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Ellen Quintelier, Sara Vissers

Institutions: Katholieke Universiteit Leuven

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The Effect of Internet Use on Political Participation

An Analysis of Survey Results for 16-Year-Olds in Belgium

Ellen Quintelier
Sara Vissers
Katholieke Universiteit Leuven, Belgium

Conflicting claims have been put forward regarding the effects of Internet use on real-life political participation. Some argue that Internet use, and the accompanying political resources, stimulates political participation; others fear that intensive Internet use is associated with a withdrawal from public life. This article's authors test both claims on a representative sample of 6,330 16-year-olds in Belgium. They investigate young people's behavior, assuming that young people are the most avid information and communication technologies users and the most susceptible to the influence of various socialization experiences. The authors introduce a distinction between time spent on the Internet (time-replacement hypothesis) and various activities performed online. Results show time on the Internet does not have an effect on the propensity to participate in public life. Although some online activities are clearly and significantly associated with offline political participation, it remains to be investigated whether this relation is a form of causality.

Keywords: *political participation; Internet; social capital; adolescents; mobilization*

In little more than a decade, new information and communication technologies have dramatically changed our lives and interaction patterns. This is especially the case for adolescents who are among the most avid users of cellular phones, SMS messages, virtual communities, file sharing, and other new forms of interaction (Di Gennaro & Dutton, 2006). In the literature, various and sometimes even conflicting hypotheses have been developed with regard to the impact of the Internet explosion. Although some authors argue that the rise of new communication tools will strengthen the awareness of public affairs and provide citizens with new tools to play an active role in public life (Norris, 2001; Ward & Vedel, 2006), others are much more pessimistic about the social consequences of the Internet. It is feared that Internet users will reduce their real-life interaction and will simply remain at home in front of their computer screens (Putnam, 2000).

Thus far, both hypotheses have been tested mainly among adult populations (Bimber, 2001; Gibson, Lusoli, & Ward, 2005; Krueger, 2002; Tolbert & McNeal, 2003), without leading to any firm conclusions. In this article, we want to provide a new form of evidence by analyzing the effect of Internet use on young people. More specifically, we will rely on the results of a representative survey of 16-year-olds to investigate the relationship between various forms of Internet use and political and social participation. There are various

reasons for why we wish to focus on adolescents. First, it is clear that the Internet's influence on this group has been huge. Nearly all countries display a clear age difference with regard to the spread of the Internet, with almost universal usage among the youngest age group. In the 2004 European Social Survey (Jowell & the Central Co-ordinating Team, 2005), 82% of those between the ages of 18 and 29 had access to the Internet and had used it at least once during the past 12 months, whereas this was true for only 14% of those older than 59.[1] Second, we can assume that young people are most likely to be influenced by the Internet. For older age cohorts, we might expect an inertia effect. Their participation patterns were developed in a pre-Internet period and would be affected only marginally by the introduction of new media. Young adolescents, on the other hand, have yet to develop firmly engrained political habits and are therefore much more open to be influenced by new experiences. If we can expect the Internet to have a clear and significant effect, then it would be among these younger age groups. Third, various recent studies have sounded the alarm about the civic and political participation of young people (Putnam, 2000; Rosenstone & Hansen, 2003; Skocpol, 2003). It is feared that young people no longer participate in voluntary associations or in various forms of civic life (Marsh, O'Toole, & Jones, 2006; Putnam, 2000; Zukin et al., 2006). The Internet might be able to counteract this trend. Gibson et al. (2005), for instance, argued that the "Internet is expanding the numbers of the politically active, specifically in terms of reaching groups that are typically inactive or less active in conventional or offline forms of politics" (p. 561). Other authors have qualified this negative view by arguing that whereas the levels of political participation are declining, the levels of community involvement and civic participation among young people are rising (Eden & Roker, 2002; Zukin et al., 2006). Nevertheless, the civic participation of young people remains a salient topic and an issue of social concern. As such, we also want to develop new insights into mechanisms that might explain the specific participation patterns of young people. We will pay more attention to the theoretical and empirical definition of *political participation* further along in this article. Here, we first review the literature on the alleged effects of the Internet on political engagement. More specifically, we will deal with the possible effects of time spent online and the precise activities performed on the Internet. Our two main hypotheses will be tested using the results of the Belgian Youth Survey 2006. In the final section, we present possible explanations for the observed patterns.

