Online News, Social Media, and European Union Attitudes: A Multidimensional Analysis

RACHEL R. MOURAO
JOSEPH YOO
University of Texas at Austin, USA

STEPHANIE GEISE
Universität Erfurt, Germany

JOSÉ ANDRÉS ARAIZA
DANIELLE K. KILGO
VICTORIA Y. CHEN
THOMAS J. JOHNSON
University of Texas at Austin, USA

How do online news and social media use relate to public support for the European Union? To answer this question, this study compares the effect of institutional websites, news websites, online social networks, blogs, and video hosting websites on five important dimensions of public attitudes toward the EU: strengthening, performance, fear, efficacy, and utilitarianism. Cases were selected by choosing the samples from the largest country in each stage of EU enlargement: Germany, the United Kingdom, Greece, Sweden, the Czech Republic, and Romania. After controlling for demographic and political factors, results show that getting European news from blogs fosters negative attitudes toward the EU, whereas social network sites contribute to a positive view of the EU’s performance and support for further strengthening. In addition, the use of YouTube and news websites interacts with off-line discussion to enhance political effects.

Keywords: online news, social media, blogs, public opinion, European Union

Rachel R. Mourao: rachelmourao@gmail.com
Joseph Yoo: jjspride@gmail.com
Stephanie Geise: Stephanie.geise@uni-efurt.de
José Andrés Araiza: atxaraiza@utexas.edu
Danielle K. Kilgo: daniellekilgo@utexas.edu
Victoria Y. Chen: Ventiva2007@gmail.com
Thomas J. Johnson: tom.johnson@austin.utexas.edu
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Introduction

The future of the European Union (EU) is at crossroads. Despite the recent economic recovery in many European countries, the European Parliament elections in May 2014 demonstrated that Euroskepticism has grown, with right-wing, anti-EU parties gaining significant ground in France, Greece, the United Kingdom, Austria, and Denmark. Although pro-European, center-right groups still dominate the parliament, and the EU has to face stronger dissent from more nationalistic-oriented parties such as the United Kingdom’s UK Independence Party, France’s Front National, and Germany’s Alternative fuer Deutschland. The elected nationalistic politicians advocate overt anti-EU policies such as less integration, more national control, anti-immigration policies, and stricter border security (D’Ancona, 2014).

News coverage of matters related to the EU, especially enlarging its membership, has been strongly correlated with how the public perceives the union (Lubbers & Scheepers, 2010; Nardis, 2015). Because most people do not have direct contact with the EU, and because it is an abstract and complex institution, news coverage should play an essential role in its ability to foster or to erode trust in the institution (Norris, 2000). For example, de Vreese and Boomgaarden (2006) found that when EU news coverage was frequent and positive in tone, the audience showed stronger support for the institution.

Studying the interplay among news, trust, and voting, Kleinnijenhuis, van Hoof, and Oegema (2006) found a negative relationship among negative European news, trust in EU institutions, and national election voting. However, Nardis (2015) found that negative news about the EU was not related to trust, but positive stories increased trust in EU institutions. His work thus suggests that people become more trusting of the EU as news coverage becomes more favorable (Nardis, 2015).

However, these studies widely ignore the potential of online news and social media to affect public support for European integration. Although a large body of research has addressed how exposure to traditional mass media influences political attitudes and political knowledge toward the EU, few studies have analyzed the effects of different types of online media usage.

This research gap is especially surprising because in 2012, 29% relied on the Web as the primary means to obtain news about political matters, and 20% of online EU users receive news about European politics through social networks (Commission of the European Communities, 2012). But how does this online news media consumption affect Europeans’ perception of the union? What is the specific impact of getting news from various online news sources on attitudes related to the EU along the attitudinal dimensions of (a) strengthening, (b) efficacy, (c) fear, (d) utilitarianism, and (e) lack of performance? With this overarching research questions, this article focuses on five types of online media: (1) institutional and official websites, (2) information websites, (3) social network sites, (4) blogs, and (5) video hosting websites. In addition to this focus on online communicative activities, this study examines the impact of political knowledge and online and off-line political discussion on EU attitudes.
The Multidimensionality of European Union Attitudes

For many years, the concept of Euroscepticism dominated the vast body of research on public opinion and the EU by focusing on the resistance to economic and political integration (Lubbers & Scheepers, 2005, 2010). Within this concept, Lubbers and Scheepers (2005) started exploring different dimensions of public aversion, distinguishing between political and instrumental Euroscepticism. Political skepticism, defined as an evaluation of the union’s government vis-à-vis the national government (Lubbers & Scheepers, 2005), affects the degree of decision-making power people are willing to give to the EU. Instrumental Euroscepticism refers to the actual costs and benefits citizens and countries perceive from joining the EU and adopting its policies. In their further study about trends of Euroscepticism in different countries and regions, Lubbers and Scheepers (2010) include identity dimensions in attitudinal measures.

