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Rosa Borge, Ana Sofia Cardenal

Institutions: Open University of Catalonia

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Rosa Borge, *Universitat Oberta de Catalunya, Barcelona*
Ana S. Cardenal, *Universitat Oberta de Catalunya, Barcelona*

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Abstract

This article explores whether use of the Internet changes the role that political motivation has traditionally played in classic explanations of participation. We ask if, by reducing so dramatically the costs of political participation, the Internet causes interest in politics to lose importance as a causal factor of participation. We examine this issue analysing a representative survey of the Spanish population which deals with political participation and Internet use. The results show that use of Internet has a direct effect on participation independently of motivation, and that, in order to participate online, skilled Internet users do not need to be motivated or interested in politics.

KEYWORDS: political participation, Internet, political interest, Internet skills, contacting

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Introduction

Use of the Internet has generated a widespread and controversial debate on its effects on political participation. This new medium has very powerful characteristics which lead one to think that it may directly or indirectly affect political participation. On the one hand, the Internet has led to an unprecedented increase in the volume of information available. Although there is still debate as to whether the information-rich environment created by the Internet has increased or decreased information costs (Bimber 2001; 2003; Anduiza, Gallego, and Jorba 2009), whatever its effects on information may be, it is likely that they will have consequences for participation. On the other hand, the Internet is an interactive medium which increases contact options extremely efficiently in terms of time investment and creates a communication-intensive environment. In addition, the Internet enables the creation and recreation of “spaces” where discussion and deliberation on issues of common interest is possible (Karakaya 2005). Finally, the use of Internet enables traditional participation activities to be undertaken much more easily (such as contacting a politician, signing a petition, making a donation, etc.) and helps to reduce some of the costs involved in collective action (Bonchek 1995).

These characteristics of the Internet, which are typical and specific to it and which distinguish it from other media, have prompted the question of whether its use could affect the classic behavior patterns in relation to political participation, changing the levels and styles of political participation. In other words, these characteristics of the medium have prompted the question of whether the Internet could change who, how, and why people participate in politics.

There are already several studies¹ that focus on how Internet is changing the classic resource model of political participation, definitively established by Verba, Schlozman, and Brady (1995) and widely accepted by mainstream political science. However, very few studies² have analyzed whether the Internet could transform this classic approach by changing the relevance of political motivation. In the traditional model, psychological engagement with politics, or political motivation, is a key element needed for participation, together with resources consisting of time, money, and civic skills, and requests for participation coming from institutions, groups, and friends (Verba, Schlozman, and Brady 1995, 269-287). What we argue is that by reducing participation costs, use of the Internet may diminish the role of political motivation in participation, leading frequent and skilled Internet users to participate in politics even without political motivation.

¹ See, for example, Krueger (2002), Best and Krueger (2005), Anduiza et al. (2010), Anduiza, Gallego, and Cantijoch (2010), and Cantijoch (2009).

² di Gennaro and Dutton (2006), Xenos and Moy (2007).

This paper is structured as follows. In the section below, we review the different positions in literature on the capacity of the Internet to attract new types of participants and the few studies which have dealt with the role of political motivation in mobilizing participants in an online environment. The second section contrasts the instrumental or rational choice perspective on participation with the classic participation model, mainly with regard to the role of political motivation. The third section explains how use of the Internet may affect the role played by motivation, and the hypotheses that will subsequently be tested are formulated. The fourth section describes the data and measurements used to carry out the analysis. In the fifth section, the results of the analysis are presented and a discussion of the results is developed. The article ends with a short conclusion.

Internet, Mobilization, and Political Motivation: The Debate

Several different positions have been adopted in the literature in response to the question of whether the Internet could change who, how, and why people participate in politics.

There are theses that maintain that the Internet will not only change the logic of participation, but will also have a negative effect on participation. Put forward by Robert Putnam in “Bowling Alone” (2000), this thesis advocates that the Internet does not favor the creation of social capital, firstly because its use replaces physical interpersonal relationships, and secondly because it is fundamentally used for entertainment activities.

Among those who maintain that the Internet will have a positive effect on participation, it is possible to identify two different positions. Firstly, there are those who maintain that the Internet will be fundamentally limited to intensifying the participation of those who already participate. These authors’ positions would be included in the so-called normalization or reinforcement thesis. These arguments are based on the fact that, following an exceptional initial period during which use of the Internet generated expectations of change in social behavior, Internet activity has returned to normal and individuals have gradually begun to do through this medium what they already do in the offline world (Margolis and Resnick 2000). When applied to participation, the normalization thesis suggests that the Internet, far from mobilizing new people who until now were non-participants in the political process, in fact acts as reinforcement for those who already participate in politics (Norris 2001; Bimber 2001).

Lastly, there are those who advocate the thesis that the Internet will not only have a positive effect on participation, but will also mobilize individuals who until now have been inactive and have not had the profile of a traditional

participant. In other words, this thesis advocates that the Internet may change the logic of participation through the mobilization of new individuals and groups of individuals who until now have remained outside the participation process (Delli Carpini 2000; Ward, Gibson, and Lusoli 2003).³

Recently, there has been an increasing number of contributions which offer evidence to support the thesis of new mobilization (Krueger 2002; Tolbert and McNeal 2003; Quintelier and Vissers 2008; Cantijoch 2009; di Gennaro and Dutton 2006; Gibson, Lusoli, and Ward 2005).⁴ For example, Cantijoch (2009) finds that use of the Internet increases unconventional participation activities (such as protests or boycotts of certain products) and that this increase in unconventional forms of participation is due not only to the participation of critical individuals who are Internet users but also to that of individuals who have traditionally participated in conventional activities and, due to the effect of the Internet, now participate more in unconventional activities. Other studies, such as those by Quintelier and Vissers (2008), di Gennaro and Dutton (2006), Gibson, Lusoli, and Ward (2005), and Mossberger, Tolbert, and McNeal (2008), have highlighted the fact that use of the Internet is mobilizing groups that have traditionally participated at a lower level than other groups, such as young people and women.

The studies by Best and Krueger (2005), Gibson, Lusoli, and Ward (2005), Anduiza et al. (2010), and Anduiza, Gallego, and Cantijoch (2010) also offer support for the new mobilization thesis as they highlight the fact that the resources which account for online participation are no longer only traditional ones such as time, money, and civic skills, but Internet skills as well. In an article published in 2002, Krueger found not only that Internet skills were the most important predictive factor of online participation but also that the classic resources of offline participation such as civic skills lost significance when it came to explaining online participation and, furthermore, that family income reduced the probability of online participation (Krueger 2002, 487-488). Other authors such as Jensen, Danzinger, and Venkatesh (2007) have also shown that some of the key variables related to the classic socioeconomic status (SES) lose weight when it comes to explaining online participation, at least in the United States. Finally, Gibson, Lusoli, and Ward (2005) found that being subjected to certain stimuli

³ For a good summary of these stances, see Boulianne (2009).