The Importance and Potential of the Internet

With the emergence of new information and communication technologies, various scholars and politicians view the Internet as a new source of political socialization and a way to bring (young) citizens closer to the political process. High expectations emerged concerning the Internet's potential for the political mobilization and engagement of new groups that are currently excluded from politics. The Internet is becoming an important source of political participation for young people, who are normally not attracted to politics (Best & Krueger, 2005; Boogers & Voerman, 2003; Gibson et al., 2005). The potential for the Internet to attract new people who were underrepresented in more traditional forms of participation is also known as the "mobilization thesis" (Norris, 2001). The literature provides

four reasons for these expectations (Strandberg, 2006). First of all, the Internet provides a lot of opportunities for political engagement: online voting in polls, debating, blogging, and so forth (Strandberg, 2006; Ward & Vedel, 2006). Second, this "new" medium lowers the cost of participation. Once someone has a connection, there are no extra costs for going online, which might lower the barrier for citizens to participate in online politics. People with a broadband connection are consequently more likely to engage in online activities (Best & Krueger, 2005). This probability has made some authors argue that online participation is more open as it provides for more equality of opportunity in political participation (Bimber, 2001, 2003; Downs, 1957; Strandberg, 2006). Third, it is also argued that the Internet is quick and up to date (Tolbert & McNeal, 2003) and that it can provide a lot of information necessary to participate in civic life and public discussion (Delli Carpini & Keeter, 1996; Hale, Musso, & Weare, 1999). Finally, as an interactive medium, the Internet can strengthen the workings of direct democracy and improve relations between citizens, politicians, and their intermediaries through processes like e-government. (Di Gennaro & Dutton, 2006; West, 2004). The Internet also might be a solution to the "democratic deficit" that several political institutions experience (Norris, 2001). Research further indicates that young people are more enthusiastic about online political participation than are older people (Mossberger, Tolbert, & Stansbury, 2003; Solop, 2000).

A number of authors have argued that new technology could be the means to link youth to the political process. Because young people spend increasing amounts of time in the "online world," the Internet must not be overlooked or underestimated as an effective educational tool that can foster political learning and participation among youth (Boogers & Voerman, 2003; Gibson et al., 2005; Weber, Loumakis, & Bergman, 2003). The World Wide Web contains a wide range of educational and informational web sites, but the problem is that young people rarely access these sites. To correct this problem, efforts must be taken to make these web sites more accessible and appealing to youth (Lupia & Philpot, 2002). With the high penetration and popularity of the Internet among young people, high expectations emerged about the Internet's mobilization potential within this part of the population (Eurobarometer, 1997, 2001; Pasek, Kenski, Romer, & Jamieson, 2006). The underlying question of this article is whether Internet functions as a mobilization structure for political participation—in other words, whether we can expect the Internet to have an impact on the democratic character of participation and mobilization regarding youngsters. The Internet's potentially overwhelming effects might be mediated in two ways: first, through the amount of time young people spend online and, second, in the various forms of the activities they engage in. Indeed, playing online games will have different effects on political participation than will chatting on political web sites. We will focus in the following parts on these two mediating variables.

Time Online

The amount of time people spend online might indeed influence levels of political participation: The more time people spend surfing the net, the more likely they are to access political web sites or news sites or to receive political e-mails. Thus, online activities forge connections between people that might actually increase levels of political participation (Gibson, Howard, & Ward, 2000). Krueger (2002), for instance, has found that the Internet

has the potential to draw new people to offline political participation or at least increase political awareness (Lupia & Philpot, 2002). The mobilization hypothesis will be especially successful when the internet is able to attract young people to politics (Eden & Roker, 2002; Norris, 2001; Zukin et al., 2006).

However, the time-replacement hypothesis is inconsistent with the hypothesis that Internet use can increase political participation. The time-replacement hypothesis argues that the time people spend on the Internet, or on television, cannot be devoted to other activities. These authors argue that all media use has a negative influence on social and political participation (Kraut et al., 1998; Nie & Erbring, 2002; Norris, 1996; Pasek et al., 2006; Putnam, 2000) and cite three reasons in support of these findings. First, time spent on the Internet cannot be devoted to other, more social, leisure activities (i.e., time-replacement hypothesis). Second, online interaction does not involve the face-to-face contact necessary to build social trust, which can be instrumental in stimulating political participation (Putnam, 2000). Kraut et al. (1998) attested to the Internet's inhibition of live interaction, arguing that "like watching television, using a home computer and the Internet generally implies physical inactivity and limited face-to-face social interaction" (p. 1019). The more time people spend online (even with just 2 to 5 Internet hours a week), the more they lose contact with their social environment and the less time they spend phoning friends and family (Nie & Erbring, 2002; Quan-Haase & Wellman, 2002). Nie and Erbring (2002) argued that as the Internet is inherently an activity of the individual, it seems very unlikely that it would be able to increase any form of participation. Third, virtual communities are rather homogeneous and therefore discourage any diversification of contacts; online communities promote the interaction of only like-minded people. Although heterogeneous networks can stimulate people to participate politically and to change their opinions, participation in homogeneous networks leads to polarization: a strengthening of the initial viewpoints and thus more polarized opinions, which will not lead to political participation (Druckman & Nelson, 2003; Mutz, 2002). The more tightly a network is knit, the more uniform the information source will be and the less likely people will be to participate politically (Teorell, 2003). In general, it has been argued by the time-replacement authors that greater media involvement leads to the reduction of social capital and generalized trust (Putnam, 2000).