Aiming for a more differentiated theoretical clarification, Boomgaarden, Schuck, Elenbaas, and de Vreese (2011) suggested a distinction between utilitarian and affective measures as well as regime and community-related support. To capture the multidimensionality of attitudes toward the EU, Boomgaarden et al. (2011) described five attitudinal dimensions related to the evaluations of the Union: affection, identity, performance, utilitarianism, and strengthening.

**Affection** relates to emotional responses to the integration efforts. Negative affection is mostly related to anti-immigration attitudes and disapproval of the government. **Identity** describes a sense of European identity and relationship to European symbols (Lubbers & Scheepers, 2010). **Performance** relates to the perceived functioning of the EU and its institutions. Economic evaluations are strong predictors of both the utilitarian and performance dimensions, because those of higher economic status are expected to both benefit from the EU and approve of its functioning. **Utilitarianism** refers to an actual cost-benefit analysis of the union. Finally, **strengthening** addresses supporting efforts to extend integration and competencies related to the EU. These five dimensions are distinct and independent, and immigration attitudes and national support were the only variables that influenced all five dimensions (Boomgaarden et al., 2011).

**Literature Review**

**Differential Gains**

According to the differential gains model, interpersonal discussion interacts with media use: so the more individuals seek out news from the media, and the more frequently they discuss the news with others, the more they will learn about politics, and the more they will participate in it (Hardy & Scheufele, 2005; Scheufele, 2000, 2002; Scheufele & Nisbet, 2002). This interaction between interpersonal discussion and media use has a greater effect on political participation and knowledge than media use alone for at least two reasons. First, political discussion aids in political learning. Those who discuss politics with others in conjunction with media use are more confident about learned information. Second, political discussion can increase the motivation to more deeply understand political information in
anticipation that future debates with others may occur (Hardy & Scheufele, 2005; Scheufele, 2002; Yamamoto, Kushin, & Dalisay, 2013).

Initial differential gains studies were limited to examining the moderating effects of interpersonal discussion on the relationship between media use and political participation and knowledge (Scheufele, 2000, 2002). However, with the rise of the Internet, scholars realized that websites and online discussion forums served as places for individuals to not only gather information, but also express their views to a larger audience. Advanced models incorporated several measures of online communication, including chatting online (Hardy & Scheufele, 2005), using blogs (Kim, Johnson, & Kaye, 2010), posting comments on blogs or websites of news organizations (Brundidge, Garrett, Rojas, & Gil de Zúñiga, 2014), and interacting with other users through social network sites and Twitter (Vu et al., 2013).

The rise of social media—a unique site where users can be both consumers and producers of complex, multimedia political messages—has led to a renewed interest in the differential gains model. Although the centrality of interpersonal communication in social media suggests that the effects of differential gains should be stronger on social network sites than traditional and online media, results have been mixed. Yamamoto, Kushin, and Dalisay (2013) discovered that online expression interacted with both traditional and online media, especially with content-sharing sites/social network sites (video-sharing sites, photo-sharing sites, and Twitter) and blogs/social news sites/online forums and discussion boards. However, other studies failed to find differential gains effects with blogs and news organization sites (Brundidge et al., 2014; Kim et al., 2010). Vu and associates (2013) found limited support for the differential gains model for political participation and no support for the model with political knowledge.

This study makes two contributions to the differential gains literature: It is one of the first studies to explore the impact of differential gains on political attitudes rather than behaviors or cognitions. Second, it extends the theory beyond the United States to a European setting.

**Online News Consumption, Political Knowledge, and Political Attitudes**

Online news consumption has shown varying effects on citizens’ political knowledge and attitudes toward politics. The wide selection of news sources available on the Internet allows for considerable knowledge gains (Kenski & Stroud, 2006; Xenos & Moy, 2007). However, the preponderance of choices also allows people to narrowly tailor their news diet to suit their own interests (Prior, 2007).

Citizens’ knowledge has generally been found to have an instinctive relationship to political attitudes; the more you know, the more likely you will have stronger opinions about current events (Delli Carpini & Keeter, 1996). More knowledgeable people are also more willing to change their attitudes when they encounter information that challenges their positions (Zaller, 1992).

Examining political knowledge and attitudes in Europe, Janssen (1991) found political skills—the ease of understanding political messages and relating them to individual situations and thoughts—correlated with support for European integration in four original EU countries (France, West Germany, Italy, the United Kingdom). Karp, Banducci, and Bowler (2003) discovered that as knowledge increases,
so does satisfaction with democracy at home and skepticism toward democracy across the EU. Skepticism also increased along with the prevalence of political discussion. For the Netherlands, Boomgaarden et al. (2011) found that political knowledge relates differently to diverse aspects of political attitudes, directly predicting utilitarian attitudes toward the EU, but that it inversely relates to identity and performance attitudes. Against the background of different findings, and in the context of our focus on online media use, we aim to further investigate the relationship between political knowledge and attitudes:

**H1a:** Political knowledge will be negatively related to the dimensions of (a) strengthening, (b) efficacy, and (c) utilitarianism.