⁴ This may be due to several different reasons. One is that the Internet does indeed have a mobilizing effect and that this has only become clear with the passing of time. Another is that there is a selection bias and, as Boulianne noted (2009, 195), only studies that identify positive effects of use of the Internet on participation are brought to light. In the latter case, the positive effect of use of the Internet on participation would obviously be overestimated.

through the Internet, such as being contacted, increases the probability of online participation or coming into contact with politicians, parties, or candidates.

All these studies provide evidence in support of the new mobilization thesis, and some not only offer empirical evidence but also suggest mechanisms on how use of the Internet affects participation. However, of all the studies on new mobilization, very few have asked whether use of the Internet affects the logic of political participation by modifying the role that motivation has in the classic participation models. We know from the classic explanations that the psychological predisposition to participate is an important and necessary factor to account for participation. Political participation is costly and, according to the classic explanations, what mainly enables these costs to be overcome is, on the one hand, the psychological predisposition to participate and, on the other, the resources linked to socioeconomic status such as time, money, and civic skills. Until now, the literature investigating the mobilizing effect of the Internet has only looked at how the Internet could change the resources necessary for political participation (Krueger 2002; Best and Krueger 2005; Anduiza et al. 2010; Anduiza, Gallego, and Cantijoch 2010; Gibson, Lusoli, Ward 2005), but not if and how it could change the role played by motivation or the psychological predisposition to participate in the classic explanations. In fact, all, or almost all, of the most recent studies on the impact of use of the Internet on participation take for granted the importance of motivation by always including this factor in their models as a control variable. However, if we accept the argument used in the studies of new mobilization that the Internet reduces the costs of participation, why don't we ask ourselves if this has any effect on the role that motivation has traditionally played in the classic models of participation?

This issue has not only been rarely addressed in the literature, but when it has been addressed, albeit as an aside, evidence has been contradictory. di Gennaro and Dutton (2006), analyzing the data of the 2005 Oxford Internet Survey on uses of the Internet, found that, when use of the Internet is introduced in the model explaining online participation, the effect of motivation or interest in politics disappears. In other words, according to this finding, what seems to have an independent and direct effect on online participation is use of the Internet, and not motivation. Xenos and Moy (2007) and Anduiza, Gallego, and Jorba (2009) achieved less conclusive results, which nonetheless point in the same direction. Xenos and Moy (2007) found that use of the Internet by itself (in particular, exposure to campaign information online) increases political knowledge and opinions of the political world, independently of motivation. Anduiza et al. (2010) and Anduiza, Gallego, and Cantijoch (2010) found that the joint effect of use of the Internet and motivation on political knowledge is the opposite of what was expected: it appears that the effect of use of the Internet on political knowledge is greater among unmotivated individuals than among motivated individuals.

However, there are studies which suggest exactly the opposite. For example, in her meta-analysis, Boulianne (2009) highlights that, in many studies examining the effect of use of the Internet on participation, this effect disappears when motivation is introduced.⁵ According to Boulianne (2009), these results would not only prove that use of the Internet does not have an independent effect on participation, but they could also be pointing to a spurious relation between use of the Internet and participation, since what would explain the positive association between them is possibly motivation.

In summary, very few works have examined the question of whether the Internet could change the role traditionally played by motivation in the classic explanations of participation. The few works which have said something on the subject not only contribute little to clarifying the relationship that exists between use of the Internet, motivation, and participation, but also offer contradictory results. It is not clear if use of the Internet has an independent effect on online participation which eliminates the effect of motivation (di Gennaro and Dutton 2006), if it has a direct effect on participation which is independent of motivation (Xenos and Moy 2007), or, finally, if the relationship between use of the Internet and participation is spurious because there is an underlying third factor affecting both: that is, motivation (Boulianne 2009; Bimber 2001).

In this article, we aim to investigate further the relationship that exists between use of the Internet, motivation, and political participation. In particular, we want to find out if use of the Internet, by reducing participation costs, changes the importance given to motivation in the classic explanations of participation.

Why Participate? The Instrumental Approach and the Classic Participation Model

Participation is one of the phenomena of human behavior that is least understood and most difficult to explain from an instrumental (or cost-benefit) perspective. Participation is a phenomenon that is difficult to explain from an instrumental perspective because while it is a costly activity it is not clear what benefits it affords. The difficulty in understanding the benefits afforded by participation, as Downs (1957) and Olson (1965) explained, results from the characteristics of the main good pursued through participation: public goods. According to the

⁵ There are other papers which show a positive effect of use of the Internet on participation but which do not control by the effect of political interest (see, for example, Weber, Loumakis, and Bergman 2003). In these papers doubt remains as to what would happen if such a relationship were controlled by the political interest variable.

aforementioned authors, who originally formulated the theory, public goods are not a good enough reason for participation for at least two reasons. Firstly, because once the public good has been provided, the benefit is shared by everyone, irrespective of who has participated. Secondly, because the influence that an isolated individual has on the provision of the public good is extremely small. When these two things are taken into account jointly—that the effort of an isolated individual contributes so little to the result and that he or she will enjoy the benefits of collective action irrespective of whether or not he or she has participated—one can see why the individual has no incentive to participate and is tempted to take advantage of the effort of others. This logic leads to the prediction that very few people will voluntarily participate in civic and political activities. However, contradicting this logic, we observe that people participate in political activities much more often than the theory predicts. Hence, the so-called “paradox of participation.”

The point of considering the problem of participation from this point of view is that it prompts us to ask the following question (a question that Olson asked himself; see Olson 1965): if the collective benefits are not a sufficient reason to explain participation, then what other reasons are there which lead individuals to participate voluntarily in civic and political activities? Of course, Olson’s answer to this question, and one of his greatest contributions to political science, is that these other reasons which lead individuals to participate in collective activities are the so-called “selective incentives.” As Olson (1965) was interested in explaining individuals’ decision to join a group, he saw selective incentives as a response/strategy of organizations aimed at overcoming the problem of collective action. As far as Olson (1965) was concerned, this response consisted of the distribution of private goods, primarily material goods, such as the enjoyment of health insurance, pension system, holidays, etc., as part of the benefits of belonging to an organization. As well as the positive selective incentives (material benefits), Olson (1965) also highlighted the role of negative selective incentives, such as coercion, to explain why large organizations survive. After Olson (1965), selective incentives were used to explain other forms of participation such as the decision to vote (Riker and Ordeshook 1968; Aldrich 1983) or the decision to voluntarily work for a political party or candidate (Aldrich 1983; Clark and Wilson 1961; Whiteley et al. 1994; Whiteley and Seyd 1998; Granick 2005). The problem, however, of using selective incentives to explain multiple and increasingly varied forms of participation is that the concept has been gradually stretched to become a catch-all term that covers all kinds of reasons for participating. We therefore find that in recent and not so recent explanations on different forms of participation, selective incentives include not only the material benefits which Olson primarily had in mind, but also intangible or immaterial benefits such as the gratification resulting from the act itself of

participating—something which the literature has also termed as expressive behavior.

