



Kay Hinz, M.A.

GRK LinkDe, Heinrich-Heine-Universität Düsseldorf

Email: kay.hinz@hhu.de

Paper for the Panel “Political Communication, Digital Campaigns and Elections” in Section 07 “Electoral Politics” at the 5th ECPR Graduate Student Conference, July 3-5 2014 in Innsbruck / Austria

Campaigning on Facebook and Twitter.

Information Provision of Candidates in the Social Web during Germany’s Federal Election Campaign 2013.

Abstract

Which factors influence candidates’ performances on Social Network Sites during campaigns? The aim of this study is to identify in which way candidates for the German Federal Election in 2013 accomplished information provision for (potential) followers as a main function of campaigning in Web 2.0. The focus lies on the analysis of factors that influence the compliance of this function. Are candidates driven by personal characteristics, by rationalities of their potential or factual voters or by factors which are related to their party?

For this purpose the activities of candidates on Facebook and Twitter were ascertained and analyzed quantitatively in a linear regression and in a multilevel analysis over the period of four weeks before the election. Results show that online communication of candidates depends on personal factors of the candidates as well as factors relating to their party. Demand-oriented factors do play a meaningful role only for candidates of party lists.

Keywords

Web 2.0; Social Network Sites; Online-Campaigning; Facebook; Twitter; German Federal Election 2013; Normalization Hypothesis; Inherent Equalization Hypothesis; Digital Native; Digital Divide; Professionalization; Disintermediation

Campaigning on *Facebook* and *Twitter*.

Introduction

Social Network Sites (SNS) have become popular in society as well as in politics for informing and connecting. Here political actors are able to reach potential voters without detouring via traditional mass media. Communication is simplified and can occur at a direct connection between politicians and citizens. This is important for a communicative democratic culture because parliamentarians are a connecting link between the political system and citizens. They impersonate the representative system (Vesnić-Alujević, 2013, p. 433).

In this study I want to determine the motivations for candidates for the German Federal Election 2013 to use SNS during the campaign and the frequency they are used in. The results highlight individual campaigning strategies and build a foundation for further questions concerning networking, mobilization and user participation as elements of a relationship of representation between politicians and voters (Gibson & Ward, 2000, pp. 301ff.).

Using *Facebook* and *Twitter* I will examine the two largest SNS, which also play an important role in the public perception of politics. To determine the extent of the candidates' usage of SNS in campaigns I will analyze how many times they offer information to network users through posts on their profiles. Beyond that I want to find out which factors influence the candidates' performance and the fulfilling of information provision (Gibson & Ward, 2000, p. 305) on SNS and who the communicative role of politicians is addressed to. Are candidates driven by personal characteristics, by rationalities of their potential or factual voters or by factors which are related to their party?

Even though this study only deals with the two most important SNS and with one selected election, the *Bundestagswahl* 2013 in Germany, it is the aim of the study to make a statement about campaign communication of politicians in Web 2.0. Therefore I want to explain information provision as individual political action and find causal factors for fulfilling this main communicative function.

More than three out of four candidates with a realistic chance to get a seat in the German *Bundestag* use own profiles on at least one of the platforms *Facebook* and *Twitter* (Hinz, 2013). Never before has the Internet played such an important role for a German parliamentary campaign. The potential for its communicative relevance is enormous because now the access to the public is no longer a privilege for well-known candidates with large financial and personal resources. Now candidates from different parties have equal possibilities to reach citizens directly (Davis, 2010, p. 105).

Campaigning on *Facebook* and *Twitter*.

Prior Literature

Research concerning online campaigns is often centered on communication and performance of prime candidates (cf. Lilleker & Jackson, 2011; Utz, 2009) or parties themselves (cf. Gibson, Margolis, Resnick, & Ward, 2003; Gibson & Ward, 1997; Klinger, 2013; Lilleker & Jackson, 2011; Margolis, Resnick, & Wolfe, 1999; Porten-Che  , 2013; Schweitzer, 2011). When communication research focuses on political communication of politicians and candidates in general, there is often a lack of attention in regards to SNS. In studies dealing with the usage of SNS politicians are asked about their usage without examining objective data as possible factors of influence (cf. Gibson & McAllister, 2014; Metag & Marcinkowski, 2012; Vesni  -Alujevi  , 2013).

There are some studies dealing with the arrangement of individual political communication of politicians in Web 2.0 from an international perspective: Vergeer, Hermans and Sams compare the usage of *Twitter* by candidates for the European Parliamentary Election 2009 under the theoretical background of normalization and equalization hypotheses (cf. Vergeer, Hermans, & Sams, 2013). These are two contrasting assumptions concerning the development of online campaigns. "The normalization hypothesis predicts that major parties will have a significantly greater Web presence than minor parties. The inherent equalization hypothesis can tolerate the major parties' having a temporary advantage, but it predicts that ultimately, Web presence of most parties will become nearly equal." (Margolis et al., 1999, p. 30). Graham et al. screen exemplarily for Parliamentary Elections in Great Britain 2010 how much activity candidates show on *Twitter* and with whom they interact (Graham, Broersma, Hazelhoff, & van't Haar, 2013). Several studies dealing with the use of social media in campaigns focus on whole parties (cf. Klinger, 2013) or their prime candidates (cf. Unger, 2012) but there is little knowledge about the average candidate concerning his/her online performance and the reasons for using this communication channel. One explanation is that individual political online communication is a rather recent development. Therefore there is not much well-structured knowledge about in how far candidates use SNS in campaigns and which factors influence the usage. The aim of this study is to fill that specific knowledge gap.

Theoretical Background

Information provision as Campaign Factor on Social Network Sites

By distinguishing political online communication into different functions, Gibson and Ward (2000) wanted "to develop a methodology for content analysis of political Web sites" (Gibson & Ward, 2000, p. 301). They name "campaigning", "information provision", "networking",

Campaigning on Facebook and Twitter.

“resource generation“, and “promoting participation“ (Gibson & Ward, 2000, pp. 305f.) as functions of online campaigning and proved them at the party level for homepages. “Campaigning” is the chief electoral purpose “to recruit voters” (Gibson & Ward, 2000, p. 305). This function cannot be fulfilled at a SNS, but unifies all of the other functions at a higher level.

SNS enable a direct connection between politicians and citizens so that they can interact by “bypassing the journalistic gatekeeping of the mass media and the political filter of their parties’ national elites and staffers” (Vaccari, 2013, p. 23). In general information and communication are centerpieces of politics (cf. Schmitt-Beck, 2007, p. 753). During campaigns it gets even more important because these are times in which there is a high degree of mobilization and polarization. Campaigns, for that reason, are called “the most crucial moment for a representative democracy” (Hansen & Kosiara-Pedersen, 2014, p. 3). With their unlimited, unmediated access and easy handling, SNS are predestined for placement and dissemination of information (cf. Druckman, Kifer, & Parkin, 2007, p. 425). Information provision means “to disseminate information on the general public about their identity and policies” (Gibson & Ward, 2000, p. 305). It describes a kind of one-way communication, which is *top-down* flowing from “representatives towards the grassroots and the electorate” (Norris, 2003, p. 26). Fulfilling information provision is one-directional, but without information provision there is no possibility to fulfill other functions, which follow a logic of *bottom-up* communication and interactivity, which means in Web 2.0 “sharing of content, online collaborating between people, socializing among people, networking, and user-generated content” (Vergeer & Hermans, 2013, p. 400).