**H1b:** Political knowledge will be positively related to the dimensions of (a) fear and (b) lack of performance.

**Discussion and Political Attitudes**

In democratic governments, deliberation and discourse about political ideas are key factors in sustaining the democracy (Habermas, 1981; Page, 1996). In accordance with political mobilization theory (Jenkins, 1983), Internet discourse requires less social presence, accountability, and identity than off-line discussion (Bennett & Iyengar, 2008; Davis, 1998). This is thought to reduce the social risks of debating political issues and the negative effects associated with disagreement (Bargh, McKenna, & Fitzsimons, 2002). It is difficult to assess whether a change in trust in government can be attributed to conversation and deliberation alone. Arguably, evaluating isolated conversation must take into account factors that are known to affect trust in government, such as identity, education levels, and ethnicity (Friedman & Thiel, 2012; Scheufele, 2000; Sunstein, 2001). Against that background, in this study we ask:

**RQ1:** What is the impact of online and off-line political discussion for attitudes related to the European Union on the following dimensions: (a) strengthening, (b) efficacy, (c) fear, (d) utilitarianism, and (e) lack of performance?

**Institutional/Official Websites and Political Attitudes**

As the Internet has become an established vehicle for finding political information quickly and efficiently, it is no surprise that governments have created online sites to render services, provide information, and engage in discourse (Laursen & Valentini, 2015). Here, institutional or official websites can be defined as the "the delivery of government information and services through the Internet or other digital means " (West, 2004, p. 16 ).

Some studies indicate that e-government can enhance people’s confidence in government (Tolbert & Mossberger, 2006), especially by offering satisfying service (Morgeson, VanAmburg, & Mithas, 2011); others find little significant relationship (McNeal, Hale, & Dotterweich, 2008; Morgeson et al., 2011). Morgeson et al. (2011) suggest that citizens actively choose to establish trusting relationship with government when two main factors are present: (1) the benefits outweigh the costs of engaging in a relationship with the government, and (2) establishing such a relationship reduces risk. Studies have also
found that motivations for using e-government sites have a significant effect on trust in government, if trust exists at all (McNeal et al., 2008; Tolbert & Mossberger, 2006).

In sum, studies that examine the relationship between e-government strategies—or institutional and official websites as practical implementation of it—and political attitudes have produced inconsistent results. We therefore ask:

**RQ2**: What is the impact of getting news on institutional and official websites on attitudes related to the European Union on the following dimensions: (a) strengthening, (b) efficacy, (c) fear, (d) utilitarianism, and (e) lack of performance?

In addition, guided by the theory of differential gains, we also examine the interaction between interpersonal discussion and media use for attitudes toward the EU:

**RQ2b**: What is the impact of the interaction between institutional and official websites and political discussion on attitudes related to the European Union on the following dimensions: (a) strengthening, (b) efficacy, (c) fear, (d) utilitarianism, and (e) lack of performance?

**News Websites and Political Attitudes**

The relationship between the media and attitudes toward democratic nations differs considerably depending on how the topic is studied. In countries with a highly developed, differentiated, and integrated mass media system—such as the United States, Great Britain, and Germany—media institutions traditionally have been blamed for increasing political cynicism through negative media coverage of politics (Cappella & Jamieson, 1996; Kepplinger & Glaab, 2007). On the other hand, surveys that specifically examined the effects of traditional news and their news sites on variables such as confidence in media and political trust have routinely found that confidence in traditional media leads to confidence in political institutions in general (Johnson & Kaye, 2003; Jones, 2004; Lipset & Schneider, 1987). However, rather than focusing on issues that provide the public with knowledge and context to make important decisions (Delli Carpini & Keeter, 1996; Schudson, 1995), the traditional and online news media typically are seduced by the scandals and the private lives of politicians and celebrities and show a high degree of negativism in their coverage, which has reduced public trust in the media (Dautrich & Hartley, 1999; Kepplinger & Glaab, 2007). Similarly, in a study about newspaper coverage of European matters, Alarcón (2010) found that journalists prefer to reinforce Eurosceptic views, fostering the belief that national governments are superior to the Union when it comes to solving problems.

Because in present-day Western democratic societies, many citizens rely on online news media for information and debates about the society they belong to, it is not surprising that government institutions see online media as a channel holding potential to efficiently influence public opinion (Laursen & Valentini, 2015). However, few studies have specifically studied information on news websites, the online news outlets that are owned by media companies and provide up-to-date news. Such studies do find that the use of news websites is positively linked to both political trust (Johnson & Kaye, 2003) and
the perceived responsiveness as the belief to what degree one can influence government (Kenski & Stroud, 2006).

Studies of news websites fail to find differences between online newspapers and television in their ability to influence political attitudes. The media industry has witnessed a convergence between online newspapers and television news sites as the former rely increasingly on videos and the latter on words to tell their story (Jenkins, 2006). Thus, few differences exist between online newspapers and television news in influencing attitudes toward government (Johnson & Kaye, 2014a; Moy & Hussain, 2013). In light of these findings, this study tests the following hypotheses:

**H2a:** News websites use will be negatively related to the dimensions of (a) strengthening, (b) efficacy, and (c) utilitarianism.