However, not all researchers see the mass media as a danger for social capital. This alternative perspective relies mainly on two mediation processes of mass media. First, mass media is a mechanism that creates common interests and fosters imagined communities. Sites such as MySpace and Second Life might not reduce social contacts between people but actually increase them. During the Belgian local elections in 2006, for example, people sent the catchphrase "Think" to their MySpace friends. In this way, they hoped to encourage people to think about for which party they should vote and discourage them from voting for the extreme Right parties. Furthermore, Best and Krueger (2005) concluded that online interactions lead to more generalized trust. Second, mass media are also the most important sources of political information, and this information is an important source of political engagement (Delli Carpini & Keeter, 1996; Pasek et al., 2006). The literature indicates high expectations for the media as knowledge transmitters (Delli Carpini & Keeter, 1996). It has often been argued that accessible and visible media (Bennett & Bennett, 1993; Dimock & Popkin, 1997) or following the news routinely (Cappella & Jamieson, 1997; Wattenberg, 2007) is correlated with more political knowledge. The media are considered

the most important sources of political information by young people (Pasek et al., 2006; Shah, McLeod, & Yoon, 2001). If political knowledge increases the likelihood of political participation (Delli Carpini & Keeter, 1996), then the media can play a central role in stimulating youth to political participation (Luskin, 1990; Zaller, 1992).

Effects of Various Forms of Internet Use

Besides the time spent on the Internet, different patterns of Internet use also have different effects (e.g., positive or negative) on the level of political engagement (Polat, 2005; Turkle, 1995), and this makes variation possible in the type of outcome on political participation (Chaffee & Frank, 1996; John, Halpern, & Morris, 2002; McLeod, Rush, & Friederich, 1968; Pasek et al., 2006). When one wants to understand the effects of Internet use on political participation levels, it is critical to distinguish different forms of Internet use. The amount of time spent online matters, but so too does the content of the activities people engage in (De Vreese, 2007; Jung, Qiu, & Kim, 2001; Norris, 1996). Young people use the Internet intensively, but not everyone uses it in the same way: Some use it as a source of information (news) or for entertainment purposes (e.g., online games, watching movies, etc.), whereas for others, the Internet has a more social function (e.g., chatting, blogging, MySpace, etc.). This differentiated use of the Internet is correlated with young people's level of education: more highly educated people use the Internet more often as a source of information, whereas less educated people prefer the entertainment functions of the net (Shah, Kwak, & Holbert, 2001; Van Dijk, 2005).

Cyberoptimists argue that the Internet is a promising tool that can stimulate political participation (Norris, 2001). Multiple studies have demonstrated the positive effects of Internet use on offline political participation. However, different activities will have varying effects—positive or negative—on levels of political participation: although following the news might positively affect political participation (see above), online gaming might not. Lupia and Philpot (2002), for instance, argued that visiting news web sites on the Internet has a positive effect on political participation. Their findings were more prevalent among young people, however, partly because youth seek online news sources more readily than older people (Jung et al., 2001; Lupia & Philpot, 2002; Polat, 2005). Young people are becoming more dependent on the Internet for all purposes, but especially for news gathering (Gibson et al., 2005; Lee, 2006; Turkle, 1995). Solop (2000) similarly argued that younger people are more likely to vote online than are older voters. In addition to surfing the web, other forms of Internet use encourage higher levels of political participation: for example, forwarding e-mails with political content, online voting, and so forth. De Vreese (2007) demonstrated that many Internet activities are positively related to "different dimensions of civic and political participation" (p. 208). Research concerning the Internet and political participation points to the Internet's commanding influence and the attractiveness of this medium to youth, leading many authors to argue that the Internet could stimulate political participation in this direction (Gibson et al., 2005; Norris, 2003; Strandberg, 2006; Van Dijk, 2005). Shah, Kwak, et al. (2001) found that information gathering is positively linked with social capital, whereas more recreational use of the Internet displays a negative correlation with community spirit. However, in examining the role of mass media and community engagement among youth, Pasek et al. (2006) found that media use, whether in the

direction of information seeking or for entertainment purposes, facilitates civic engagement. On the other hand, we must consider that most of this research is directed toward the usual suspects (Internet news, signing petitions, etc.), which tend to increase the level of political participation. Therefore, we included less conventional Internet activities such as playing games, downloading music, and purchasing and selling things.

