

Surfing the Net: a pathway to political participation without motivation?

Rosa Borge and Ana Sofía Cardenal*

Political Science Lecturers. Internet Interdisciplinary Institute IN3. Universitat Oberta de Catalunya. Barcelona.

rborge@uoc.edu

acardenal@uoc.edu

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Abstract

In this article, we aim to investigate 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. In order to examine this issue, we have used data from survey 2736 of the Spanish Sociological Research Centre (CIS) which deals with political participation and the uses of the Internet. We find that the use of Internet has a direct effect on participation independently of motivation and that in order to participate at least in one activity online the frequent and skilful internet users do not need to be motivated or interested in politics.

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

* With the collaboration of Claudia Malpica.

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 easily (such as contacting a politician, signing a petition, making a donation, etc..) and reduces the costs of organizing and coordinating collective action (Bonchek, 1995).

These characteristics of the Internet, which are typical and specific to it and distinguish it from other media, have prompted the question of whether its use could affect the classic behaviour 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-based model that explains political participation, definitively established by Verba, Schlozman and Brady (1995) and that has been very much accepted by the mainstream political science. However, very few studies² have analysed whether Internet could transform this classic approach by changing the relevance of political motivation. For the traditional model, psychological engagement with politics, or in other words, political motivation, is a key element needed for participation, together with resources consisting of time, money and civic skills (Verba, Schlozman and Brady, 1995: 269). What we argue is that by reducing participation costs, use of the Internet may diminish the role of political motivation on participation and in this way the frequent and skilful users of the Internet, even without political motivation, would participate.

This paper is structured as follows. In the section below, we review the different positions in the literature around the capacity of 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 regards 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 which 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. Finally, the article ends with a short conclusion.

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

² Di Genaro & Dutton (2006); Xenos & Moy (2007).

INTERNET, MOBILISATION AND POLITICAL MOTIVATION: THE DEBATE

Several different positions have been adopted in 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 favour the creation of social capital, firstly because its use replaces 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 have therefore been included in the so-called normalisation 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 behaviour, 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, normalisation thesis suggests that the Internet, far from mobilising new people who until now had not participated in politics, 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 mobilise 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 mobilisation of new individuals and groups of individuals who until now have remained outside the participation process (Delli Carpini, 2000; Ward, Gibson & Lusoli, 2003)³.

Recently, there have been an increasing number of contributions which offer evidence to support the thesis of new mobilisation (Krueger, 2002; Tolbert & McNeal, 2003; Quintelier & Vissers, 2008; Cantijoch, 2009; DiGenaro & Dutton, 2006; Gibson, Lusoli & 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

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 mobilising 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 which 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.

Internet, now participate more in unconventional activities. Other studies, such as those by Quintelier & Vissers (2008), DiGenaro & Dutton (2006) and Gibson, Lusoli and Ward (2005), and Mossberger, Tolbert & McNeal (2008), have highlighted the fact that use of the Internet is mobilising 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 & Ward (2005) and Anduiza, Gallego & Cantijoch (2010) also offer support for the new mobilisation thesis as they highlight the fact that the resources which account for online participation are no longer only the traditional ones such as time, money and civil skills, but Internet skills as well. Finally, Gibson, Lusoli & Ward (2005) found that being subjected to certain stimuli through the Net, such as being contacted, increases the probability of online participation or coming into contact with politicians, parties or candidates.

All these studies provide evidence to support the thesis of new mobilisation, 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 mobilisation, 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 enables these costs to be overcome is, on the one hand, the psychological predisposition to participate, and, on the other, the resources linked to socio-economic status such as time, money and civic skills. Until now, the literature investigating the mobilising effect of the Internet has only looked at how the Internet could change the resources necessary for political participation (Krueger, 2002; Best & Krueger, 2005; Anduiza, Gallego & Cantijoch, 2010; Gibson, Lusoli & Ward, 2001), 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 on new mobilisation that the Internet reduces participation costs, why don't we ask ourselves if this has any effect on the role of motivation when accounting for participation?