The problem, as shrewd observers such as Barry (1978) have pointed out, is that including the action or behavior itself among the benefits of an action goes against the very logic of the instrumental approach, the characteristic of which consists of explaining human behavior on the basis of its consequences and not as an end in itself. In addition, participation, as Verba, Schlozman, and Brady (1995) explained, poses an additional problem for the instrumental approach, as the fact is that in many cases the benefit or reward of the participating action results directly from its costs. After carrying out interviews with activists, Verba, Schlozman, and Brady (1995, 103) observed that “a goal that has been realized as the result of struggle against hardship gains meaning, while a cheap victory sometimes seems trivial or, at least, unearned.” They conclude that “under such circumstances, the more time, money, or effort given, the higher the level of gratification” (Ibid.). In other words, “bearing the costs becomes part of the benefit” (Ibid.). From this it follows that when it comes to explaining participation it is not easy to distinguish between costs and benefits and, according to the authors, this adds another problem to the ability of the instrumental approach to explain this phenomenon.

The sociological explanations, in order to be coherent, are under no obligation to clearly distinguish between the costs and benefits of participation (even if they are in any case veiled explanations of costs and benefits) as their aim is to estimate how the socioeconomic attributes of individuals determine their propensity to participate. Hence, they can avoid the problem of clearly specifying the costs and benefits of participation by introducing motivation into the model. Verba, Schlozman, and Brady (1995) saw motivation as the psychological predisposition of individuals to participate in public affairs. This psychological predisposition to participate is actually responsible for transforming a part of the costs of participation into benefits. The mere fact of having this psychological predisposition or motivation therefore helps the individual to overcome part of the costs of participation. The other part of the costs of participation, in the classic sociological explanations, is overcome with resources such as money, time, and skills which are related to the position of individuals in the socioeconomic structure. In the sociological explanations, motivation produces the gratification which is obtained from voluntary participation in civic and political activities.

Although the key explanatory factor of participation in sociological explanations is not motivation but resources, the work of Verba, Schlozman, and Brady (1995) allows us to deduce that motivation or psychological involvement plays a key role in participation. In fact, from a careful reading of Verba, Schlozman, and Brady (1995) it can be gathered that the effect of the resources will depend on the psychological involvement of the individual. As these authors

point out, “Resources consisting of time, money, and skills make it easier for individuals who already have the predisposition to take part (and, we should add, not those who do not) to do so” (Verba, Schlozman, and Brady 1995, 334). Put another way, from what these authors say, it would appear that the effect of the resources on participation is not independent of motivation but depends on the values adopted by this variable. This conditional relationship of motivation over the effect that resources have on participation seems to be confirmed in a section of Appendix D of their book. In this section (Verba, Schlozman, and Brady 1995, 609-610) the authors admit that (1) the joint or multiplicative effect of these variables (motivation measured as political interest and resources measured as civic skills) is positive and significant, and (2) by introducing the interaction term one of the specific effects of these variables on participation disappears, although the authors do not say which one it is. Put another way, and taking into account that we do not know which variable is the one that has lost significance, it would appear that a certain predisposition to participate increases the propensity for participation, which is also influenced by the resources (civic skills) already available.

Of course, all of this makes perfect sense when we take into account that participating is costly. It is precisely because participating is costly that an explanation is necessary which puts the emphasis not only on resources but also on motivation. An explanation based only on resources may aim to explain who does not participate in politics, but not who does participate (Krueger 2002, 480). In order to explain who participates in politics, motivation, seen as an additional cost reduction factor that works by transforming the costs of participation into benefits, would appear to be a fundamental factor.

Internet, Political Motivation, and Participation: How Do They Relate?

As we said at the start, use of the Internet has generated a widespread debate on its possible effects on participation. One of the premises that lies behind this debate, and on which many of those who have expressed an opinion in this debate agree, is that the Internet reduces participation costs. On the one hand, it has been stressed that the Internet reduces the costs of being informed by increasing the volume of information available and allowing access to diverse sources of information. It is true that although it could be argued that the Internet makes access to information easier, this does not necessarily reduce the costs of processing this information. These costs will continue to be high and could even be higher due to the increase in the number of information options offered by the

Internet. In other words, although the Internet increases the number of information options, this does not necessarily result in more political knowledge and/or participation (Bimber 2001; Anduiza, Gallego, and Jorba 2009).

On the other hand, as an interactive medium in which bilateral communication is possible, from one to many and from many to many, the Internet offers a huge number of contact and communication possibilities and greatly reduces the cost of making contacts. This communication-intensive environment created by the Internet may reduce the costs of—and therefore affect—both offline and online participation. As far as offline participation is concerned, the Internet may help to reduce certain transaction costs, particularly information and communication costs, which are present in the formation and action of groups. As Bonchek (1995) says, by reducing information and communication costs, the Internet reduces the coordination costs which pervade collective action, thus facilitating the action of groups. The Internet can also stimulate offline participation and reduce its costs by making mobilization campaigns much less costly for political organizations. The Internet makes it possible for these mobilization campaigns to reach a much larger potential audience at a far lower cost.⁶

However, online participation is where the Internet offers the greatest advantages. The ease of contact and communication through the Internet enables traditional participation activities which were previously relatively costly, such as contacting politicians, working with organizations, joining a party, working on campaigns, and/or participating in forums and discussion groups, to be carried out at an extremely low cost. In fact, to receive information or subscribe to a bulletin, contact a politician, make a donation, complain or protest against the government via email, contact an association, work on a campaign, participate in a discussion forum, etc., all you need to do is be online and, without having to move from your armchair, tap on the keyboard of the computer. In short, use of the Internet, by allowing traditional participation activities such as those mentioned above to be carried out on the Net, has reduced the cost of carrying out such activities to previously unimaginable levels.

What we argue here and will attempt to show is that by reducing participation costs so dramatically, use of the Internet may even change the role played by motivation in the classic (sociological) explanations of participation. How? By changing the relationship between resources and participation, which in the classic participation models was conditional on motivation. The idea is that, when participation costs are sufficiently low, it may be that having the necessary resources, in this case having Internet skills, is a sufficient factor to explain

⁶ Contrary to this argument, Krueger (2006) points to the barriers limiting the use of Internet for political mobilization by political organizations.

participation. Krueger (2002) finds this to be the case in the American context: he shows that Internet skills have a direct and independent effect on the probability of online participation in the United States. However, his argument is not about the changing role of motivation but about the changing role of resources in the online environment. Closer to our argument are both the research goals and findings of Xenos and Moy (2007). Using data on the American context as well, these authors show that political interest has no effect on searching for political information online (Xenos and Moy 2007, 711) and then show that searching for information online on a campaign increases political knowledge independent of the level of political interest (713).