Not all empirical evidence reveals that the Internet is effective in stimulating higher levels of political participation. Quan-Haase and Wellman (2002) argued, for example, that the Internet supplements political participation but does not change people's level of involvement. Oblak (2003) stated that even though the Internet increased the possibility of people's finding people with similar opinions and debating, it did not increase the possibility of receiving information about public institutions or the potential to make contacts with politicians. The Internet neither increased nor reduced the effectiveness of other forms of political participation. Bimber and Davis (2003) also claimed that the Internet will not increase the turnout in elections. Bimber (1999) found only "small and quite subtle" differences in the ability of the Internet to increase online contacting (compared to face-to-face contacting).

This review of the literature leads us to two hypotheses to test whether the Internet can increase the political participation of young people. Our first hypothesis is, therefore, that young people who spend more time on the Internet will participate more in politics. Second, we argue that different forms of Internet use can have positive and/or negative effects on political participation. We expect that blogging or participating in discussion groups, following the news, and forwarding political e-mails will have a positive effect on political participation, whereas chatting with unknown people, looking at web sites, sending e-mails, playing interactive games, downloading music/movies, and purchasing or selling things will have a negative effect on political participation.

Dependent and Control Variables

The dependent variable in our analysis is political participation. A wide variety of definitions of political participation exists, but the central idea of each definition is almost always the same and can be reduced to four essential components: Political participation is in essence (a) the activity (b) of citizens (c) to influence (d) political decisions (Brady, 1999). The definition of political participation, moreover, has grown in terms of activities (van Deth, 2001) or "repertoires" (Norris, 2002). Therefore, we will use a broad spectrum of political activities in our analysis: donating/collecting money, signing a petition, boycotting and buycotting products, wearing a badge/sticker/T-shirt, attending a cultural show with political content, participating in a legal demonstration, writing a political message, contacting a politician, and being a member of a political party. We asked young people if they participated in one of these activities within the past year. As the dependent variable, we will use a sum-scale (range = 0-10) of all acts of political participation (Cronbach's $\alpha = .629$).

Considering the effect of socioeconomic status on Internet access and use, it is important to include these variables in our analysis. We will control for groups who are "digitally divided": lower and higher socioeconomic groups, girls and boys, Belgians and immigrants (DiMaggio, Hargittai, Neuman, & Robinson, 2001; Norris, 2001). We will not use age in

our analysis, because the young people in our sample are all roughly 16 years old, although this group might have distinct characteristics, which we have highlighted before. With respect to gender, Bimber (2000) argued that women generally use the Internet less frequently than men, and this gap even increases for more intensive use (Albrecht, 2006; Best & Krueger, 2005; Norris, 1999; Polat, 2005). Boys and girls also prefer different forms of online participation (Van Dijk, 2005). Girls dislike computer games because they involve no social interaction, promote gender role stereotyping, and contain too many competitive elements (Hartmann & Klimmt, 2006). Cooper and Weaver (2003) contended that girls and young women feel less comfortable with new information technology and have fewer digital skills, driven by unequal opportunities and attention. Altogether, women use the Internet differently and visit different web sites than men do (Wasserman & Richmond-Abbott, 2005). As both Internet and computer use become more widespread, however, this gap between boys and girls narrows (DiMaggio et al., 2001; Van Dijk, 2005; Vissers and Hooghe, 2006; Warschauer, 2003).

The effects of gender are supplemented by socioeconomic differences (Bimber, 2000). Online users are most often well educated and affluent and have a higher income (Jung et al., 2001; Norris, 1999; Polat, 2005). Socioeconomic background is relevant not only to questions of access but also to the purposes for which the Internet can be used. People with higher socioeconomic backgrounds use the Internet more frequently for information, whereas people with lower socioeconomic backgrounds often use the Internet for entertainment (Shah, Kwak, et al., 2001). In the literature, this (socioeconomic) gap is also referred to as the *deepening divide.* This new term points to the swing from inequality in access to inequality in use between different social status groups (Van Dijk, 2005).