**H2b:** News websites use will be positively related to the dimensions of (a) fear and (b) lack of performance.

In addition, we assess the differential gains hypothesis of moderation:

**H2c:** The relationship between news website use and EU attitudes is contingent upon the effect of political discussion for the dimensions of (a) strengthening, (b) efficacy, (c) utilitarianism, (d) fear, and (e) lack of performance.

### Online Social Networks and Political Attitudes

Social network sites (SNSs) are defined as:

web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. (boyd & Ellison, 2008, p. 211)

As virtual communities where people engage in exchanging information, such as Facebook and Twitter, SNSs have been credited with helping topple governments, particularly in the Middle East (Wolfsfeld, Segev, & Sheaffer, 2013).

At the same time, researchers have generally found that use of SNSs increases support for government institutions (Hong, 2013; Johnson & Kaye, 2014b), although an earlier study showed no relationship (Zhang, Johnson, Seltzer, & Bichard, 2010). SNSs allow government agencies and officials to communicate directly and interactively with their citizens to increase transparency and public participation in government and to solicit public feedback to improve government efficiency, which could also increase citizen trust (Macnamara & Kenning, 2011; Snead, 2013). In addition to these communicative potentials, government officials primarily use SNSs to engage in one-way communication aiming to promote themselves or their agencies (Waters & Williams, 2011).
However, scholars suggest that the major political roles served by SNSs are to connect users with political actors and with other users, which may make them feel more involved with the political process. Similarly, uses and gratifications studies of Twitter (Parmelee & Bichard, 2012) and other SNSs (Lee & Ma, 2012; Macafee, 2013) do find that people participate on these sites to engage with others and share information. Because SNSs help connect individuals with others, including political officials, the sites likely increase confidence in government (Johnson & Kaye, 2012; Stroud, 2010). Thus, we test the following hypotheses:

H3a: SNS use will be positively related to the dimensions of (a) strengthening, (b) efficacy, and (c) utilitarianism.

H3b: SNS use will be negatively related to the dimensions of (a) fear and (b) lack of performance.

H3c: The relationship between SNS use and EU attitudes is contingent upon the effect of political discussion for the dimensions of (a) strengthening, (b) efficacy, (c) utilitarianism, (d) fear, and (e) lack of performance.

**Blogs and Political Attitudes**

Although the use of blogs as an alternative news source for Americans in the 2004 and 2008 presidential campaigns has evoked much media and scholarly interest as an egalitarian form of grassroots movement (Davis, 2005; Kaid, 2009), since their inception, blogs—defined as a personal or institutional website on which an individual, a small group of people, or an institution regularly publishes information, statements, opinions, comments, and links to other sites (McKenna & Pole, 2004; Mortensen & Walker, 2002)—have been linked to low confidence in government. Political blogs normally stake out clear ideological positions (Lawrence, Sides, & Farrell, 2010) and overwhelmingly link to sites that share their ideology (Adamic & Glance, 2005; Sunstein, 2001), thus attracting a rather distinct community of politically like-minded users (Johnson, Zhang, & Bichard, 2011; Lawrence et al., 2010).

In their study about the impact of blogs on political reasoning processes, Gil de Zúñiga, Bachmann, Hsu, and Brundidge (2013) found that only expressive use of blogs affects reasoning and leads to political participation: If the user actively participates—by posting comments, for example—blog use is associated with political attitudes and behaviors. The effects are not present in more passive use of blogs, such as reading entries and comments.

Scholars argue that people who selectively expose themselves primarily to agreeable information will become more polarized in their views and adopt the more extreme views of the dominant members of their group (Garrett, 2009; Johnson, Bichard, & Zhang, 2009). Consequently, studies suggest that discussion on blogs risks being decidedly uncivil and that this potential incivility could lead to lower confidence in government in general (Borah, 2013). Indeed, several studies have demonstrated that especially blog users express little confidence in governmental institutions, for example the American presidency and Congress (Johnson & Kaye, 2004, 2012; Sweetser & Kaid, 2008). Because these results
suggest that blogs would have a negative effect on government attitudes, this article tests the following hypotheses:

\textit{H4a:} Blog use will be negatively related to the dimensions of (a) strengthening, (b) efficacy, and (c) utilitarianism.

\textit{H4b:} Blog use will be positively related to the dimensions of (a) fear and (b) lack of performance.

For the differential gains assessment:

\textit{H4c:} The relationship between blog use and EU attitudes is contingent upon the effect of political discussion for the dimensions of (a) strengthening, (b) efficacy, (c) utilitarianism, (d) fear, and (e) lack of performance.

\textbf{Video-Hosting Websites and Political Attitudes}

Video-hosting websites—Web services that allow registered users to upload video content to share or place on a website so that anyone with an Internet connection can view the videos (Chenail, 2011)—have increasingly become a research focus in online political communication, especially in studies of election campaigns (English, Sweetser, & Ancu, 2011; Gueorguieva, 2007; Towner & Dulio, 2011). Services such as YouTube and Vimeo are important sources for voters to seek political information and thus can motivate them to participate in further political activities (Gueorguieva, 2007). However, research also shows that online videos have little potential to influence political attitudes, because people selectively expose themselves to information that aligns with their political attitudes (English et al., 2011; Towner & Dulio, 2011).