This discussion leads us to formulate the first of three basic propositions which we aim to test here with regard to the impact that use of the Internet will have on participation, specifically online participation. Firstly, by dramatically reducing participation costs, we would expect the Internet to change the role played by motivation in the classic explanations of participation. We do not expect use of the Internet to eliminate the effect of motivation on participation, but to have a direct effect on participation independently of motivation. This will not enable us to conclude that motivation has ceased to be an important factor in explaining observed levels of online participation, but that it has ceased to be such a relevant factor to explain participation among frequent Internet users. In fact, what we are saying is that it is enough to be a skilled Internet user for the probability of participating in politics through the Internet to increase. We will therefore formulate our first hypothesis as follows:

H1. Use of the Internet will not cause the main effect of motivation on participation to disappear, but having Internet skills will increase the probability of participation independently of motivation.

But if having Internet skills enables by itself online participation, how would it affect the probability of online participation? Here we argue that there are two possible mechanisms by which having Internet skills may increase the probability of online participation. The first of these mechanisms is by contacting: having Internet skills may increase the probability of receiving an email with political information in which you are asked to participate. This mechanism can be considered the online version of the political mobilization efforts which Verba, Schlozman, and Brady (1995) and Rosenstone and Hansen (1993) found to be a key factor explaining political participation in the offline world. This mechanism is less interesting from the perspective of the Internet's potential to transform the traditional participation model because the likelihood of being contacted is not randomly distributed with respect to political interest. We know from classic as well as Internet studies on participation that in both the offline and online

environments those who are more likely to be asked to participate are also those who are more likely to participate (Rosenstone and Hansen 1993; Krueger 2006; Gibson, Lusoli, and Ward 2005). However, due to the fact that the costs of both contacting and participation are lower in the online environment, we would expect contacting not always to target politically motivated individuals and to increase the probability of online participation independent of political interest. This would lead to our second hypothesis:

H2. Being contacted online will increase the probability of online participation independent of political interest.

A second mechanism by which Internet skills may increase the probability of online participation is by accident: skilful Internet users may be more prone to surf the net without a specific purpose and this would increase the likelihood of involuntary exposure to political information and opportunities for political participation. This mechanism is more interesting from the perspective of the Internet's potential to transform the traditional participation model for two reasons. First, by definition, involuntary exposure to political information or to opportunities for political participation online rules out self-selection on the basis of political interest. Hence, in contrast to being contacted, we would not expect those who surf the net without a specific purpose and who are more likely to be exposed involuntarily to opportunities for political participation to be in anyway related to the politically motivated. Second, precisely because online participation is a low-cost/low-benefit action, we would expect surfing the net without a specific purpose to increase the probability of online participation by being more likely to be involuntarily exposed to both political information and opportunities for political participation. As Aldrich (1983) argued, for low-cost/low-benefit activities, any outside event could have a significant effect in undertaking action. This would lead to our third hypothesis:

H3. Surfing the net without a specific purpose will increase the probability of online participation.

Through these two mechanisms, and especially through the second, having Internet skills might weaken the relevance of political motivation when it comes to taking part in one or more political activities online. In fact, frequent and skilful Internet users are more exposed than less frequent and skilful Internet users both to targeted political information as well as to involuntary exposure to political information online. These frequent and skilful Internet users spend a lot of time online, very often surfing the Internet without a specific goal or purpose, and as a

result they might probably be either requested to take action or be involuntarily confronted with opportunities for participation.

Data, Measures, and Methods

In order to explore the relationship between use of the Internet, motivation, and online participation, we have used a representative survey conducted in November 2007 by the Spanish Sociological Research Centre (CIS). This survey⁷ was purposely designed to test the relationships between Internet and political participation and therefore contains the classic questions for testing the impact on political participation of socio-demographic characteristics, political attitudes and orientations, and exposure to mass media. In addition, there are questions about access to and uses of the Internet, including several forms of online participation.⁸ We explain the details of the variables codification in the Appendix.

In the questionnaire there are up to six political activities undertaken on the Internet that might be considered as participation in politics. We have selected four of them after carrying out several reliability and dimensionality tests.⁹ These four pertain to the same construct and are the following: contacting a politician or political party (4.35 percent); contributing with money donation to a campaign or association (6.80 percent); posting or writing comments on a forum, blog, or webpage about current issues or political or social issues (19.76 percent); and signing a petition or joining a campaign or manifesto (13.03 percent). From a population of 2,169 Internet users (59 percent of individuals reporting they have used the Internet in the last three months), 28 percent (600 individuals) report having at least undertaken one political activity. As for the distribution of the variable, it adopts a pattern similar to offline participation, with an overwhelming majority of individuals (71.95 percent) concentrating in the extreme value of the

⁷ The size of the survey is 3,716 interviewed people and the sample error is ± 1.64 percent for a 95.5 percent level of confidence. The sampling procedures were those commonly used by the CIS: multi-staged, stratified into population clusters, and selection of individuals by random routes and quotes. The study number at the CIS is 2736. The questionnaire is available online in English at <http://www.polnetuab.net/resulten.php?pagina=Datos&Idioma=English&jpg=03>.

⁸ For a description of the situation of online participation in Spain based on this survey (frequencies, modes of participation, participant profiles), see the monograph by Anduiza et al. (2010) and Anduiza, Gallego, and Cantijoch (2010). More detailed and explanatory analyses using this survey data can be found at Cantijoch (2009), Anduiza, Gallego, and Jorba (2009), Anduiza et al. (2010), and Anduiza, Gallego, and Cantijoch (2010).

⁹ The principal component analysis shows that the four activities have a significant weight (over 0.43) in the first component, and the Kuder–Richardson reliability coefficient is 0.5679.

distribution with no activities, fewer (17.06 percent) falling in the next value of the distribution with one activity, and a tiny few (10.99 percent) distributing across all the other values of the distribution (7.15 percent report two activities, 3.32 percent report three activities, and 0.51 percent report four activities). Given the distribution of online participation, and following other studies such as Krueger (2002), we have transformed the dependent variable for the analysis into an ordinal variable with three categories, where 0 is assigned to all individuals having performed no activities, 1 to all those having performed one activity, and 2 to all those having performed more than one activity.

In the questionnaire there are also questions relating to our key independent variables, such as political interest, Internet skills, being contacted with political information, and browsing with no specific goal in the net. Political interest is measured as each individual's self-placement in a scale that moves from no interest at all in politics (1) to a lot of interest in politics (4), where 2 is "very little interest" and 3 "quite a lot." Of the total sample population, 73.1 percent have no or very little interest in politics, and 26.9 percent have quite a lot or a lot of interest. This distribution changes slightly among Internet users where the percentage of the politically interested increases by almost a nine percentage point amounting to 35.12 percent, and the percentage of the uninterested amounts to 64.88. In fact, there is a positive and statistically significant association between political interest and use of the Internet: Internet users as an average tend to be more interested in politics than the general population (χ^2 is significant and Cramer's V equals 0.27).