Research indicates that ethnic minorities have less access to the Internet: They are less likely to have an e-mail address as well as computer and Internet access at home even after controlling for education, income, and so forth (Mossberger et al., 2003; Nakamura, 2002; Norris, 2001; Wasserman & Richmond-Abbott, 2005). However, in a lot of studies, ethnic minorities comprise different groups, such as Latinos, Asians, and African Americans, and possible differences between these groups are rarely taken into account as influential factors contrary to gender, age, income, and education (Bimber, 2001; DiMaggio et al., 2001; Jung et al., 2001). Norris (2001) also argued that citizenship status is a vital factor, although she also wondered "whether 'normalization' of African-American participation in the online population will eventually occur" (p. 72).

Data and Method

These two hypotheses will be tested using the Belgian Youth Survey 2006. The Belgian Youth Survey 2006 is a representative survey conducted in 2006 with 6,330 fifteen- and sixteen-year-olds in Belgium (in both the French and the Dutch communities). This study is based on written surveys filled out by the respondents in 112 schools on the social and political attitudes of young people. The schools were randomly selected from among the Belgian provinces and the type of education (public/private) to ensure a representative sample. The response rate of this survey was quite high (66%), even among demographics that are generally more difficult to recruit (less educated people, immigrants, etc.), because we

Table 1
Frequency of Internet Use on a Weekday Among Young People (in percentages)

	Belgium	Girls	Boys	*F* Value
No Internet use	9.3	10.4	8.4	78.728**
Less than 1 hour	19.3	22.0	16.9	
1-2 hours	37.1	38.5	35.9	
3-4 hours	20.7	19.0	22.1	
5 hours or more	13.6	10.1	16.7	
Number of cases	6,286	2,945	3,335	

Note: Missing $n = 44$.
**$p < .001$.

selected a representative sample of schools, not students. Even after controlling for individual characteristics (gender, school type, level of education), the data are highly representative (Hooghe, Quintelier, Claes, & Dejaeghere, 2006).

The questionnaire included 10 acts of political participation, and the adolescents could indicate whether they had already participated in them in the past 12 months: boycotting and buycotting products, donating money, signing petitions, protesting and attending a show with political content, wearing a badge, displaying messages, contacting a politician, and being a member of a political party. Young people are most active in donating and collecting money and least active in political party membership. The latter is not surprising, because underage people (younger than 18 years old) are not a target group of Belgian political parties. Of the youth surveyed, 25% do not participate in any political activity, 25% participate in only one activity, and 50% participate in two or more activities. As the dependent variable, we will use a sum-scale (range = 0-10) of all acts of political participation.[2]

Internet use was measured in two ways: first, through how much time youth spend online and, second, according to the online activities in which they partake. First, we will look to the amount of time young people spend online (see Table 1). On one hand, almost 10% of the young people do not go online on weekdays, even though they do have Internet access. On the other hand, one third spend more than 3 hours per day on the Internet. As we already saw in the literature, young boys use the Internet significantly more often than do young girls. The frequency of Internet use of the youngsters in the Belgian Youth Survey 2006 does not differ much from that in other West European countries (Jowell & the Central Coordinating Team, 2005).

Because young people spend so much time on the net, we were also interested to find out what they do while they are online. Access to this information is one of the main advantages of the Belgian Youth Survey 2006, as most surveys are limited to the frequency of Internet use. Furthermore, this survey included Internet activities designed for the younger generations. The most popular activities (see Table 2) seem to be chatting with friends, looking at web sites, and reading and sending e-mails. Also very popular is the downloading of music and/or movies. “Blogs and discussion groups” and “follow the news” are also rather frequent activities and, as we have seen in the literature, might enhance the political participation of young people. However, the forwarding of political e-mails—the activity most likely to stimulate political participation—is much less frequent. Girls are significantly

Table 2
Activities of Young People on the Internet

	Never	Not Often	Very Often
Chatting with friends	8.0	8.3	83.7
Looking at web sites	5.1	11.2	83.7
E-mail	9.1	13.5	77.4
Downloading music or movies	23.8	21.4	54.8
Playing interactive games	40.6	24.9	34.4
Blogging or discussion groups	46.9	20.7	32.4
Follow the news	53.2	20.2	26.6
Chatting with people I don't know	65.7	19.6	14.8
Purchasing or selling things	83.3	12.0	4.7
Forwarding political e-mails	88.2	10.3	1.5

more likely than boys to read their e-mails, whereas boys are more likely to chat with unknown people, surf web sites, play games, download films and music, buy and sell things on the Internet, and follow the news (results not presented here). As these are only bivariate results, we did not control here for the time they spend online.