Studies examining YouTube’s influence on political trust have produced divergent results. Whereas some pundits indicate that YouTube can increase confidence because voters can connect with political actors, who have become more savvy online (Roettgers, 2011), others found that confidence in government can be reduced by "gotcha" videos posted by citizens that capture candidates making public mistakes (Cortese & Proffitt, 2012). Consequently, some studies suggest that YouTube either reduces trust in government (Towner & Dulio, 2011) or is unrelated to trust (Hanson, Haridakis, Cunningham, Sharma, & Ponder, 2010). Therefore, we ask:

\textit{RQ3a:} What is the impact of getting news on video hosting websites on attitudes related to the EU on the following dimensions: (a) strengthening, (b) efficacy, (c) fear, (d) utilitarianism, and (e) lack of performance?

\textit{RQ3b:} What is the impact of the interaction between video hosting websites use and political discussion on attitudes related to the European Union on the following dimensions: (a) strengthening, (b) efficacy, (c) fear, (d) utilitarianism, and (e) lack of performance?
Data

To estimate the impact of new media on public opinion in the EU, we used the 2011 Eurobarometer representative public opinion survey \((N = 31,659)\), which was carried out during November 2011 in 33 countries in the region. The European Commission has conducted the survey on a regular basis since 1973. For the 2011 survey, 31,659 respondents were interviewed between November 5 and 20 across the 27 EU member states and in the candidate countries.

To capture a diverse sample, cases were selected from the largest country in each stage of EU enlargement: Germany (founding member), the United Kingdom (first enlargement), Greece (Mediterranean enlargement), Sweden (1995 enlargement), the Czech Republic (2004 enlargement), and Romania (2007 enlargement). In addition to information about Internet access and media use and based on the dimensions outlined above proposed by Boomgaarden and colleagues (2011), we selected 19 survey items that measure different aspects of attitudes toward the EU. Table 1 displays the results of a factor analysis on these selected 19 items, relating to the dimensions of performance (perceived function of the union), identity (sense of European identity), affection (emotional responses to integration), utilitarianism (cost-benefit analysis), and strengthening (support for further integration). Five factors emerged from the analysis, containing two to five items each. Three of the factors analyzed related to dimensions identified by Boomgaarden et al. (2011): strengthening, utilitarian, and lack of performance. Two new factors were observed: fear and efficacy.

We examined all five factors: strengthening, efficacy, fear, utilitarianism, and lack of performance. The first factor, strengthening, consists of items expressing a desire to augment the process of European integration, including extending common defense policies, a single currency, a common foreign policy, and future enlargements.

The second factor relates to efficacy within the union. It consists of items about understanding how the EU works and how country and personal interests are being respected. The item "trust" also falls into this dimension.

The third factor is a refinement of Boomgaarden et al.’s (2011) measure of negative affection; it refers to items that view the EU as a perceived threat. This factor taps fear attitudes such as believing that the EU means more unemployment, more crime, less border control, and loss of cultural identity.

The fourth factor consists of utilitarian measures, such as benefits that the EU brings to the country and the individual. This factor also contains items related to postmaterial utilitarianism, such as "the EU means peace" and "the EU means democracy" (Boomgaarden et al., 2011; Hobolt & Brouard, 2011).

Finally, the fifth item, lack of performance, relates to the general assessment of the union’s efficiency. Note that this item is inverted—that is, it measures items that represent lack of competence, such as bureaucracy and waste of money.
Table 1. Component Matrix for the 19 EU Attitude Items—Eurobarometer 2011.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Strengthening</th>
<th>Efficacy</th>
<th>Fear</th>
<th>Utilitarianism</th>
<th>Lack of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I support a European economic and monetary union with one single currency, the euro.</td>
<td>0.639</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I support a common foreign policy of the 27 member states of the EU.</td>
<td>0.822</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I support a common defense and security policy among EU member states.</td>
<td>0.792</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I trust the European Parliament.</td>
<td></td>
<td>0.432</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I understand how the EU works.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interests of my country are well taken into account in the EU.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>My voice counts in the EU.</td>
<td></td>
<td>0.706</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means more crime.</td>
<td></td>
<td>0.714</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means not enough control at external borders.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means loss of cultural identity.</td>
<td></td>
<td>0.456</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means unemployment.</td>
<td></td>
<td>0.623</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means peace.</td>
<td></td>
<td>0.556</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means democracy.</td>
<td></td>
<td>0.411</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means freedom to travel, study, and work anywhere in the EU.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means a stronger say in the world.</td>
<td></td>
<td>0.534</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means social protection.</td>
<td></td>
<td>0.598</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The EU means a waste of money.</td>
<td></td>
<td></td>
<td></td>
<td>-0.483</td>
<td></td>
</tr>
<tr>
<td>The EU means bureaucracy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.667</td>
</tr>
<tr>
<td>Initial eigenvalue</td>
<td>3.82</td>
<td>1.51</td>
<td>1.47</td>
<td>1.14</td>
<td>1.08</td>
</tr>
<tr>
<td>Percent explained variance</td>
<td>20.11</td>
<td>7.97</td>
<td>7.33</td>
<td>6.01</td>
<td>5.66</td>
</tr>
<tr>
<td>Cumulative percent</td>
<td>20.11</td>
<td>28.08</td>
<td>35.81</td>
<td>41.82</td>
<td>47.48</td>
</tr>
</tbody>
</table>
Methods