As for our measure of Internet skills, we use information concerning different activities that Internet users can do online. In the questionnaire, there are questions on at least nine different activities that Internet users can do online. We consider a skilled person on the Internet to be someone who carries out several of these different activities online. Of the nine activities, we have selected six to build our index of Internet skills. Selection of activities was done on the basis of two criteria: we excluded (1) activities that were performed by more than 90 percent of Internet users, such as searching for information online (95.5 percent), and (2) activities that could somehow (even slightly) be related to our measures of the dependent variable, such as participating in discussion forums or chats (32.5 percent). On the six activities that did not match any of these two criteria, we then performed several reliability and dimensionality tests.¹⁰ The final six online activities selected for our Internet skills index are buying a product or service (37.2 percent), using online banking (39.1 percent), receiving or sending emails

¹⁰ The six activities were closely associated, taking into account the results of the Kuder-Richardson reliability coefficient of 0.555 and the principal component analysis that shows that the six activities selected have an important weight (over 0.30) in the first component.

(85.7 percent), making phone calls on the Internet (14.9 percent), downloading files (79.1 percent), and hosting a blog or webpage (21.7 percent). In contrast to the skewed distributions of online participation and political interest, where most individuals concentrate in low values of the distribution, the distribution of Internet skills closely follows the normal form, with most individuals concentrating around the central values of the distribution (2, 3, and 4 activities), and few concentrating around low (0 and 1) and high values (5 and 6) of the distribution.

Having Internet skills also seems to be positively associated with having political interest, although less strongly than being an Internet user, as is shown in Table 1. In fact, as we will see later in the multivariate analysis, the association between Internet skills and political interest disappears once we control for making political uses of the Internet through “searching for political information online.” Regression analysis seems to confirm that causality does not run from political interest to Internet skills but from both Internet skills and political interest to making political uses of the Internet. In fact, both Internet skills and political interest account for almost one quarter (24 percent) of the total variance of searching for political information online. In contrast, searching for political information online and political interest account only for 7 percent of the total variance of having Internet skills, and political interest is not significant.

Table 1. Measures of association between political interest and Internet users and uses

Political interest

	Pearson χ^2			Cramer's V
	χ^2	gl	PPr	
Internet users	283.81	3	0.000	0.2783
Internet skills	68.76	18	0.000	0.1041
Being contacted by email	153.27	3	0.000	0.2663
Browsing aimlessly	2.10	3	0.552	0.0312

As for the measures of being contacted and browsing the net without a specific purpose, we use information in the questionnaire that specifically asks these questions. There is a question asking if one has been contacted with an email that contained varied political information and requests for action, and another question asking if one has searched the net without a specific purpose. Both questions are formulated in such a way that they only admit a dichotomous answer (yes/no). Consistently, these two variables are measured as dichotomous variables. As expected and is shown in Table 1, being contacted is positively associated with political interest but surfing the net without a specific purpose is

completely unrelated to political interest. Also, as expected, both being contacted and surfing the Internet without a specific purpose are highly related to Internet skills: they have respectively a Cramer's V of 0.30 and 0.28 and a Pearson χ^2 that is significant. In fact, having Internet skills increases the probability of both being contacted and browsing aimlessly by 60 percent and 49 percent, respectively. In other words, the probability change of being contacted and browsing aimlessly when Internet skills moves from minimum (1) to maximum values (6) is respectively 60 and 49 percent. This contrasts with the effect of political interest, which as expected increases the probability of being contacted although by a percentage (43 percent) that is lower than the probability change caused by Internet skills but which has no effect whatsoever in browsing aimlessly.

Finally, to be able to estimate the effects of the Internet in online participation we include a bunch of control variables. The questionnaire contains questions related to classic variables that have been traditionally used to model political participation, such as socio-demographic characteristics, political attitudes and orientations, and exposure to mass media. In the analysis we use these variables as controls.

As for the method used in the analysis, we use ordinal logistic regression to test for the influence of the Internet on online participation. We have proceeded by entering the different variables (controls, key independent variables, and mechanisms) as separate blocks and running different sequential regressions.

Analysis and Discussion

As we say, in order to test our three hypotheses we have carried out several ordinal logit analyses. We have interpreted the results by means of the odds ratios, the probability changes of taking action, and the diagrams depicting the probabilities of participation when our key explanatory variables take different values.

The first step was to test the effect of all the independent variables, but taking into account that we had 21 independent variables, we tried to simplify the model by means of a hierarchical entering of the variables. That is, each grouping of variables (socio-demographics; political attitudes and orientations; exposure to political information; political interest and Internet skills; being contacted by email and browsing aimlessly) was entered separately in order to see the significant effects over the dependent variable and remove the variables that are non-significant in all the runs. We carried out seven runs of ordinal logit

regression analysis. As a result, 10 variables that were not significant were removed from the definitive analysis.

The definitive analyses consisted of four ordinal logistic regression runs with the 11 variables remaining. One of the goals of these four consecutive final runs was to estimate the main effects of Internet skills (hypothesis 1) and of contacting (hypothesis 2) on online participation and to test whether these effects were independent from political interest. Another goal was to ascertain if receiving political emails and browsing aimlessly are in fact causal mechanisms that may help to explain the direct effect of Internet skills on online participation (hypotheses 2 and 3). Therefore, we first ran the model with nine independent variables leaving aside the two possible causal mechanisms, and later we introduced the interaction term between political interest and Internet skills. In a third round, we included the two causal mechanisms and, in the fourth run, the interaction between political interest and being contacted. Here, we only show the results of the models that include the interaction terms because the main effects of the variables compounding the terms (political interest, Internet skills, being contacted by email) are almost the same with and without the interaction terms in the model. This means that both interaction terms (between political interest and Internet skills, and between political interest and being contacted by email) are not altering the independent and main effects of Internet skills and being contacted on the probability of participation online (hypotheses 1 and 2).

The selected results are shown in Table 2. The coefficients in the two first columns are the odds ratios for ordered logistic regression, that is, the odds of online participation for a respondent with a given value of the independent variable. The third column corresponds to the percentage change in the probability of participating caused by moving from the minimum to the maximum values of our key independent variables.

Regarding hypothesis 1, in the first column we can see that both political interest and Internet skills have a positive and significant effect in online participation while the interaction term between political interest and Internet skills is not significant. This result implies that political interest does not intensify or modify the impact of Internet skills on participation. There is not a combined effect of both variables on participation, and political interest and Internet skills have a direct and independent effect on the carrying out of one or more than one activity.

Table 2. Ordered logistic regression of online participation

Independent variables	Online participation (0, 1, ≥2)	Online participation (0, 1, ≥2)	Percentage change in probability (Minimum to Maximum) ¹¹	
Level of education	0.316** (0.136)	0.209 (0.139)		
Student	0.937*** (0.179)	0.732*** (0.176)		
Income	0.142* (0.0862)	0.124** (0.0521)		
Internal efficacy	-0.0679* (0.0348)	0.153* (0.0910)		
Citizen-duty conception	-0.0679* (0.0348)	-0.0795** (0.0368)		
Engaged citizen conception	0.0516 (0.0405)	0.0617 (0.0420)		
Political info on the Internet	0.226*** (0.0449)	0.197*** (0.0465)		
Political interest	0.496*** (0.101)	0.471** (0.167)	19%	10%
Internet skills	0.473*** (0.0573)	0.347*** (0.0636)	34%	14.7%
Interest*skills (centered)	-0.0130 (0.0569)	0.00411 (0.0612)		
Being contacted by email		1.441*** (0.171)		15%
Browsing aimlessly		0.367** (0.164)		2.6%
Interest*contacted (centered)		-0.143 (0.192)		
<i>Wald chi²(10)</i>	276.38	354.66		
<i>Prob. > chi²</i>	0.0000	0.0000		
<i>Pseudo R²</i>	0.1647	0.2104		
<i>N</i>	1834	1769		

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.001$.