Therefore SNS are functional for the political public, because they “carry some profile information of representatives and make parts of the interaction publicly accessible” (Escher, 2012, p. 72). Politicians who communicate with citizens via SNS want to inform about political positions and want to be apprehended in the public. To the extent that information provision presupposes the fulfillment of other functions, it can be named as a requirement function. If candidates are not actively present on SNS, they can fulfill neither information provision nor other functions.

Influences on Political Online Communication

There are different influences underlying the motivations for the usage of online campaigning and the fulfillment of functions by the candidates because they act and communicate in different roles (cf. Jackson & Lilleker, 2011, pp. 87ff.; Ward, Lusoli, & Gibson, 2007, p. 211). As a result online communication cannot be described with one specific theory. Therefore I will be testing factors from three different potential groups of influence. They can be summarized

Campaigning on *Facebook* and *Twitter*.

as: personal characteristics / factors of a candidate, demand-oriented factors and factors relating to organization / party of a candidate.

Beginning with personal factors which are based on individualization (cf. Vergeer & Hermans, 2013, p. 401; Zittel, 2009, pp. 299ff.), one aspect which can affect the fulfilling of functions is the level of professionalization of a candidate in accordance with his/her personal rank in his/her career. Providing a service is connected with a profession (cf. Schweitzer, 2011, p. 311; Wilensky, 1964). Therefore professionalization can be connected to fulfilling of campaign functions.

Another personal factor is the perception of candidates in traditional mass media. These media lose their gatekeeping function because of the rising impact of information and communication possibilities in the Internet (cf. Davis, Baumgartner, Francia, & Morris, 2009, p. 13; Vaccari, 2013, p. 23). Therefore it must be asked if this development affects communicative processes on SNS. If it does, it is an indication for “disintermediation” (Gellman, 1996). It is relevant to know if traditional media and new media depend on each other and if there are effects of normalization or equalization (cf. Margolis et al., 1999, pp. 26f.) concerning the perception of well- and less-known politicians on the Internet.

A further relevant factor is the age bracket a candidate belongs to. Older candidates use fewer appliances for campaigning (cf. Hoffmann, Meckel, Ranzini, & Suphan, 2012, pp. 14ff.; Jackson & Lilleker, 2011, p. 99; Metag & Marcinkowski, 2012, p. 139). The group of *Digital Natives* (cf. Prensky, 2001) plays an important role. These people are linked to a high affinity for the usage of the Internet. It should be tested if this is also valid for the fulfilling of functions in Web 2.0.

The German Federal Election System is a combination of a personalized election on the basis of proportional representation for electing the *Bundestag*. Half of the Members of Parliament are elected directly in small election districts, the other half are elected via party lists (cf. Fehndrich, Zicht, & Cantow, 2013). Communication strategies of politicians depend on the mode of direct voting and especially in the districts competition between candidates calls for the usage of online campaigning tools and therefore fulfilling of functions (cf. Geber & Scherer, 2013, p. 4): “Compared with party-list candidates, district candidates should have stronger incentives to individualize their campaigns. If district candidates have a fair chance of winning their district, the incentive to individualize a campaign should be even stronger” (Zittel, 2009, p. 304).

Demand-oriented factors which can affect the fulfilling of functions are caused by a possible *Digital Divide* between regions (cf. Norris, 2001). It describes differences in usage of the Internet among the population in different regions which can generate a “barrier to increasing political participation” (Davis, 2010, p. 101). This can be linked with the candidates’ usage of

Campaigning on Facebook and Twitter.

the Internet: "Districts with a high number of Internet users provide a stimulus for candidates to adapt to new demands" (Zittel, 2009, p. 302).

Another demand-oriented factor is the achievable age group. Candidates use the Internet in campaigns because they think they cannot reach younger voters, the generation of Digital Natives (cf. Graham et al., 2013, p. 708; Papacharissi, 2009, p. 239), when only using traditional media. That way a candidate's decision to use SNS depends on his/her expectations of potential voters and therefore on the structure of their district or state (cf. Hoffmann et al., 2012, p. 12). Both peculiarities are codes for the grade of urbanization. It will be answered whether candidates adjust their campaigning strategy on the basis of an urban electorate. If the fulfilling of functions depends on demand-oriented factors, it militates for a marketing-based communication strategy. Candidates see the orientation on the potential electorate as a swap rate between supply and demand (cf. Hoffmann et al., 2012, p. 12; Vaccari, 2013, p. 16; Zittel, 2009, p. 302).

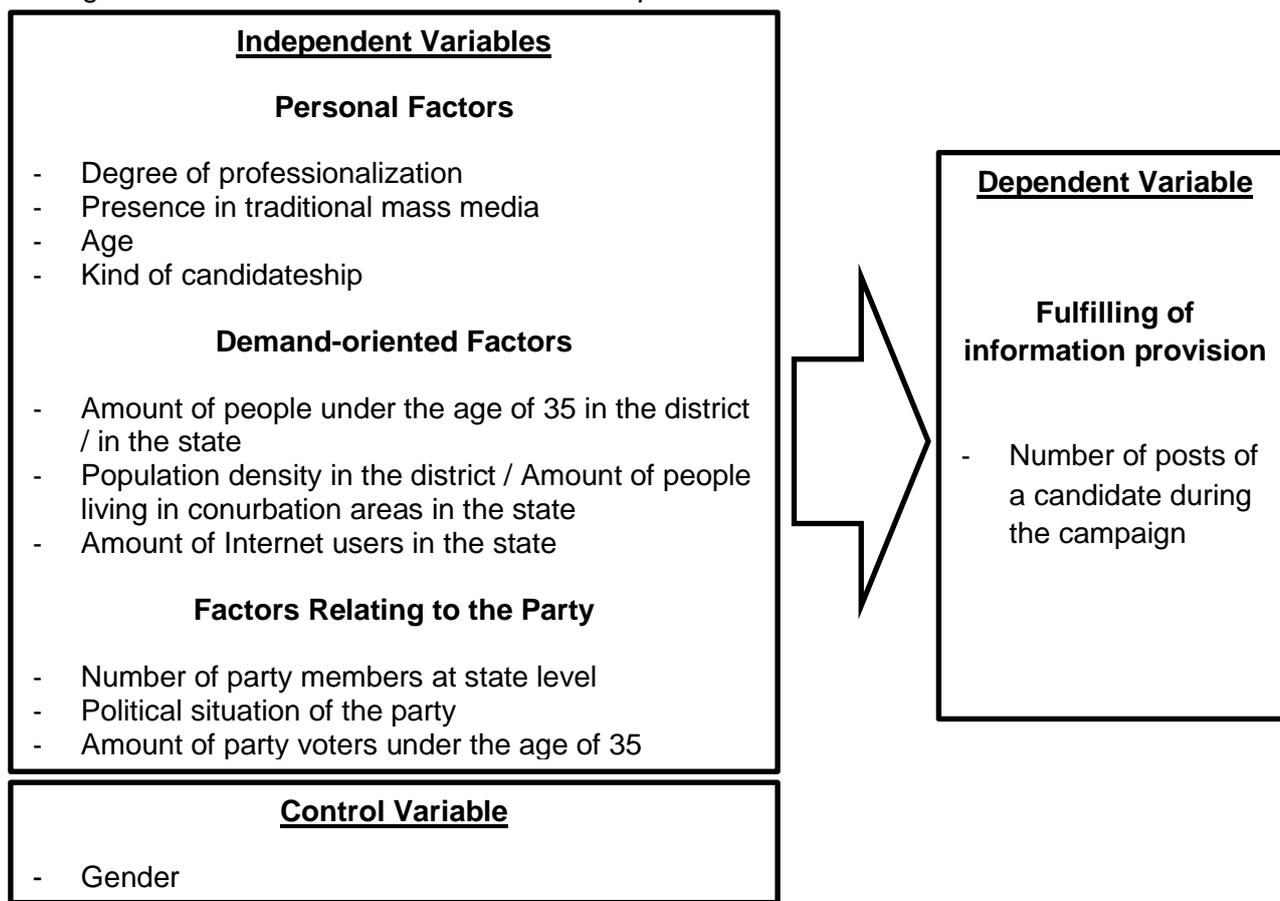
Factors relating to organization or directly to the party of a candidate have their main point of view on the contrast between the normalization hypothesis and the inherent equalization hypothesis (cf. Margolis et al., 1999, pp. 28ff.). These factors can be connected with size, structure or the political situation of the party. Studies have shown that online communication is used by candidates of small parties in a higher rate because their public perception was lower (cf. Wattal, Schuff, Mandviwalla, & Williams, 2010). This behavior is caused by an act of compensation. It would mean that especially small parties and those which are not members of the government would spend more time in fulfilling the function of information provision on a direct way to potential supporters via SNS (cf. Gibson & McAllister, 2014, pp. 1f.; Klinger, 2013, p. 720). If the analyses result in findings like that, it would mean that not the individual himself/herself is responsible for the extent of fulfilling of communication functions but it is the organization which affects it (cf. Hanna, Sayre, Bode, Yang, & Shah, 2011, p. 510; Lilleker et al., 2011, p. 208).

