim that resources that are more readily available in larger municipalities may determine the level of interactivity of political Web sites.

A third conclusion is that interactivity makes a difference. We found a positive relationship between Web site interactivity and voting results, which is an interesting finding. Specifically, it seems that the discussion features, and not the participation features, affect voting. In other words, it is the process of communication that makes a difference, and not the interactions with the technological features of a Web site (Stromer-Galley, 2004). This is also largely in line with previous research (e.g., Utz, 2009). Hence, experimental research found that if politicians engage in a responsive online dialogue, citizens have the feeling that they engage in a direct conversation with that politician (i.e., closeness with a politician), which positively affects evaluations and stronger voting intentions (Lee & Shin, 2012). It

is likely that participation features, such as clickable features of Web sites, do not induce such feelings of closeness. Thus, taken together, the current study extends previous research by demonstrating that Web site interactivity may influence actual behavior, such as voting preferences. It is important to emphasize that this effect is small, which is not surprising given the many factors that influence vote choice.

The finding also adds to recent evidence that interactivity on social media or the use of (interactive) platforms affects “real world” voting (Kruikemeier, 2014; Spierings & Jacobs, 2014). Moreover, these findings empirically support claims about the importance of interactive communication tools during election times. Therefore, interactivity, specifically two-way communication tools that facilitate communication between the political party and citizens, should be taken into account when examining and theorizing the influence of political campaigning. This finding may also indicate that the use of online media is not without consequences. In the era of postmodern election campaigns, political parties may benefit from intelligent use of the opportunities the Internet offers, such as interactive Web sites. Combining the results from the first and second parts of our analyses, we find that larger parties profit most from the use of interactivity; they are able to devote more resources and to grow even larger in electoral terms, ultimately increasing the differences between smaller and larger parties.

Regarding our conclusions, we must state a few important limitations. It is possible that our findings represent a general campaign effect rather than a specific *online* campaign effect. A professional, interactive Web site may be informative about the general organization of the election campaign at the local level and may thus be a good indicator of the general professionalization of the campaign (D'Alessio, 1997; Gibson & McAllister, 2006; Koc-Michalska, Lilleker, Surowiec, & Baranowski, 2014; Kruikemeier, 2014; Vliegthart & Van Noort, 2010). Considering all the elements and aspects of a political campaign, it is difficult to isolate the impact of only online media and/or its interactivity. Therefore, future research could take into account other media variables such as

media budget, media appearance, and sentiment of media coverage. Despite this reservation, there is also a strong argument in favor of the claim that the effects on election results can be ascribed to online campaigning. That is, previous studies demonstrated that even the mere online presence of organizations (Kelleher, 2009), political parties (Sudulich & Wall, 2010) and politicians (Kruikemeier, 2014) may result in positive outcomes and even predict election results (such preferential votes). It would be odd to assume that only presence in online media influences voters, and communication style (in this case in interactive style) does not. Nevertheless, even when taking all limitations into account, our results inevitably demonstrate that local elections are not completely determined by national politics and that the influence of the local branches of political parties is more than marginal. The campaign at the local level makes a difference, but the precise mechanism that explains this effect remains to be further investigated.

This study leaves a wide variety of questions unanswered, and these questions may be the focus of future research. An important caveat is that we did not examine how often political parties or politicians “talked back” to citizens or responded to requests made by citizens. Although interactivity is thus possible using different online features, to fully capture two-way communication, one should include responses by political parties as well. Only by including these responses, the entire feedback loop (i.e., mutual and public discourse or responsive and controlled dialogue, Ferber, Foltz, & Pugliese, 2007; McMillan, 2002) is revealed and researchers can better assess what it is about online communication that ultimately leads to campaign effects. Furthermore, future research should take into consideration different types of online communication tools or online platforms. The Web site can be considered a central element of parties' online communication, but social media, such as Facebook and Twitter, occupy an increasingly prominent spot. Interactivity opportunities and effects should be analyzed for these platforms to obtain a complete picture.

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