¹¹ Two sets of predicted probabilities are shown in column three. We first calculated the probabilities for the model with nine independent variables (see column one) and secondly with all these variables and the causal mechanisms (see column two). We calculate the percentage change in the probability of participating from no to more than one political act when the independent variable moves from the minimum to the maximum value. The rest of the variables are kept to their means or to zero for dichotomous variables when corresponding.

In addition, Internet skills not only has an independent effect from political interest on online participation but also a very strong one because the odds ratio of online participation when the number of skills increases in one activity is 0.47. Moreover, the percentage change in the probability of participating rises by 34 percent when we go from the lowest skilled to the highest skilled person.

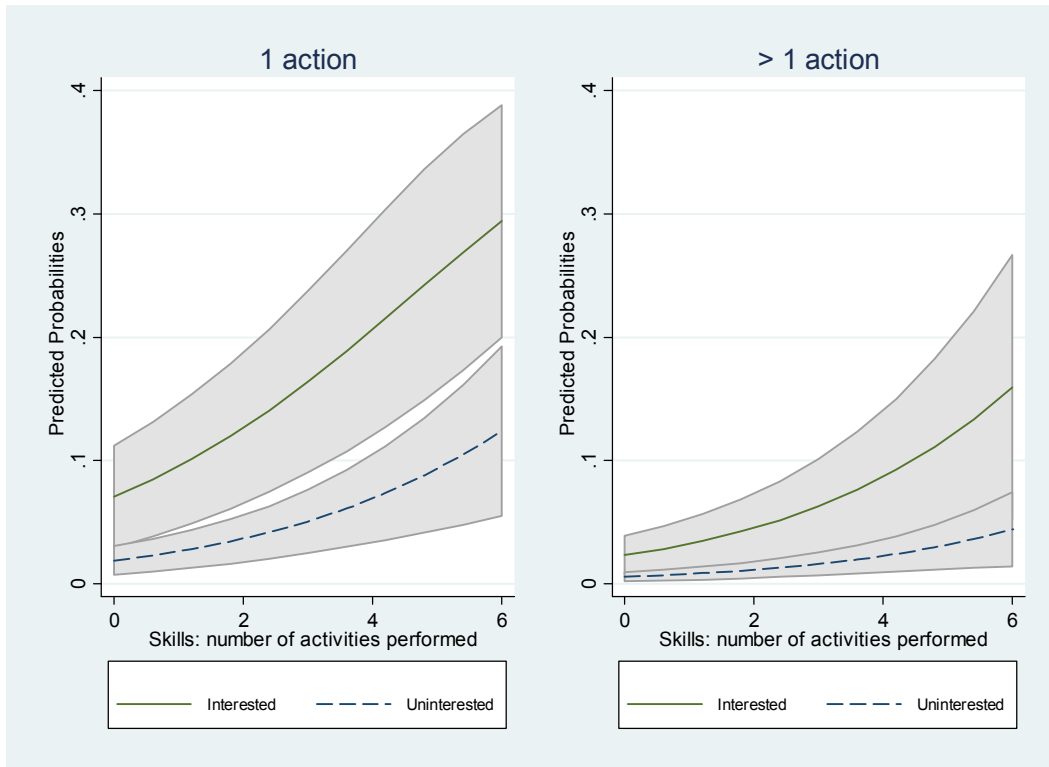
Nevertheless, the impact of political interest on the probability of participation clearly exists as we can see by its odds ratio and statistical significance. In Figure 1 we represent graphically the probabilities of participation¹² according to combined levels of political interest and Internet skills, and we can observe that among those interested in politics¹³ the probability of participation is always higher than among the uninterested.¹⁴

¹² Following what is explained in the preceding footnote, for obtaining the predicted probabilities the continuous variables are set to their means and the three dichotomous variables (being contacted by email, browsing aimlessly, and being a student) are fixed to zero. The first two because they are possible causal mechanisms intervening in the relation between Internet skills and participation, and they will be examined later. The third because the number of students is very few (217 people) and several analyses done previously show that its division into more categories will not be representative. Therefore, we calculate the probabilities for the rest of the sample that were not students.

¹³ Respondents saying they have a lot of interest in politics.

¹⁴ Respondents saying they have no interest in politics.

Figure 1. Predicted probabilities of online participation by political interest and Internet skills



Both variables, political interest and Internet skills, show here their direct impact on the probability of participating online. We can also observe how the likelihood of engaging in one action is logically higher than the likelihood of engaging in more than one action.

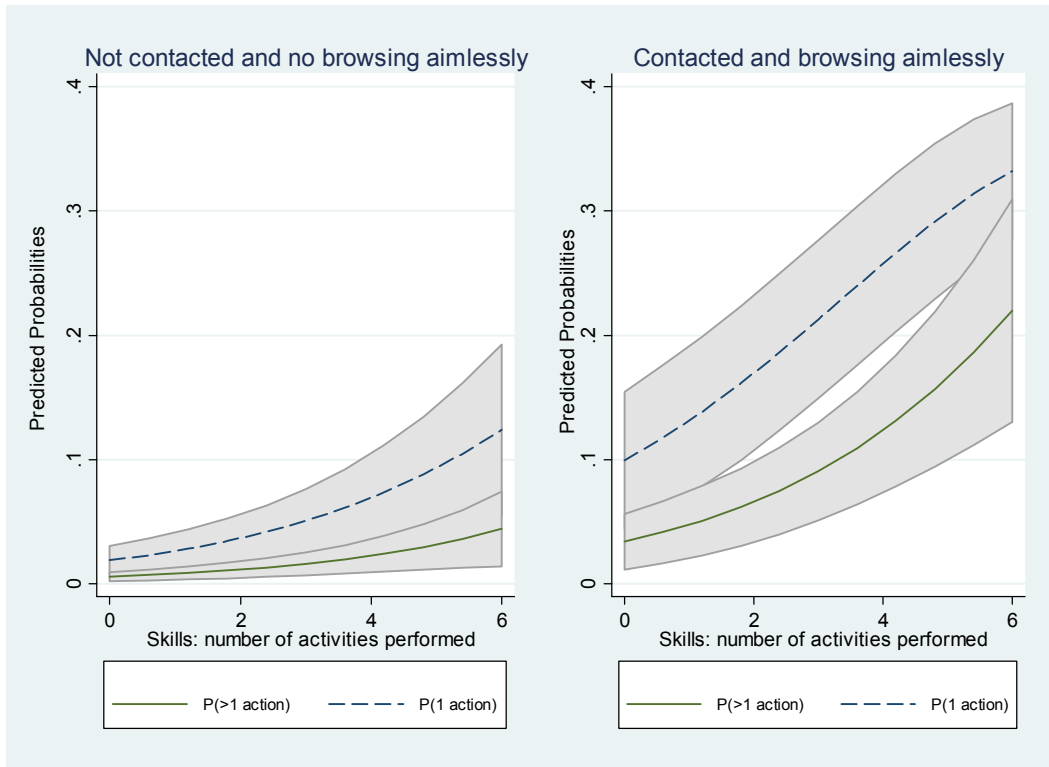
In relation to hypothesis 2, we can also confirm the hypothesis because in the second column of Table 2 we can observe that being contacted by email has an independent and significant effect on participation online, regardless of political interest. The interaction term between being contacted by email and political interest is not significant while being contacted by email alone has a direct and significant effect on online participation. This implies that being contacted by an email with political content increases the probability of online participation independently of political interest. Related to this, we have tested the role of being contacted as a causal mechanism that may help to explain why having Internet skills increases the probability of online participation. As we argued in the theoretical section, skilful and frequent Internet users are more