It can be expected that fulfilling of information provision is influenced by factors of the three labeled groups, which are connected with different theoretical backgrounds, which disembody in this model¹:

¹ For the model to test candidates of party lists, *Personal Factors* will be level 1 in the multilevel model, *Demand-Oriented Factors* will be level 2, and *Factors Relating to the Party* will be level 3.

Campaigning on Facebook and Twitter.

Figure 1: Examination model for information provision



It is not only estimated that the labeled groups influence the fulfillment of information provision but theories also deliver assumptions of the direction of influence. The following hypotheses will be tested in the analysis:

H1 Professionalization: The higher the degree of professionalization of a candidate is, the more he/she fulfills the function of information provision.

H2 Impact of traditional mass media: The more attendance a candidate has in traditional mass media, the more he/she fulfills the function of information provision.

H3 Digital Natives: The younger a candidate is, the more he/she fulfills the function of information provision.

H4 Kind of candidateship: Direct candidates fulfill information provision more than candidates on party lists.

H5 Digital Divide: The higher the amount of people having Internet access in a district / state is, the more a candidate fulfills the function of information provision.

H6a Digital Divide: The higher the population density in a district is, the more a candidate fulfills the function of information provision.

H6b Digital Divide: The higher the amount of people living in metropolitan areas in a state is, the more a candidate fulfills the function of information provision.

Campaigning on *Facebook* and *Twitter*.

H7 Digital Natives: The higher the amount of people under the age of 35 in a district / state is, the more a candidate fulfills the function of information provision.

H8 Equalization: The smaller the number of party members is, the more a candidate fulfills the function of information provision.

H9 Equalization: Candidates of parties which are not members of government fulfill the function of information provision more than candidates of parties which are members of government.

H10 Digital Natives: The larger the amount of party voters under the age of 35 is, the more a candidate fulfills the function of information provision.

Data & Measurement

With more than 26 million active users *Facebook* is the largest SNS in Germany (cf. WebMediaBrands, 2013). According to unofficial information *Twitter* has about 3.8 million German users (cf. Statista, 2013). At first sight *Facebook* might have much more relevance but one has to keep in mind that political relevance is not only about the number of users but also about the usage in political communication and its perception in traditional mass media (cf. Graham et al., 2013, p. 709). Both networks afford the possibility for politicians to provide information for network users who can receive, comment and share their posts. Relevant for these analyses are only those profiles of candidates that are “fan-pages” (*Facebook*) and open for the network public (*Twitter*). There must be a connection to the own candidanship or the party. That way it is ensured that there are just profiles in the selection which are pursued in the role as a politician.

The extent to which a candidate provides information for his/her supporters on SNS will be proved with the number of posts during the campaign. The investigation period for the data from *Facebook* and *Twitter* lasts for the heyday of the campaign (cf. i.a. Lilleker et al., 2011, p. 201; Schweitzer, 2011, p. 315) for the German Federal Election 2013, that is for the last 31 days before the election. During the period from August 22, 2013 until September 22, 2013 I gathered information activities of the candidates. It is not possible to determine if candidates run their SNS profiles on their own but according to a study 91 percent of German parliamentarians state that they control publishment in Web 2.0 at least substantially on their own (cf. Meckel, Hoffmann, Suphan, & Poell, 2013, p. 25). It can hereby be assumed that information is provided in the accordance with the candidate.

Possible personal factors of influence factors are operationalized in the following way: For the operationalization of the degree of professionalization the candidates are categorized into three groups under consideration of prior theoretical works (cf. i.a. Burmeister, 1993; Edinger, 2009). We can distinguish between candidates who do not have a parliamentary

Campaigning on *Facebook* and *Twitter*.

seat, candidates who have a parliamentary seat and possibly a promising *double candida-ship*², and as a third group top politicians who have leading positions in their parliamentary group, in the parliament or in the government. One has to keep in mind, that professionaliza-tion of a candidate implies more personal and financial resources (cf. Metag & Marcinkowski, 2012, p. 146; Schweitzer, 2011, p. 312), which can affect a higher frequency of information provision.

For gathering the attendance of a candidate in traditional mass media during the examination period I counted the number of findings on the German news aggregation platform *www.nachrichten.de* for the connection of a candidates' name and his/her party, e.g. "Angela Merkel, CDU".

The variable "kind of candida-ship" is differentiated to whether persons are direct candi-dates with a realistic chance of getting a parliamentary seat or whether they have a realistic chance of getting into parliament via their party list. Double candidates are examined in both groups. On the one hand their belonging to the group of direct candidates is due to the fact that this kind of candida-ship is more important for the personal standing in the party and for the connection with the voters (cf. Zittel, 2009, p. 304). On the other hand they are not *only* direct candidates and have to be examined twice. Additional personal factors are the age of a candidate and his/her gender.

As a demand-oriented factor there is the amount of population in a district / a *Bundesland* under the age of 35. This age limit shows the relative amount of Digital Natives. They are often described as persons born in the year 1980 or later (cf. Prensky, 2001). As an indicator for urbanization the population density in a district is gathered. For a state this is not a helpful indicator, because the bigger the region, the less the amount of population density is mean-ingful. For that reason for every *Bundesland* it is gathered which percentage of the popula-tion lives in a metropolitan area (so-called *BIK-Region*³). Moreover the relative amount of Internet users in a *Bundesland* is gathered. Because there isn't any data available for dis-tricts, the data of the states is used as proxy data. The preceding variables concerning the potential voters of a candidate or his/her party test a possible *Digital Divide*.