The 2011 Eurobarometer contained a series of differentiated questions about media use. In line with our research focus, we were particularly interested in those respondents who get their news about the EU online ($N = 1,577$). Participants were asked which websites they used to get news on European political matters. Questions about online news consumption included institutional and official websites (e.g., governmental websites), news websites (e.g., those of newspapers and news magazines), online social network sites, blogs, video-hosting websites, and others. Participants gave binary answers, coded as 0 being not-used and 1 being used.

Among the applicable 1,577 cases, about 40% had visited institutional and official websites ($N = 692, 39.9\%$). About two-thirds obtained political news from information websites ($N = 1,240, 78.6\%$), and only one in five relied on SNSs ($N = 301, 19.1\%$). About one in eight had browsed blogs ($N = 201, 12.7\%$), and 7% had viewed video sites ($N = 117, 7.4\%$). A small number had sought other online sources ($N = 34, 2.2\%$).

Control Variables

Demographics. Of the 1,577 respondents, the average age was 38.73 years ($SD = 14.92$), and about 55% were men ($N = 866, 54.9\%$). To measure social class, participants were asked to place themselves from 1 (the lowest level in the society) to 10 (the highest level). The mean value for social class was 6.14 ($SD = 1.70$).

Political knowledge and discussion. To measure political knowledge, participants were asked three true-or-false questions about the number of EU members, whether the citizens of each member state directly elect the members of the European Parliament, and whether Switzerland is a member of the EU. The summed values of political knowledge were calculated and divided into a three-point scale including low ($N = 65, 4.1\%$), average ($N = 828, 52.5\%$), and high groups ($N = 684, 43.4\%$). The mean was 2.39 ($SD = 0.567$), showing that participants had a considerable degree of political knowledge. Participants were also asked how often they were involved in political discussions with their friends and relatives. Choices were frequently ($N = 303, 19.3\%$), occasionally ($N = 917, 58.3\%$), and never ($N = 352, 22.4\%$). The average score of the participants’ involvement in political discussion was 2.04 ($SD = 0.653$).

In the first step of our analysis, we created variables based on a factor analysis aiming to categorize the affective feelings about the EU, which yielded the five dimensions efficacy, strengthening, fear, utilitarian, and lack of performance (see Table 1). Those five factors were then used as dependent variables in further hierarchical regression analyses. In each model, the demographics (age, gender, social class) were entered in the first block. The second block included objective knowledge of the EU and political discussion of European matters. Different resources of online news activities were placed in the third block, and interactions between political discussion and online news source uses were entered in the last block. We conducted hierarchical regression analysis based on a total of 1,577 respondents.
Results

Hypotheses 1a and 1b asked about the impact of political knowledge on the dimensions of strengthening, efficacy, utilitarianism, fear, and lack of performance. As shown in Table 2, political knowledge of the EU was significantly associated with strengthening ($\beta = -.141, p < .001$), efficacy ($\beta = -.154, p < .001$), fear ($\beta = .117, p < .001$), and lack of performance ($\beta = -.071, p < .01$). Those with higher political knowledge evaluated the EU’s attitudes negatively, supporting hypotheses 1a and 1b.

RQ1 inquired about the impact of political discussion on EU attitudes. Results show that political discussion was positively associated with strengthening ($\beta = .139, p < .001$) but negatively associated with utilitarianism ($\beta = -.092, p < .001$). This means that although discussion led to support of a single currency, a common foreign policy, and future enlargement, respondents were concerned about the threat of peace and democracy. Along with two direct effects of political discussions, three interaction effects toward EU attitudes were found: the interactions with political discussions and the use of official sites ($\beta = .061, p < .05$) and video-hosting sites ($\beta = .055, p < .05$) toward efficacy were positive, and the interaction between political discussions and the use of news sites led to less fearful views of the Union ($\beta = -.051, p < .05$).

As for institutional and official websites (RQ2) and use of news websites (H2), no significant direct relationships emerged from the data. However, the interaction between political discussion and the use of official websites significantly predicted higher levels of efficacy ($\beta = .061, p < .05$). Also, the interaction between political discussion and the use of news sites had a negative relationship with fear ($\beta = -.051, p < .05$), suggesting that citizens who consume news from websites and discuss them will be less fearful of integration (partially supporting hypothesis 2c).