likely to be contacted by email for political purposes than unskilful and non-frequent Internet users, and that fact alone increases the probability that they will participate politically. Also, as we have argued, if being contacted is really acting as a causal mechanism the effect of Internet skills on participation should decrease when being contacted is included in the model. As we can see in the third column of Table 2, the percentage change in the probability of participating for Internet skills, when contacting is included in the model, decreases from 34 percent to 14.7 percent. That is, when contacting and surfing with no aim are not included in the model, moving from 1 to 6 in the index of Internet skills increases by 34 percent the probability of engaging in more than one action online. But when we introduce these two possible causal mechanisms, this probability diminishes in more than a half. Therefore, we may say that being contacted online and surfing without a specific purpose are acting as causal mechanisms, helping to explain at least partially and to a certain extent the processes involved in the impact of Internet skills on online participation.

The analysis also provides some confirmation for hypothesis 3. As we can see in Table 2, browsing with no specific purpose on the Internet has a positive significant impact on online participation. However, as column three shows, the percentage change in online participation due to surfing without a purpose (2.6 percent) is much lower than that of being contacted (15 percent). A reason for this might be that surfing without a purpose may positively affect the likelihood of being exposed involuntarily to opportunities for participation, but it certainly does not guarantee that the Internet user will be exposed to positive stimuli for political participation.

To get a better idea of the magnitude of the effect of being contacted by email and browsing aimlessly in online participation, we depict graphically the probabilities of participation for the uninterested when they are contacted and they browse aimlessly, and when they have not been contacted and have not browsed aimlessly. Figure 2 shows two graphs. The first graph represents the probabilities of participation for the uninterested who have neither been contacted by email nor have surfed the Internet without a specific purpose. The second graph depicts these probabilities for the non-interested when they have been contacted by email and have browsed the Internet with no aim.

Figure 2. Predicted probabilities of online participation for the not interested in politics by Internet skills



In both cases this probability increases when we move from lower Internet skills to higher Internet skills. However, the probability of carrying out one action increases only from 0.02 to 0.12 when the non-interested have not been contacted by email or they have not surfed the net without a specific aim. As we can see in the second graph, when the uninterested are contacted by email or surf the Internet without a specific purpose, the probabilities increase from 0.1 to 0.33. In the case of the probability of engaging in more than one action, the probability rises from 0.03 to 0.21. Therefore, both being contacted and browsing aimlessly clearly increase the probability of online participation (hypotheses 2 and 3). This is a particularly interesting result because these are the probabilities of online participation for those saying that they have no interest at all in politics.

Following these analyses in which the impact of Internet skills on political participation appears to be very important and independent of political interest, we need to ensure that this impact is not spurious, that is, we need to be sure that political interest is not the real underlying cause explaining the positive

relationship between Internet skills and online participation. It could be that the politically interested individuals are more prone to be skilful Internet users by which we would find among the skilful Internet users a higher concentration of politically interested individuals, and we need to rule out this possibility. In order to examine this possibility, we have run a multiple regression of Internet skills on several variables, including political interest.¹⁵ In the results presented below, we have removed the variables that were not significant in a preceding run.

Table 3. Multiple regression of Internet skills

Independent variables	Internet skills (0–6)
Level of education	0.225*** (0.0660)
Man	0.125* (0.0696)
Income	0.173*** (0.0246)
Age	-0.0216*** (0.00332)
Internal efficacy	0.102** (0.0453)
External efficacy	-0.0566 (0.0364)
Political information on the Internet	0.212*** (0.0269)
Political interest	0.00408 (0.0505)
cons	1.339*** (0.212)
F	39.99
Prob. >F	0.0000
R ²	0.1,631
N	1,941

Standard errors in parentheses. *p < 0.10, **p < 0.05, ***p < 0.001.

The results in Table 3 show that political interest has no significant impact on Internet skills. As discussed in a previous section, when we control for searching for political information online the impact of political interest on Internet skills disappears.¹⁶ This regression analysis seems to confirm what we

¹⁵ In this model, we exclude the two possible causal mechanisms (being contacted online and browsing aimlessly on the Internet) because we consider these factors to be mediating in the relationship between Internet skills and online participation and hence to be the result and not the causes of having Internet skills.

¹⁶ Several tests with different measures of associations (Cramer's V, Pearson correlation, and chi²) confirm that there is a strong association between searching for political information online and political interest (Cramer's V is 0.27 and Pearson correlation is 0.42) and a softer one between searching for political information online and Internet skills (Cramer's V is 0.15 and Pearson correlation is 0.28). In order to rule out causality from political interest to Internet skills, we run several regressions with these different variables. The results tend to confirm that causality runs not from political interest to Internet skills but from both Internet skills and political interest to

have found in the previous analysis: that political interest and Internet skills are affecting independently online participation. It also enables us to disregard the idea that those who are most skilful in the use of the Internet are also those that are most interested in politics. The argument that the relationship between Internet skills and participation is spurious due to political motivation is not supported by our data. In this regard we find different results from Boulianne (2009) and Bimber (2001).

Moreover, these results differ strongly from what authors such as Krueger (2002, 491) have found regarding the impact of the socioeconomic variables over Internet skills. In our case, the level of education and family income become positive predictors of Internet skills. In contrast, Krueger finds that factors related to SES do not affect Internet skills in the American context. This difference in results might be given by the more reduced extension of Internet within the Spanish population. From our survey we know that 59 percent of the Spanish population were Internet users in 2007, while we know from Krueger that the percentage of Internet users in the American population in 2000 (seven years earlier) was 66 percent.