With factors relating to the organization the aim of this study is to prove variables concerning the subsistent voters of a candidate or a party, which can influence information provision of the individual candidates. Therefore the number of party voters in each *Bundesland* and the political situation of the party (government versus opposition) are tested. Findings concerning these variables will show whether there is a normalization or equalization between large and small parties, as well as more or less established parties. By testing the influence of the

² These are candidates who have a realistic chance to get a parliamentary seat through the direct election as well as through the election via party list. So their candida-ship is secured twice.

³ These are regions with more than 6.000 inhabitants, which belong to a core town of more than 5.000 inhabitants and at least one tied commune (cf. BIK-Regionen. Ballungsräume, Stadtregionen, Mittel-/Unterzentrengebiete. Methodenbeschreibung zur Aktualisierung 2000, 2001).

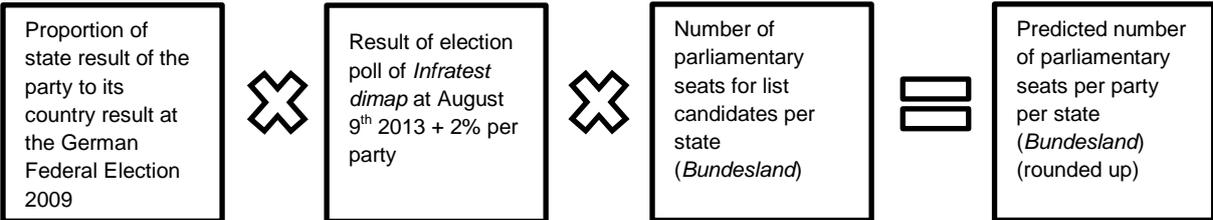
Campaigning on Facebook and Twitter.

amount of party voters under the age of 35 the relevance of Digital Natives in the target group can be shown.

Both, Facebook and Twitter, are channels for public political communication. It is not the aim of the study to declare network-specific assertions. That way it is not necessary for answering the core question of the study to analyze both SNS separately. If candidates provide information on both SNS, the data is aggregated.

Examination objects of this study are candidates of parties for the German Federal Election 2013 for whom a parliamentary relevance after the election can be predicted. The “perceived likelihood of winning is the most important predictor for the use of online campaigning” (Metag & Marcinkowski, 2012, p. 151). The likelihood for the relevance for candidates of party lists is calculated on the basis of an election poll of the German polling institute *Infratest dimap* from August 9th 2013, six weeks before the election (cf. Infratest dimap, 2013). Two per cent are added to the expected electoral result of every party to compensate deviations to the factual election results⁴.

Figure 2: Calculation of candidates with a realistic chance of getting a parliamentary seat



District candidates with a realistic chance to get a parliamentary seat are gathered in another way. If a candidate of a party won a district at the German Federal Election in 2009 with a pitch of ten per cent or more, then only the candidate of this party belongs to the case selection. If the pitch was less than ten per cent, then the candidates of the two most successful parties are included in the case selection. There are 299 districts which only the candidate with the relative majority gets a parliamentary seat for. In 137 districts the gap between the first and the second was less than ten per cent which makes for 299+137=436 district candidates. There are 177 double candidates within this group and 343 candidates of party lists, including the group of double candidates. A total of 602 candidates have, by definition, a realistic chance of getting a parliamentary seat. It will not be necessary to pay attention to sta-

⁴ In fact there are deviations from the case selection to the real election result, which are particularly noticeable, because with the FDP one party (deviating the assumption) didn't enter the *Bundestag*. Some of the candidates who finally got a parliamentary seat are not considered (110) and some, who failed to get a mandatory (81) are considered. The deviations are not problematic for the results of this study, because before the election none of the candidates knew assuredly, if he/she would enter the parliament or not. As a result all of these candidates had a realistic chance to get a parliamentary seat.

Campaigning on Facebook and Twitter.

tistical significance within the analysis because these values have to be used when working with samples.

One month before the election, on August 22nd 2013, it was determined which candidates have a profile on either of the platforms. 461 out of 602 candidates (76.6%) had at least one profile. For the analyses only those candidates are relevant who have a profile and who show at least one activity during the time leading up to the election. 23 candidates have profiles which are completely inactive. As a result there are 438 candidates of interest (*cf. table 1*). The results will be representative for candidates with a realistic chance to get a parliamentary seat *and* are active in the Web 2.0. All cases relevant to the study are tested in that way.

Table 1: Overall number of candidates and number of candidates who are active in Web 2.0

	CDU/CSU		SPD		FDP		Green Party		Die Linke		Total	
	N	Online	N	Online	N	Online	N	Online	N	Online	N	Online
Absolute	289	191	168	138	30	21	54	40	61	48	602	438
Relative	66.1%		82.1%		70%		74.1%		78.7%		72.8%	

Two ways of analyzing the resulting data will be made use of. The data of the direct candidates⁵ is analyzed in a linear regression with clustered standard errors. Because the dependent variable is not normally distributed, it is converted into a logarithmic value for the empirical analysis. Beside individual variables there are variables concerning the district of a candidate. Because of having only one or two cases for each district it is not possible to analyze the data in a multilevel model.

For candidates of party lists⁶ influences on fulfilling information provision are tested in a multilevel model. There are three levels: the individual level of candidates, the level of the party in a state and the level of the state. It will be possible to determine which variables of which levels have influence on information provision of a candidate in Web 2.0. Furthermore additional descriptive data will be shown.

Analysis & Findings

The total amount of the candidates' activities within the 31 days before the Federal Election summarized for *Facebook* and *Twitter* lies between one and 886 posts. A candidate pub-

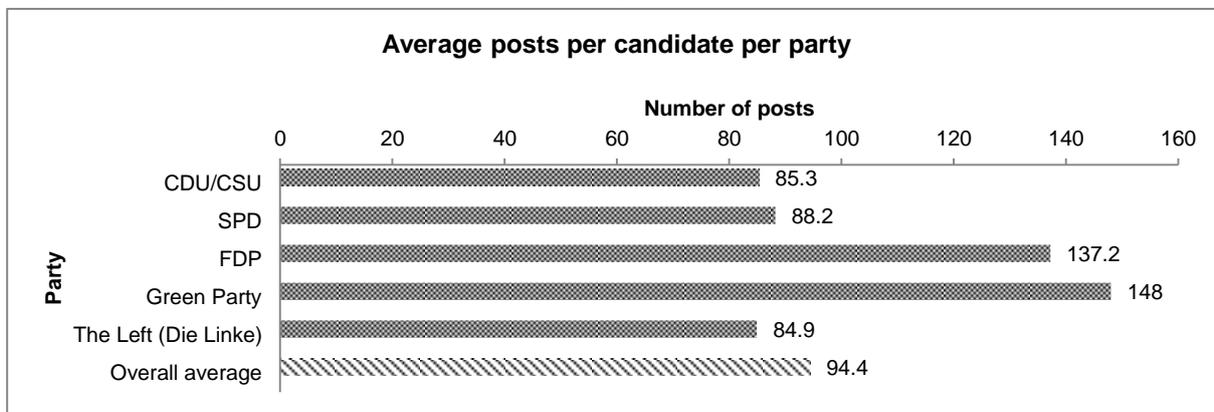
⁵ Double candidates are also examined in this model. Here data concerning their districts are tested. As a result they are seen as direct candidates in this analysis.