Our research question is whether the Internet can enhance the political participation of young people. We will test this hypothesis in two ways: First, we will look at the time spent on the Internet; subsequently, we will investigate whether the kind of activities one pursues on the Internet makes a difference.

Analysis

To investigate the influence of the time spent on the Internet on political participation, we will use multiple regression analysis. This permits us to measure the effect of the Internet while simultaneously taking both the control variables (gender, socioeconomic and ethnical background) and the political attitudes (political interest, efficacy and knowledge) into account.[3] In our first analysis, we investigate the influence of intensive Internet use on political participation. We argue that more time spent online increases the frequency and likelihood of online communication, which may include chatting about politics, sending e-mails, signing Internet petitions, and so forth, which might positively influence youth's political participation.

However, if we look at Table 3, we notice that spending time online has no significant influence on political participation: How much time people spend online does not influence their levels of political participation. We also tested for a curvilinear relationship between Internet use and political participation (by adding dummies for each category of Internet use) (Hooghe, 2002), but no curvilinear functions were found. We find that both gender and students' educational aspiration have a positive influence on political participation. Other factors that lead to more political participation are a general interest in politics, political efficacy, and political knowledge. This supports the ubiquitous fact that political attitudes are effective in stimulating political behavior. Parents and voluntary organizations can also

Table 3
The Impact of Time of Internet Use on Offline Political Participation (Ordinary Least Squares Regression)

	Unstandardized Coefficients	Standard Error
Control variable		
Gender	0.342**	.041
Educational goal	0.125**	.026
Citizenship status	–0.0575 (*ns*)	.086
Discussing politics with parents	0.238**	.030
Membership associations	0.288**	.014
Political attitude		
Political interest	0.387**	.027
Political efficacy	0.049*	.016
Political knowledge	0.047**	.007
Frequency of Internet use	–0.005 (*ns*)	.017
Constant	–1.080**	.158
R^2	0.209	

Note: The dependent variable is political participation. The univariate distributions of all variables are available at `http://www.kuleuven.be/citizenship/_data/internetappendix.pdf`.
*$p < .01$. **$p < .001$.

have a large and positive influence on the offline political participation of young people. Furthermore, citizenship status does not have a significant influence on political participation. Although the time spent on the Internet is not significant, the model explains 21% of the difference in offline political participation. Therefore, we cannot confirm the time-displacement hypothesis that young people who spend more time on the Internet will participate more in politics.

Although our study suggests no significant relationship between more Internet use and more political participation, it is still possible that specific forms of online activism (blogging, reading the news, and forwarding political e-mails) can positively influence offline political participation. First, we will test the bivariate relations between specific forms of Internet use and the frequency of political participation (see Table 4). In addition, we will run regressions for each item separately (see Table 5). We were forced to do so because the high correlation between the items would lead to multicollinearity problems when introducing them simultaneously in a multivariate regression. As displayed in Table 4, "blogging and discussing," "following the news," and "forwarding e-mails with political content" are positively related to political participation of young people: People who send political e-mails are twice as likely to perform an offline political activity; people who follow the news on the net or participate in discussion groups are, respectively, 30% and 20% more likely to participate politically. Surprisingly, "e-mailing," "looking at web sites," and "purchasing/selling things on the Internet" also increase levels of political participation. But we can argue that people who chat, sell, and purchase things on the Internet are very active Internet users and have a lot of Internet skills, which are helpful in online and offline political participation. The correlations between Internet use and chatting and purchasing things are, respectively, .278 ($p < .01$) and .133 ($p < .001$). However, we must also note that these

Table 4
Bivariate Relation Between Internet Use and Political Participation (Mean Number of Activities)

Internet Use	Does Not Perform This Internet Activity	Performs This Internet Activity	*F* value	Odds Ratio Exp(B)
Forwarding political e-mails	1.50	2.99	120.38**	1.99
Following the news	1.47	1.93	118.14**	1.31
Blogging/discussion groups	1.50	1.85	68.35**	1.23
E-mail	1.43	1.71	13.89**	1.20
Looking at web sites	1.42	1.70	7.57*	1.20
Purchasing or selling things	1.64	1.91	23.06**	1.16
Chatting with friends	1.57	1.69	2.47 (*ns*)	1.08
Chatting with unknown people	1.69	1.67	0.09 (*ns*)	0.99
Downloading music/movies	1.72	1.68	0.51 (*ns*)	0.98
Playing interactive games	1.77	1.62	12.69**	0.92

*$p < .01$. **$p < .001$.

are infrequent activities. On the other hand, playing games on the Internet makes people less likely to participate. So these primary results suggest that certain Internet activities are significantly associated with levels of political involvement. However, we did not control for a number of influential factors in Table 4, so we need to expand our analysis.