Conclusion

This article has argued that the Internet might be reducing the role of motivation in accounting for political participation due to its cost-reducing effect in the act of participating, especially online. Our analyses do not show that use of the Internet eliminates the effect of motivation on participation, as some authors have suggested (di Gennaro and Dutton 2006). However, it is in line with the more moderate thesis stating that use of the Internet has a direct effect on participation independently of motivation (Xenos and Moy 2007). These results do not allow us to conclude that motivation has ceased to be an important factor in explaining different observed levels of online participation. In fact, the propensity to take part in online political activities always rises with political interest no matter the level of Internet skills. However, from our analysis we can say that to be an experienced Internet user increases significantly the probability of participation in politics through the Internet, independently of motivation.

searching for political information online. Since searching for political information online is a confounder in the relationship between Internet skills and political interest, not having included it in the model would have biased our estimates.

We therefore find some confirmation for our first hypothesis, which states that having Internet skills will increase the probability of online participation independently of motivation. The Internet seems to have a substantial impact on political engagement that goes beyond the mere reinforcement of existing participation patterns. Our data shows evidence of a possible new type of participant—skilled Internet users with no political motivation—who is starting to take part in online activities. The data supports the thesis of the mobilization effect of Internet on online participation as other authors have also found (Krueger 2002; Anduiza et al. 2010; Anduiza, Gallego, and Cantijoch 2010; Gibson, Lusoli, and Ward 2005), but our results shed new light on the role of political motivation which loses part of the relevance for participating online.

Regarding our second and third hypotheses, we established two possible mechanisms through which Internet skills might be increasing the propensity to participate online: being contacted online and browsing with no specific purpose on the Internet. Skilled Internet users tend to spend a lot of time online and it is thus highly likely that they will be exposed to both targeted as well as unintentional requests for online participation, particularly if they often surf the Internet aimlessly. The results tend to show that both processes are acting as intervening mechanisms, at least to a certain extent, and are having a significant effect on participating online. The most important mechanism here seems to be receiving political emails. Moreover, it has an important and direct effect on participation, regardless of political interest. This means that online contacting not always targets politically motivated individuals and, therefore, classical theories on political mobilization should at least be partially readdressed to give account of this (Krueger 2006).

As a limitation, we would like to pinpoint the cross-sectional character of our data that makes it very difficult to establish with full certainty any claim about the causal process between Internet uses and political engagement. That is, it is difficult to find out what is the cause and what is the effect in a cross-sectional survey because we can't observe whether use of the Internet precedes in time political participation or the other way round. Moreover, this kind of survey might suffer from problems of self-selection by which the characteristics affecting Internet use would at the same time affect political participation. These are, in general, shortcomings of most of the studies in this field that are mostly based on observational data (Boulianne 2009). However, we have done our best to try to disentangle part of the causal pathway that might be explaining the effect of Internet skills on online participation by means of analyzing intervening variables such as being contacted or being an aimless surfer on the Internet.

Finally, we agree with other authors such as Best and Krueger (2005), Gibson, Lusoli, and Ward (2005) or Anduiza et al. (2010) and Anduiza, Gallego, and Cantijoch (2010) that online resources or what has also been called “Internet

skills” should be included in the classic explanatory model of participation, at least when it comes to explaining online participation. However, in addition, this model should also be adapted and refined to acknowledge the fact that political interest has lost importance as an explanatory factor at least for explaining participation among experienced Internet users. This fact opens lots of questions about the future role of political motivation in a world where the Internet will be widespread and will become one of the most important means for political participation and collective action.

Appendix. Variables codification

<i>Variable</i>	<i>Codification</i>
Political participation	Ordinal index (0; 1 activity; 2 or more activities) made up of the following activities: - Contacting a politician or political party - Contributing with money donation to a campaign or association - Posting or writing comments on a forum, blog, or webpage about current issues or political or social issues - Signing a petition or joining a campaign or manifesto
Level of education	1= Less than Primary 2= Primary 3= Secondary 4= Higher
Employment situation	Different categories entered as dummies 0= Working (reference category) 1= Retired or pensioner 1= Unemployed 1= Student 1= Homemaker
Gender	1= Man 0= Woman
Income	1= Less than or equal to 300 € per month 2= From 301 to 600€ 3= From 601 to 900€ 4= 901–1200€ 5= 1201–1800€ 6= 1801–2400€ 7= 2401–3000€ 8= 3001–4500€ 9= 4501–6000€ 10= More than 6000€ The missing values were imputed through multiple regression.
Age	18 to 95 years old
Internal efficacy	Mean of the two items: - Usually politics and government seem so complicated that a person like me cannot really understand what is going on.

	<p>- I think that I am better informed about politics and government than most people. Answers: 1. Agree strongly; 2. Agree; 3. Neither agree nor disagree; 4. Disagree; 5. Disagree strongly.</p>
External efficacy	<p>Mean of the two items: - Politicians are always in search of their personal interest - I think public officials do not care very much about what people like me think. Answers: 1. Agree strongly; 2. Agree; 3. Neither agree nor disagree; 4. Disagree; 5. Disagree strongly.</p>
Trust in political institutions	<p>Mean of the trust in three political institutions: political parties, local governments and central government. Answer: 0. No trust; 10. Complete trust.</p>
Citizen-duty conception (Dalton 2008, 27–29)	<p>Mean of the three items on citizen-duty conception: - Voting in elections - Not evading taxes - Always obey the law and norms Answer: 0. Not at all important; 10. Very important.</p>
Engaged citizen conception (Dalton 2008, 27–29)	<p>Mean of the two items on engaged citizen conception: - Thinking more about others than oneself - Form your own opinions Answer: 0. Not at all important; 10. Very important.</p>
Acquiring information on current political affairs through the Internet	<p>Frequency of use of Internet to get information on current political affairs: 1. Over once a week 2. Once a week 3. Once a month 4. Less often 5. Never</p>
Listening to and watching the news (radio or TV)	<p>Frequency of listening and watching the news on radio and television: 1. Every day 2. 3–4 days a week 3. 1–2 days a week 4. Less often 5. Never</p>
Listening to and watching other programs about politics (radio or TV)	<p>Frequency of listening and watching other programs about politics on radio or television: 1. Every day 2. 3–4 days a week 3. 1–2 days a week 4. Less often 5. Never</p>
Reading a newspaper (in paper format or on the Internet)	<p>Frequency of reading a newspaper (in paper format or on the Internet): 1. Every day 2. 3–4 days a week 3. 1–2 days a week 4. Less often 5. Never</p>

Political interest	Interest in politics: 1. No interest at all in politics 2. Very little interest in politics 3. Quite a lot of interest in politics 4. A lot of interest in politics
Internet skills	Summation index ranging from 0 to 6 made up of the following activities: <ul style="list-style-type: none"> - Buying a product or service (food, books, cinema, travel, etc.) - Using online banking - Receiving or sending emails - Making phone calls on the Internet (Skype, etc.) - Downloading files (documents, music, video, software, etc.) - Hosting and keeping a blog or webpage.
Browsing aimlessly	Surfing the net with no particular purpose (0–1)
Being contacted by email	Receiving emails with any of the five following contents: <ul style="list-style-type: none"> -Supporting a candidate or party -With some criticism about a politician or political party -Calling a demonstration, a sit-in or other protest action -With an electronic manifesto or petition -On other current issues or type of call for action. Recorded 0 (no email received) and 1 (one or more emails).

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