⁶ Double candidates are also examined in this model. Here data concerning their states are tested.

Campaigning on Facebook and Twitter.

lishes 94.4 posts on average, the median is 60. This shows that most candidates provide information to potential followers several times a day on at least one of the platforms.

Figure 3: Average posts per candidate per party within the examination period (N=438)



Candidates of the Free Democratic Party (FDP) and the Green Party (Grüne) deviate strongly positively from the average. They are the most active group of candidates being online. Candidates of the Social Democratic Party (SPD), the Christian Democratic Union / Christian Social Union (CDU/CSU) and the Left Party (Die Linke) are situated on a below-average level. The results reaffirm the concept of Digital Natives concerning the member structures of the parties. While about one fifth of the members of the Green Party and FDP are younger than 35 years, the other parties have a considerably smaller amount of young members. This shows that candidates of parties with a high amount of Digital Natives within their own ranks use SNS more frequently for information provision (*cf. figure 3*).

Campaigning on Facebook and Twitter.

Table 2: Influences of independent variables on fulfilling of information provision – Linear Regression, Direct Candidates

Linear Regression, Direct candidates	
Dependent variable: Fulfilling of information provision (logarithmized value)	
Independent Variables	Model 1 Coefficients
<i>Personal Factors</i>	
Degree of professionalization	.3298
Presence in traditional mass media	.0002
Age	-.0128
Kind of candidateship (Reference: Double candidateship)	-.1385
<i>Control Variable: Gender (Reference: male)</i>	
	.0706
<i>Demand-Oriented Factors</i>	
Amount of people under the age of 35 in the district	.0215
Population density in the district	.0000
Amount of Internet users in the state	-1.9169
<i>Factors Relating to the Party</i>	
Number of party members at state level	-.000
Political situation of the party (Reference: Opposition)	-.2005
Amount of party voters under the age of 35	2.7758
Observations	320
R²	.0667

In model 1, standard errors are clustered by district. Coefficients are comparable in magnitude. An increase of one unit means an increase by one standard deviation from the mean for continuous variables. There is no multicollinearity identifiable. Low values of coefficients are due to the logarithmization of the dependent variable. Values of significance and standard errors are not declared, because this analysis does not work with a sample but with all relevant cases.

The coefficient of determination shows that the regression model for analyzing influence factors on information provision can explain a part of the variance but it is obvious that there are other, additional factors influencing fulfilling of the function. These could be the technical affinity of the candidate, personal and financial resources or apprehension of loss of control about own information in the Internet. This does not affect the results of this study because it is not its aim to outline every possible influence factor.

As the empty model of the multilevel model with three levels showed, the third level (party in a state) has no influence on the explaining of variance. So the id-variable of the third level has to be excluded and variables of the former third level have to be included as individual influence factors on the first level.

Campaigning on Facebook and Twitter.

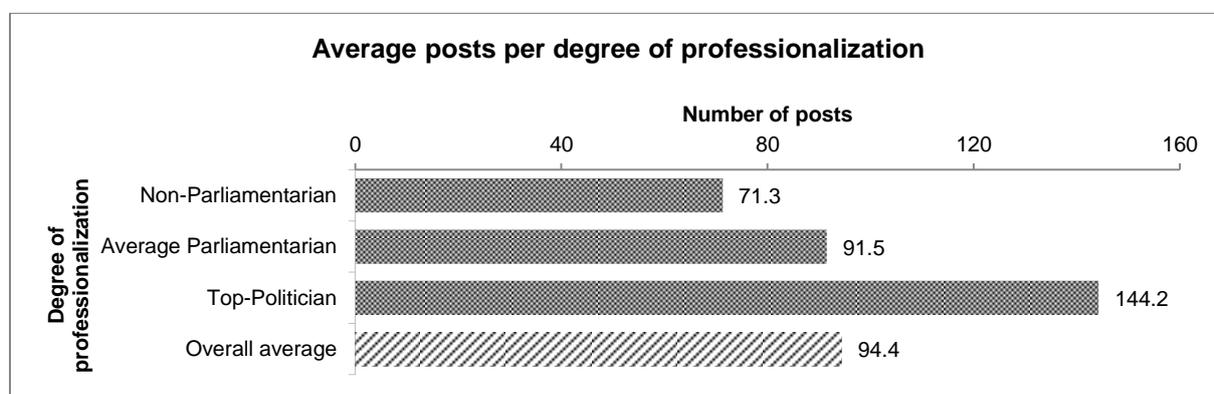
Table 3: Influences of independent variables on fulfilling of information provision – Multilevel Analysis, Candidates of party lists

Multilevel Analysis, Candidates of party lists	
Dependent variable: Fulfilling of information provision (logarithmized value)	
Independent Variables	Model 2 Coefficients
<i>Level 1: Personal Factors</i>	
Degree of professionalization	.4681
Presence in traditional mass media	.0002
Age	-.0218
Kind of candidateship (Reference: Double candidateship)	-.4825
<i>Control Variable: Gender (Reference: male)</i>	
	.0797
<i>Level 1: Factors Relating to the Party</i>	
Number of party members at state level	-.000
Political situation of the party (Reference: Opposition)	-.2770
Amount of party voters under the age of 35	2.5957
<i>Level 2: Demand-Oriented Factors (15 units: states)</i>	
Amount of people under the age of 35 in the state	-.1316
Amount of people living in conurbation areas	4.5705
Amount of Internet users in the state	10.1333
Observations	229
Pseudo-R² (Snijders & Bosker)	.16 (Level 1); .93 (Level 2)⁷

Coefficients are comparable in magnitude. An increase of one unit means an increase by one standard deviation from the mean for continuous variables. There is no multicollinearity identifiable. Low values of coefficients are due to the logarithmization of the dependent variable. Values of significance and standard errors are not declared, because this analysis does not work with a sample but with all relevant cases.

Beginning with personal influence factors I found out that the more a candidate is professionalized, the more he/she provides information for users on Facebook and Twitter.