Earlier studies have indicated that citizens who pay a lot of attention to political information and the news are more interested in politics and more knowledgeable than the average citizen (Norris, 2000). Therefore, in the following models, we control for political attitudinal variables (political interest, political efficacy, and political knowledge). Even when controlling for these attitudinal variables, certain Internet activities remain significant predictors of political participation (see Table 5). Chatting with unknown people, participating in blogging/discussion groups, purchasing or selling things, following the news, and forwarding political e-mails still positively influence offline political participation, even after controlling for several parameters. It is not surprising that following the news and forwarding political e-mails have a positive effect on someone's level of (offline) political participation. The relation between other Internet activities and political participation is more surprising. A possible explanation can be that chatting with unknown people and sending messages to discussion groups and blogs helps to develop civic skills that are necessary to participate in political life. Besides, (online) talking and discussing with strangers can influence the levels of generalized trust, resulting in higher levels of political engagement. These findings are very interesting and definitely should be elaborated on more in depth. Furthermore, we find the same relationship between political participation and the independent variables as in the previous analysis: Girls and more highly educated people are more active, even after we have taken the effect of political socialization agents, such as parents and voluntary organizations, into account. Political attitudes—interest, efficacy, and knowledge—also have an effect on political participation. Again, we find that nationality does not influence political participation as no difference was revealed between non-Belgian and Belgian youth. This is a positive finding as it suggests that young people,

Table 5
Multivariate Model for Internet Use and Political Participation (Ordinary Least Squares Regression)

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Control variable											
Gender	.106**	.105**	.107**	.104**	.106**	.104**	.107**	.105**	.124**	.115**	.102**
Educational goal	.061**	.060**	.062**	.060**	.060**	.057**	.062**	.062**	.063**	.054**	.061**
Citizenship status	–.008 (*ns*)	–.010 (*ns*)	–.007 (*ns*)	–.007 (*ns*)	–.006 (*ns*)	–.008 (*ns*)	–.007 (*ns*)	–.006 (*ns*)	–.006 (*ns*)	–.009 (*ns*)	–.008 (*ns*)
Discussing politics with parents	.101**	.100**	.097**	.100**	.097**	.095**	.101**	.102**	.096**	.092**	.087**
Membership associations	.256**	.256**	.259**	.256**	.257**	.254**	.252**	.254**	.252**	.254**	.236**
Political attitude											
Political interest	.191**	.191**	.193**	.192**	.190**	.187**	.189**	.187**	.190**	.181**	.168**
Political efficacy	.039*	.038*	.036*	.038*	.039*	.035*	.041*	.040*	.036*	.035*	.037*
Political knowledge	.085**	.081**	.083**	.081**	.082**	.085**	.082**	.083**	.081**	.076**	.072**
Time spent online	–.003 (*ns*)	–.005 (*ns*)	–.017 (*ns*)	–.010 (*ns*)	–.010 (*ns*)	–.033*	–.010 (*ns*)	–.012 (*ns*)	–.019 (*ns*)	–.020 (*ns*)	–.021 (*ns*)
Internet use											
Chatting with friends		–.008 (*ns*)									
Chatting with unknown people			.040*								
Looking at web sites				.004 (*ns*)							
E-mail					–.006 (*ns*)						
Blogging/discussion groups						.097**					
Playing interactive games							.006 (*ns*)				
Downloading music/movies								.010 (*ns*)			
Purchasing or selling things									.089**		
Following the news										.087**	
Forwarding political e-mails											.225**
R^2	.209	.207	.210	.208	.205	.214	.206	.205	.211	.210	.263

Note: The dependent variable is political participation.
*p <.01. **p < .001.

whether of Belgian or non-Belgian descent, are equally inclined to political participation, which is not always the case in other countries. Similarly, we also find a positive correlation between political participation and discussing politics with parents, as well as with membership in different voluntary associations. However, despite the positive effects of several Internet activities on overall participation levels, these do not contribute significantly to the explained variance (R^2) of the model, which complicates making predictions at the individual level.