The third set of research hypotheses addressed the impact of SNSs on the five dimensions of attitudes toward the EU. Results shown in Table 2 indicate that the use of social network sites negatively predicted lack of performance ($\beta = -.073, p < .01$) (partially supporting hypothesis 3b).

Hypotheses 4a and 4b tested a negative relationship between blogs and strengthening, efficacy, and utilitarianism and the positive relationship between blogs and fear and lack of performance. Analyses indicated that blog use predicted efficacy negatively ($\beta = -.078, p < .01$) and utilitarianism positively ($\beta = .056, p < .05$). Thus, hypothesis 4a was partially supported. No interaction effects between political discussion and blog use were found (rejecting hypothesis 4c).

No significant relationship between the use of YouTube and attitudinal dimensions emerged. In answering RQ3, where we asked about the effects of video-hosting websites and interaction with political discussions, only one significant relationship was found, showing that the interaction with political discussion and video-hosting websites significantly predicted higher levels of efficacy ($\beta = .055, p < .05$).

Because all hypotheses and research questions were assessed by a number of tests within the same data, the high number of tests may generate significant results that can be inaccurate or
misleading. To avoid such biases of repeated testing, Bonferroni corrections for all analytical procedures were additionally conducted.

**Table 2. Influence of Internet Use on Attitudes Toward the EU.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Strengthening</th>
<th>Efficacy</th>
<th>Fear</th>
<th>Utilitarian</th>
<th>Performance</th>
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<tr>
<td></td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
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<td></td>
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<tr>
<td>Age</td>
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<td>.033</td>
<td>-.016</td>
<td>.103***</td>
<td>.208</td>
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<tr>
<td>Gender</td>
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<td>.085**</td>
<td>.080**</td>
<td>-.011</td>
<td>-.032</td>
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<td>Class placement</td>
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<td>-.034</td>
<td>-.060*</td>
<td>-.031</td>
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<tr>
<td>$\Delta R^2$</td>
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<td>.010</td>
<td>.015</td>
<td>.046</td>
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<tr>
<td><strong>Block 2</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Political knowledge</td>
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<td>-.158***</td>
<td>.117***</td>
<td>-.004</td>
<td>-.071**</td>
</tr>
<tr>
<td>Political discussion</td>
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<td>.139***</td>
<td>-.027</td>
<td>-.092***</td>
<td>-.004</td>
</tr>
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<td>$\Delta R^2$</td>
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<td>.044</td>
<td>.014</td>
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<td>.006</td>
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<tr>
<td>Official sites</td>
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<td>-.013</td>
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<td>Social network sites</td>
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<td>-.001</td>
<td>.030</td>
<td>.032</td>
<td>-.073**</td>
</tr>
<tr>
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<td>.004</td>
<td>.008</td>
<td>.010</td>
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<td><strong>Block 4</strong></td>
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<td>Discussion x official</td>
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<td>-.042</td>
<td>.021</td>
<td>.020</td>
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<tr>
<td>Discussion x news</td>
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<td>.006</td>
<td>-.051*</td>
<td>.045</td>
<td>.019</td>
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<td>Discussion x SNS</td>
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<td>.023</td>
</tr>
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<td>Discussion x blogs</td>
<td>-.031</td>
<td>-.040</td>
<td>.050</td>
<td>-.012</td>
<td>.018</td>
</tr>
<tr>
<td>Discussion x video sites</td>
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<td>-.023</td>
<td>.001</td>
<td>-.001</td>
<td>.029</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
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<td>.007</td>
<td>.007</td>
<td>.003</td>
<td>.003</td>
</tr>
<tr>
<td><strong>Total R^2</strong></td>
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<td>.048</td>
<td>.035</td>
<td>.036</td>
<td>.065</td>
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<td><strong>N</strong></td>
<td>1577</td>
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</tbody>
</table>

* $p < .05$. ** $p < .01$. *** $p < .001$. (Standardized $\beta$.)

Five hierarchical regression analyses were conducted based on a total of 1,577 respondents with the significance level of .05. Bonferroni correction tested each individual hypothesis or research question by dividing a statistical significance level by a number of tests. Thus, the significance level of .01 (.05 / 5) became the new criteria to determine significance for independent variables. After restricting the significance level to .01, the influence of blogs toward strengthening and the influence of social network sites predicting performance would remain as significant independent media variables in this model. When it comes to political discussion variables, the significance level of political discussions toward efficacy and utilitarian were below .01, and those two relationships were still statistically significant. Also for political
knowledge, every relationship (the influence of political knowledge toward strengthening, efficacy, fear, and performance) still remained statistically significant.

It is important to note that Bonferroni’s post hoc procedures are quite conservative, so many outcomes that would normally be declared statistically significant are not because of the very low alpha level required to pass the correction test (Bland & Altman, 1995). Yet political knowledge, political discussion, blogs, and social media use remained statistically significant predictors of EU attitudes even after Bonferroni’s correction, suggesting that their impact is well beyond chance.