Figure 4: Average posts per candidate per degree of professionalization within the examination period (N=438)



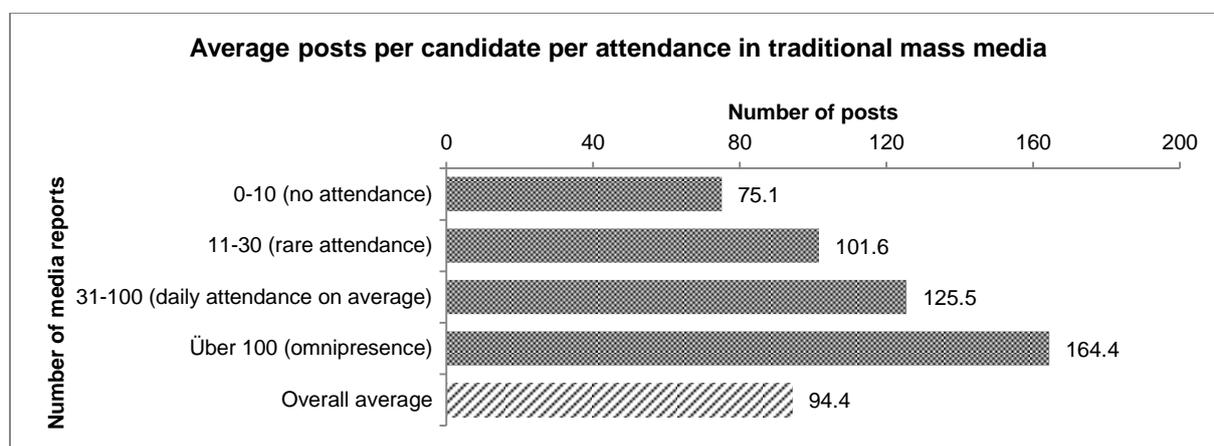
⁷ It is important to add, that this is a pseudo-r² on base of Snijders and Bosker (1994), which has limited validity. The ICC value of the model (.0035) is lower than the ICC of the empty model (.0410) which shows that the amount of unexplained variance decreases when adding independent variables.

Campaigning on Facebook and Twitter.

Top-politicians deviate from the average in a positive way, especially in comparison with candidates who are non-parliamentarians. This result contradicts the inherent equalization hypothesis: it is not the non-established politicians who seek a way to the public via Internet in a relatively strong way. The data of the empirical analysis supports this finding (cf. table 2 and 3). Hypothesis 1 can be confirmed.

Now it must be proved, in how far the presence of a candidate in traditional mass media during the period of campaign is connected with his/her information provision in Web 2.0. For the descriptive analysis candidates are categorized by reference to the extent of their media attendance into four groups. Here we can see strong correlations between attendance in traditional mass media and the own online activity:

Figure 5: Average posts per candidate per attendance in traditional mass media within the examination period (N=438)



Results show that those candidates who get more attention in traditional mass media are more active in information provision. There is a positive correlation between the presence in mass media and the online activity of a candidate. Hypothesis 2 can be confirmed. This shows that traditional mass media and new media are not separate systems. Connections are discernible, even if they are not strong at all.

The strength of information provision of candidates is also connected with their age. Only about 5% of the candidates who are present in Web 2.0 are born in 1980 or later. It is not possible to make convincing assertions about the group of Digital Natives in comparison with older candidates. Even so there is an influence of age on providing information for potential supporters. According to the data younger candidates use the Internet stronger as an appliance for campaigning than older candidates do (cf. table 2 and 3). Hypothesis 3 can be confirmed. Candidates with a high online activity do not only belong to the group of Digital Natives but also to the group of *Digital Immigrants* (Prensky, 2001).

Campaigning on Facebook and Twitter.

Descriptive data outlines that *double candidates* and candidates of party lists show online activity in equal measure, both have on average 106 posts during the examination period. Candidates who only have a promising direct candidatedship have on average 78 posts. In the multilevel analysis we see that double candidates provide more information to their potential supporters than candidates who only have a party list candidatedship. The tendency is the same at direct candidates. A double candidature has a strong positive effect on information provision. Furthermore it is remarkable that a direct candidatedship influences information provision in a negative way in comparison with a party list candidatedship⁸. This is divergent to theoretical assumptions and requires further research. Hypothesis 4 must be rejected.

There is a marginal statistical influence of a candidate's gender on his/her online activity. Women seem to be slightly more active. The median information provision is almost the same for men and women.

After testing personal influence factors we will turn the attention to demand-oriented factors. It has been analyzed if there is a *Digital Divide* between the extent of information provision of candidates from different states. It is remarkable that there are strong differences of online activity between the *Bundesländer*, and it correlates with the amount of Internet users in the state. As we can see in table 3, this result is only valid for candidates of party lists. Direct candidates are not influenced by this demand-oriented factor concerning the whole *Bundesland*. Hypothesis 5 can be confirmed partly.

It has also been tested whether there is a *Digital Divide* between more urban and more rural regions concerning the online activity of the candidates. Neither descriptive data nor empirical testing show a connection between population density and information provision in districts. Hypothesis 6a must be rejected. On the other hand there is a stark connection between the amount of people in a state living in conurbation areas and the number of provided information by the candidates (cf. table 3). So hypothesis 6b can be confirmed.

Moreover it is assumed that the amount of persons under the age of 35 in a district or a state influences the extent to which candidates provide information. We see that there is low positive influence on direct candidates (cf. table 2) and low negative influence on candidates of party lists (cf. table 3). Therefore there is no clear evidence in how far candidates are led by Digital Natives within their potential electorate. Hypothesis 7 cannot be confirmed.

With the third group of factors the influence of the party a candidate belongs to is tested. In regard to the size of the party by the number of party members it cannot be confirmed. There is no evidence that the number of members influences information provision. So a normalization or equalization between parties concerning the online activity of their members can be neither proven nor disproven. Hypothesis 8 must be rejected.

⁸ Due to the data structure it was not possible to compare candidates who do not have a doubled chance to get a parliamentary seat in a direct way. Therefore the influence of the kind of candidatedship has to be examined in an additional model which only contains a dummy variable of the kind of candidatedship as an independent variable. There the effect has been seen.

Campaigning on *Facebook* and *Twitter*.

Instead of party size the political situation of a party in Germany influences the extent of information provision of candidates in Web 2.0. Both, direct candidates and candidates of party lists, are influenced by the specific situation of their party (cf. table 2 and 3). Candidates who belong to parties of the parliamentary opposition are more likely to provide information for supporters than candidates of governmental parties do. This result can be caused by the inherent equalization hypothesis. Indeed candidates of SPD, Greens and Die Linke are no less established but as members of the opposition they do not have as many channels to get through to the public or to potential supporters (cf. Vergeer et al., 2013, p. 486). Therefore the Web 2.0 is a tool in campaigns which is used more strongly by opposed candidates. Hypothesis 9 can be confirmed.

To test the influence of the voter structure of a party on the information provision of candidates the amounts of voters under the age of 35 are separated into ten deciles, which are between 12.5% and 35.8% of the voters. The average amount of the candidates' posts is categorized by the amount of voters under the age of 35 and is computed afterwards. This shows very plainly that candidates of parties with more than 20% of voters under the age of 35 in a state provide most information to supporters. On average they publish 141 posts during the examination period. Where parties have lower amounts of young voters candidates publish 85 posts on average. Altogether it can be determined that there is a positive-linear relation between the amount of voters under the age of 35 and the online activity of a candidate during campaigns⁹. Hypothesis 10 can be confirmed.

It is remarkable that the amount of people under the age of 35 voting for a party has an effect on information provision of candidates while the amount of people under the age of 35 in a state or in a district has not. This shows a high importance of Digital Natives within the specific target group of a party. This factor may be demand-oriented in a way but it is not distinctly demand-oriented in the sense of a candidate, but in the sense of a party. So it belongs to the group of factors relating to the organization / party of a candidate.

Conclusions & Implications

It was the aim of this study to explain the extent of the fulfilling of information provision during campaigns in Web 2.0. For this purpose I examined the number of posts candidates for the German Federal Election 2013 published on *Facebook* and *Twitter*. Their online activity has been tested on the basis of factors from three groups.