Our findings shed a positive light on the ongoing debate regarding the democratic potential of the Internet. Besides the traditional resources and factors, some forms of Internet use play a significant role in fostering offline political participation among youth. Tables 4 and 5 indicate a positive relationship between certain online activities and real-life political participation. The Internet is thus more than an informational tool; the interactive features of this mass medium can help youth in expanding social communication, relations, and civic skills. Nonetheless, both voluntary engagement and parents remain important predictors of political involvement. Moreover, we cannot ignore the possibility that the Internet's tremendous ability to increase youth interactions may actually encourage the development of young surfers by sharpening their communication skills and their capacity for self-expression and by granting them access to valuable information that will influence their everyday actions and decisions.

Conclusion

Young people who spend more time online do not participate in offline politics more frequently. However, some Internet activities are more successful in stimulating political participation. The amount of time spent online is less important than the type of online activities that youth engage in. Our results suggest that certain activities (i.e., chatting with unknown people, blogging and contributing messages to discussion groups, purchasing or selling things, following the news, and forwarding political e-mails) affect youth's political involvement in a positive way. Despite the pull character of the Internet—what makes it easy for the uninterested ones to neglect political information and activities online—evidence suggests that even if we control for socioeconomic status, sociodemographic factors, voluntary engagement, and political attitudes, various Internet-related activities have a positive influence on levels of offline political participation. In any case, the Internet does not lead to social withdrawal. With our data, we cannot confirm the social capital hypothesis that people who spend a lot of time in front of the computer are less active political participants: It does not seem to make a difference either way. Belonging to voluntary organizations or associations remains a very important predictor of political participation and, furthermore, our findings that more Internet use necessarily produces less engaged citizens. Rather, the Internet's effects are conditional under the terms of its use, and as such, the Internet might become an important political mobilization agent similar to voluntary associations and parents.

However, there are some important caveats to these findings. The first thing to notice is that the survey is representative for Belgian youth. We cannot argue that this trend will be universal. As we mentioned, young people are a specific group: They are socialized with the Internet

from a young age and display low levels of political participation. Second, young people cannot vote, which might reduce their level of political participation (Quintelier, 2007). Therefore, we must stress that these results cannot be generalized to all young people (at least those older than the legal voting age). Therefore, it might be easier to affect (low levels of) political participation through the Internet. Finally, the Belgian level of political participation might also be an exception because of the compulsory voting system in Belgium. We should also note that although we assume causality, this is not necessarily the case. However, to establish this causality, we would require panel data, which are a rare commodity in the social sciences (Taris, 2000). Furthermore, international and comparative research is needed.

The conclusions from this study have important implications for the development of the Internet and other information and communication technologies in the democratic political system and should be studied in further depth. Are certain online activities related to specific forms of political participation? Can we see a switch in the participation forms of offline citizens? What makes Internet use so special compared to other forms of media use? Does the Internet attract new participants to politics? Is the Belgian trend universal? Are young people a unique group (e.g., with specific trends) with respect to Internet use? As the Internet rapidly becomes the most dominant utility in Western media, it is of great importance for governments, parties, organizations, and education systems to better understand the interplaying dynamics of online and real life.

Notes

1. In the European Social Survey, Internet use is measured as personal Internet use, that is, "How often do you use the internet, the WWW or e-mail—whether at home or at work—for your personal use?"

2. The univariate distributions of all political participation variables are available at `http://www.kuleuven.be/citizenship/_data/internetappendix.pdf`.

3. The univariate distributions of all variables are available at `http://www.kuleuven.be/citizenship/_data/internetappendix.pdf`.

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Ellen Quintelier is a PhD student in political science at the Katholieke Universiteit Leuven, Belgium. Her PhD research focuses on political participation patterns among adolescents and the anticipation of their future political behavior. She studied political science and quantitative research methods. Previously, her work has appeared in journals such as the *Journal of Women, Politics & Policy, Journal of Ethnic and Migration Studies,* and *Contemporary Politics.* Address correspondence to K. U. Leuven, Centre for Citizenship and Democracy, Parkstraat 45, Box 3602, 3000 Leuven; e-mail: ellen.quintelier@soc.kuleuven.be.

Sara Vissers is affiliated with the Katholieke Universiteit Leuven, Belgium, both as a research fellow in the Department of Political Science and as a member of the research group Centre for Citizenship and Democracy. Her research interests concern information and communication technologies and political participation. In her PhD dissertation, she tries to disentangle the influence of information and communication technologies on the democratic character of participation by focusing on the political use of the Internet, the World Wide Web as a campaign and mobilization tool for political parties and social movements, and social identities within the cyberculture.