**Discussion**

Our research questions and hypotheses addressed which types of online media use influence attitudinal dimensions related to the European Union. The five hierarchical regression analyses revealed that the use of blogs and social network sites is directly associated with several attitudinal changes. Blog use negatively predicted the strengthening dimension but positively predicted utilitarianism. The use of social network sites was significantly and negatively associated with lack of performance.

Previous literature suggests that news coverage of European matters in general is related to public attitudes toward the EU, but few studies have assessed the potential effects of different types of online websites as well as social media for public support of the bloc. This study fills this gap and explicitly identifies the impact of several forms of online news consumption on the way Europeans perceive their union.

Using data from the 2011 Eurobarometer Public Opinion Survey and building upon the work of Boomgaarden et al. (2011), five dimensions of public attitudes toward the EU emerged from the data: strengthening, efficacy, fear, utilitarianism, and lack of performance. Of particular theoretical interest are the new dimensions of fear and efficacy. Efficacy relates to the belief that individuals understand and perceive themselves as an active part of the EU and that the EU represents their interests. Fear, on the other hand, comprises the perceptions that the union will bring more crime, less control of borders, loss of cultural identity, and unemployment.

Political knowledge was found to predict support for strengthening, feelings of efficacy, and the idea that the EU fosters utilitarian benefits to the region. Studies exploring the effects of political knowledge on EU attitudes have found mixed results (Boomgaarden et al., 2011; Janssen, 1991; Karp et al., 2003). Some have argued that the more one knows about the EU, the less threatening it will be. However, others suggest that citizens with more knowledge will also have higher expectations of EU performance and express more disappointment when it does not measure up (Karp et al., 2003). Our results support the idea that those who are more knowledgeable about the EU feel less threatened by it and indeed see the personal and national benefits of belonging to the bloc. In addition, they wish that the EU played a larger role in areas such as common defense and foreign policies as well as an increase in membership.
Because the estimated independent effects of online news use are small, the findings with respect to the effect on the dimensions of EU attitudes are exploratory rather than definitive. Nonetheless, we found that getting European news from blogs remains a significant predictor for negative attitudes toward the EU, even after using conservative post hoc assessments. This is not surprising. Several studies have suggested that blogs can reduce confidence in government institutions (Johnson & Kaye, 2004, 2012; Sweetser & Kaid, 2008), in part because of the biased, uncivil tone of many political blogs (Borah, 2013) and in part because blog users are polarized in their views (Johnson et al., 2009).

Receiving news on interactive social network sites, on the other hand, fosters positive EU attitudes on the dimensions of performance and strengthening, suggesting that those who get their news from social networks are more likely to assess the EU performance positively and support further EU enlargements. This is in line with previous studies that suggest the major political role served by social media sites is to connect users with political actors as well as other users (Lee & Ma, 2012; Macafee, 2013; Parmeelee & Bichard, 2012) and that government agencies and officials have relied increasingly on Facebook and Twitter to foment political participation, increase transparency, and seek public feedback, which can improve the efficiency of government and increase trust (Macnamara & Kenning, 2011; Snead, 2013).

Previous studies have questioned whether examining political discussion alone—without considering the quality of that discussion—can explain political attitudes (Friedman & Thiel, 2012; Scheufele, 2000). Indeed, the findings presented here reveal that political discussion produced conflicting results: Although it increased the sense of efficacy inside the EU, it also increased feelings of fear associated with integration.

This study also explored the effects of differential gains on European attitudes. We found limited evidence that online media interact with off-line discussion to enhance political effects, with only 3 of 25 relationships being significant. This may partly result from the fact that the Eurobarometer asks only for off-line discussion measures. More recent differential gains studies have included measures of online political discussion (Brundidge et al., 2014; Hardy & Scheufele, 2005; Yamamoto et al., 2013), because many online sites, particularly social media, are interactive sources that allow people to express their views as well as find information. However, several of these studies have found no interaction between online media and online discussion (Brundidge et al., 2014; Hardy & Scheufele, 2005; Kim et al., 2010; Vu et al., 2013), perhaps because online news and social media incorporate both mass and interpersonal media, reducing the possible additive influence of political discussion.

Limitations and Suggestions for Future Research

This study relied on a leading measure of European attitudes, the Eurobarometer, to examine the influence of different types of online and social media on European attitudes. Although results have explicitly shown that different online media have different effects on political attitudes toward the European Union, our models cannot explain why such differences occur. Future studies should examine the content of messages in distinctive types of online media sites as well as the moderating role of economic and political conditions on attitudinal differences among European democracies.
We examined a diverse set of countries (Germany, the United Kingdom, Greece, Sweden, the Czech Republic, and Romania) to increase the generalizability of results. However, exploring a different or expanded group of countries might produce a different set of results. Also, although the Eurobarometer included an extensive list of online and social media, respondents were asked only whether they had used each source for political news rather than how much. Stronger media measures might have produced stronger results.

This study included several demographic and political variables that have been shown to influence European attitudes in the past. However, the models explained only about 3% to 8% of the variance. Future studies should investigate other measures that have been shown to be related to European attitudes, such as anti-immigration attitudes and perceived personal, national, and EU economic performance.

References


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