⁹ Because of multicollinearity with the variable "amount of party voters under the age of 35" the variable "amount of party members under the age of 35" had to be excluded from the analysis. If the influence of the amount of party members under the age of 35 is tested in a separate model, I find out that information provision decreases with rising amount of older party members. The decision of deleting the variable concerning the amount of members under the age of 35 is caused by the epistemological interest. In regard to campaigns it is more important to get information about the voters' structure than about the members' structure. Moreover there was broader data with more variance for the structure of voters than for the structure of members.

Campaigning on Facebook and Twitter.

Apparently personal factors have the strongest impact on the extent of provided information: the more a candidate is professionalized as a politician, the more he/she fulfills information provision (hypothesis 1). Informing supporters via SNS is associated with the career structure of politicians. This result is emphasized by the positive effect of perception in traditional mass media (hypothesis 2). Both results disagree with the inherent equalization hypothesis, which assumes that visibility in the Internet will be equal for all candidates. Here we cannot come to a final conclusion about the effects of the perception of candidates in Web 2.0 but we can see that more established candidates are more inclined to use the Internet in campaigns for providing information. Moreover we can see that the age of a candidate is connected with his/her online activity (hypothesis 3). Beside citizens who are keen on using the Internet for political communication, especially the Digital Natives, we can outline a generation of *Digital Representatives*: candidates who provide information to citizens via a direct channel. Information provision is more connected to the age of a candidate than to geographical closeness to his/her potential electorate. Direct candidates use the Internet less strongly for campaign communication than candidates of party lists do (hypothesis 4).

Demand-oriented factors of the potential electorate in the own district do not have meaningful effects on the extent of information provision of direct candidates. As opposed to this it is recognizable that demand-oriented factors can affect information provision of candidates of party lists: The higher the amount of people having Internet access in a state is, the more a candidate fulfills the function of information provision (hypothesis 5). We can further see that the higher the amount of citizens living in conurbation areas is in a *Bundesland*, the more active candidates are in Web 2.0 (hypothesis 6b). This shows that there are effects of a *Digital Divide* on strategic communication of candidates. Influence of the amount of Digital Natives on the online activity of candidates (hypothesis 7) is not unambiguous. Direct candidates are influenced by a high amount of Digital Natives within their potential electorate in the district. On the other hand the amount of Digital Natives in a state has a light negative influence on information provision of candidates of party lists. Probably the age structure of a whole *Bundesland* is too notional to have an influence on strategic communication. Demand-oriented factors describe a strategic element of political online communication. A deliberate strategy of direct candidates to use SNS in consideration of the potential electorate cannot be taken for granted.

With testing factors relating to organization / party of a candidate it could be assumed that candidates do not only act individually but also correspondingly to party structures. Though we see that the size of the party does not affect information provision (hypothesis 8), it has been ascertained that candidates of parties which are not members of government fulfill this function more than candidates of parties which are members of government (hypothesis 9). While we conclude that there is a kind of normalization in online communication at the indi-

Campaigning on Facebook and Twitter.

vidual level of candidates there is equalization concerning the political situation of a party. Another factor that has a positive influence on information provision is the amount of party voters under the age of 35 (hypothesis 10). We can see an approach of the extent of online communication of candidates in direction to Digital Natives as a target group of their party. Therefore online communication seems to be addressed rather to factual and convinced voters than to undecided voters.

Connected with the core question of this study it has been found out that candidates do not act online because of the fluent market of voters but because of a mix of individual factors and factors relating to their party and its target group. When younger candidates are more active in Web 2.0 it can be assumed that during the coming elections a new style of policy transfer and communicative representation will develop which is more accomplished at the online level. Beyond that we can see that attendance in traditional mass media is still important for candidates.

To sum up, political online communication during campaigns can evoke transparency because politicians use a direct way to the public, while the public can use a direct way to politicians as well. There are not large hurdles for citizens to be politically informed, especially for the group of Digital Natives. The possibility of a direct connection can acquaint citizens with politics. Though there is little evidence for this today, the potential does exist as can be recognized by looking at the numbers of users of SNS – both in the citizenship and in politics. For examining the connection between citizens and politicians this study is just a beginning. Furthermore functions like resource generation, networking and promoting participation must be examined for testing a connection between different factors that affect candidates during campaigns and the usage of interactive tools in the Internet. It will be interesting to know how online communication between politicians and voters will change under the development of Internet and its usage. The data can be part of a comparison between campaigning of 2013 and the next Federal Election in 2017. Furthermore it gives hints to political actors about how they can reach voters successfully when they do not explore their full potential concerning the demand for Internet-delivered political information.

References

- BIK-Regionen. Ballungsräume, Stadtregionen, Mittel-/Unterzentrengebiete. Methodenbeschreibung zur Aktualisierung 2000, BIK 10/2001.
- Burmeister, K. (1993). *Die Professionalisierung der Politik: Am Beispiel des Berufspolitikers im parlamentarischen System der Bundesrepublik Deutschland. Beiträge zum Parlamentsrecht: Vol. 25.* Berlin: Duncker & Humblot.
- Davis, A. (2010). *Political communication and social theory. Communication and society.* London u.a.: Routledge.

Campaigning on Facebook and Twitter.

- Davis, R., Baumgartner, J. C., Francia, P. L., & Morris, J. S. (2009). The Internet in US election campaigns. In A. Chadwick & P. N. Howard (Eds.), *Routledge Handbook of Internet Politics* (pp. 25–39). London, New York: Taylor & Francis Ltd.
- Druckman, J. N., Kifer, M. J., & Parkin, M. (2007). The Technological Development of Congressional Candidate Web Sites How and Why Candidates Use Web Innovations. *Social Science Computer Review*, 25(4), 425–442.
- Edinger, M. (2009). Profil eines Berufsstandes: Professionalisierung und Karriereologiken von Abgeordneten im vereinten Deutschland. In H. Schöne & J. v. Blumenthal (Eds.), *Parlamentarismusforschung in Deutschland. Ergebnisse und Perspektiven* (Vol. 40, pp. 177–217).
- Escher, T. (2012). *Does use of the Internet further democratic participation?: A comparison of citizens' interactions with political representatives in the UK and Germany*. DPhil Thesis, Oxford Internet Institute. Oxford.
- Fehndrich, M., Zicht, W., & Cantow, M. (2013). *Wahlssystem der Bundestagswahl*. Retrieved from <http://www.wahlrecht.de/bundestag/>
- Geber, S. & Scherer, H. (2013). *My Voter, My Party, and Me. American and German Parliamentarians on Facebook*.
- Gellman, R. (1996). Disintermediation and the internet. *Government Information Quarterly*, 13(1), 1–8.
- Gibson, R., Margolis, M., Resnick, D., & Ward, S. J. (2003). Election Campaigning on the WWW in the USA and UK: A Comparative Analysis. *Party Politics*, 9(1), 47–75.
- Gibson, R., & McAllister, I. (2014). Normalising or Equalising Party Competition? Assessing the Impact of the Web on Election Campaigning. *Political Studies*, 1–19.
- Gibson, R., & Ward, S. (1997). *UK political parties and the Internet: prospects for democracy*. Salford: European Studies Research Institute, University of Salford.
- Gibson, R., & Ward, S. (2000). A proposed methodology for studying the function and effectiveness of party and candidate web sites. *Social Science Computer Review*, 18(3), 301–319.
- Graham, T., Broersma, M., Hazelhoff, K., & van't Haar, G. (2013). Between Broadcasting Political Messages and Interacting With Voters: The use of Twitter during the 2010 UK general election campaign. *Information, Communication & Society*, 16(5), 692–716.
- Hanna, A., Sayre, B., Bode, L., Yang, J., & Shah, D. V. (2011). Mapping the Political Twitterverse: Candidates and Their Followers in the Midterms. In L. A. Adamic, R. A. Baeza-Yates, & S. Counts (Eds.), *ICWSM* (pp. 510–513). o. O.: The AAAI Press.
- Hansen, K. M., & Kosiara-Pedersen, K. (2014). Cyber-campaigning in Denmark: Application and effects of candidate campaigning. *Journal of Information Technology & Politics*, (just-accepted).
- Hinz, K. (2013). *Die Kandidaten zur Bundestagswahl 2013: Wer ist wie präsent im Web 2.0?* Retrieved from <http://regierungsforschung.de/dx/public/article.html?id=230>
- Hoffmann, C. P., Meckel, M., Ranzini, G., & Suphan, A. (2012). *I'll tweet my representative: Antecedents of Social Media use among German Parliamentarians*.
- Infratest dimap. (2013). *Sonntagsfrage bundesweit*. Retrieved from <http://www.infratest-dimap.de/umfragen-analysen/bundesweit/sonntagsfrage/>
- Jackson, N., & Lilleker, D. (2011). Microblogging, constituency service and impression management: UK MPs and the use of Twitter. *The Journal of Legislative Studies*, 17(1), 86–105.
- Klinger, U. (2013). Mastering the Art of Social Media: Swiss parties, the 2011 national election and digital challenges. *Information, Communication & Society*, 16(5), 717–736.
- Lilleker, D. G., & Jackson, N. A. (2011). Elections 2.0: Comparing E-Campaigns in France, Germany, Great Britain and the United States. In E. J. Schweitzer & S. Albrecht (Eds.),

Campaigning on Facebook and Twitter.

- Das Internet im Wahlkampf. Analysen zur Bundestagswahl 2009* (pp. 96–116). Wiesbaden: VS-Verl.
- Lilleker, D. G., Koc-Michalska, K., Schweitzer, E. J., Jacunski, M., Jackson, N., & Vedel, T. (2011). Informing, engaging, mobilizing or interacting: Searching for a European model of web campaigning. *European Journal of Communication*, 26(3), 195–213.
- Margolis, M., Resnick, D., & Wolfe, J. D. (1999). Party competition on the Internet in the United States and Britain. *The Harvard International Journal of Press/Politics*, 4(4), 24–47.
- Meckel, M., Hoffmann, C. P., Suphan, A., & Poell, R. (2013). *Politiker im Netz: Treiber und Hürden der Social Media-Nutzung unter Bundes- und Landtagsabgeordneten*. Abschlussbericht. Retrieved from http://isprat.net/fileadmin/downloads/projektabschlussberichte/ISPRAT_Abschlussbericht_Politiker_im_Netz.pdf
- Metag, J., & Marcinkowski, F. (2012). Strategic, Structural, and Individual Determinants of Online Campaigning in German Elections. *Policy & Internet*, 4(3-4), 136–158.
- Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*: Cambridge University Press.
- Norris, P. (2003). Preaching to the converted? Pluralism, participation and party websites. *Party Politics*, 9(1), 21–45.
- Papacharissi, Z. (2009). The virtual sphere 2.0: The Internet, the public sphere, and beyond. In A. Chadwick & P. N. Howard (Eds.), *Routledge Handbook of Internet Politics* (pp. 230–245). London, New York: Taylor & Francis Ltd.
- Porten-Che e, P. (2013). The Use of Party Web Sites and Effects on Voting: The Case of the European Parliamentary Elections in Germany in 2009. *Journal of Information Technology & Politics*, 10(3), 310–325.
- Prensky, M. (2001). Digital natives, digital immigrants: Part 1. *On the horizon*, 9(5), 1–6.
- Schmitt-Beck, R. (2007). New modes of campaigning. In R. J. Dalton & H.-D. Klingemann (Eds.), *The Oxford handbooks of political science. The Oxford handbook of political behavior*. Oxford, New York: Oxford University Press.
- Schweitzer, E. J. (2011). Normalization 2.0: A longitudinal analysis of German online campaigns in the national elections 2002–9. *European Journal of Communication*, 26(4), 310–327.
- Snijders, T. O., & Bosker, R. J. (1994). Modeled variance in two-level models. *Sociological Methods & Research*, 22(3), 342–363.
- Statista. (2013). *Anzahl der Besucher von Twitter in Deutschland in den Monaten M arz 2011 bis 2013 (in Millionen)*. Retrieved from <http://de.statista.com/statistik/daten/studie/223174/umfrage/unique-visitors-von-twittercom-in-deutschland/>
- Unger, S. (2012). *Parteien und Politiker in sozialen Netzwerken: Moderne Wahlkampfkommunikation bei der Bundestagswahl 2009*. SpringerLink : B ucher. Wiesbaden: VS Verlag f ur Sozialwissenschaften; Imprint: VS Verlag f ur Sozialwissenschaften.
- Utz, S. (2009). The (potential) benefits of campaigning via social network sites. *Journal of Computer-Mediated Communication*, 14(2), 221–243.
- Vaccari, C. (2013). *City Hall 2.0? Italian Local Executive Officials' Presence and Popularity on Web 2.0 Platforms*. Paper presented at the annual meeting of the International Communication Association, Hilton Metropole Hotel, London, England, Jun 17, 2013.
- Vergeer, M., & Hermans, L. (2013). Campaigning on Twitter: Microblogging and Online Social Networking as Campaign Tools in the 2010 General Elections in the Netherlands. *Journal of Computer-Mediated Communication*, 18(4), 399–419.

Campaigning on Facebook and Twitter.

- Vergeer, M., Hermans, L., & Sams, S. (2013). Online social networks and micro-blogging in political campaigning The exploration of a new campaign tool and a new campaign style. *Party Politics*, 19(3), 477–501.
- Vesnić-Alujević, L. (2013). Online strategies of members of the European parliament. *Journal of Audience & Reception Studie*, 10(1), 432–435.
- Ward, S., Lusoli, W., & Gibson, R. (2007). Australian MPs and the Internet: Avoiding the Digital Age? 1. *Australian Journal of Public Administration*, 66(2), 210–222.
- Wattal, S., Schuff, D., Mandviwalla, M., & Williams, C. B. (2010). Web 2.0 and Politics: The 2008 US Presidential Election and an E-Politics Research Agenda. *Mis Quarterly*, 34(4).
- WebMediaBrands. (2013). *Facebook Nutzerzahlen*. Retrieved from <http://allfacebook.de/userdata/>
- Wilensky, H. L. (1964). The professionalization of everyone? *American journal of sociology*, 137–158.
- Zittel, T. (2009). Lost in technology? Political parties and the online campaigns of constituency candidates in Germany's mixed member electoral system. *Journal of Information Technology & Politics*, 6(3-4), 298–311.