This is an issue which is not only rarely addressed in literature but the few papers that have said anything about it, albeit as an aside, have reached contradictory conclusions. Di Genaro and Dutton (2006), analysing the data of a survey carried out by the Oxford Internet Institute 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, what seems to have an independent and direct effect on online participation is use of the Internet and not motivation. Xenos & Moy (2007) and Anduiza, Gallego & Jorba (2009) achieved less conclusive results which nonetheless point in the same direction. Xenos & Moy (2007) found that use of the Internet by itself (see campaign information online) increases political knowledge and having opinions about the political world and civic participation, independently of motivation. Anduiza, Gallego & 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 motivated individuals. However, there are studies which suggest exactly the opposite. For example, in her meta-analysis, Boulianne (2009) suggested that in many studies which examine the effect of use of the Internet on participation, this effect disappears when motivation is introduced⁵. According to Boulianne (2009), these results could not only prove that use of the Internet does not have an independent effect on participation, but also that the positive association between use of the Internet and participation is explained by the influence of motivation - the key explanatory factor.

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 anything 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 (DiGenaro & Dutton, 2006), if it has a direct effect on participation which is independent of motivation (Xenos & Moy, 2007), or, finally, if the relationship between use of the Internet and participation is spurious and the causal factor of both online and offline participation is still motivation (Boulianne, 2009; Bimber, 2001).

In this article, we aim to further investigate 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. In order to examine this issue, we have used data from survey 2736 of the Sociological Research Centre (CIS) which deals with political participation and the uses of the Internet.

WHY PARTICIPATE? THE INSTRUMENTAL APPROACH VERSUS THE CLASSIC PARTICIPATION MODEL

Participation is one of the phenomena of human behaviour which is least understood and most difficult to explain from an instrumental (or cost-benefit) perspective. Participation is a phenomenon which is difficult to explain from an instrumental perspective because it is a costly activity but is not clear what benefits it affords. The difficulty understanding the benefits afforded by participation, as Downs (1957) and Olson (1965) explained, results

⁵ There are 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 relationship were controlled by the political interest variable.

from the characteristics of the main good pursued through participation: public goods. According to those who originally formulated the theory, public goods are not a good enough incentive or 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 it is taken into account that the effort of an isolated individual contributes so little to the result, and that he or she will be able to enjoy the benefits of the collective action whether or not he or she has participated, it is deemed that the individual has no incentive to participate and is tempted to take advantage of the effort of others. This logic is what leads to the prediction that very few people will voluntarily participate in civic and political activities. However, contradicting this logic, it has been observed that people participate voluntarily in political activities much more often than predicted by the theory. Hence, the so-called "participation paradox".

The point of considering the participation problem from this point of view is that it prompts us to ask the following question (a question that Olson (1965) asked himself): if the collective benefits are not sufficient reason to explain participation, then what other reasons are there which lead individuals to voluntarily participate 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 organisations 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 organisation. 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 organisations 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 with using selective incentives to explain multiple and increasingly varied forms of participation is that the concept has been gradually widened to become a catch-all term to cover 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 of participating itself - which literature has also termed expressive behaviour.

The problem, as shrewd observers such as Barry (1978) have pointed out, is that including the action or behaviour itself among the benefits of an action goes against the very logic of the instrumental approach, the characteristic of which consists of explaining human behaviour 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. From interviews to activists, Verba, Schlozman and Brady (1995: 103) observe that “a goal that has been realized as the result of struggle against hardship gains meaning, while cheap victory sometimes seems trivial or, at least, unearned”. And they conclude that “under such circumstances, the more time, money, or effort given, the higher the level of gratification” (Ibidem). In other words, “bearing the costs becomes part of the benefit” (Ibidem). 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 socio-economic 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 socio-economic structure. In the sociological explanations, motivation is therefore equivalent to 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, “*The resources of time, money, and skills make it easier for the individual who is predisposed 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 the book. In this section of Appendix D (p. 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 disappear, although the authors do not tell what variable is that. 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, that 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. In order to explain who participates in politics, motivation, seen as an additional cost reduction factor which 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 & 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 mobilisation campaigns much less costly for political organisations. The Internet makes it possible for these mobilisation campaigns to reach a much larger potential audience at a far lower cost⁶.

⁶ For a counter-argument to this thesis, see Krueger (2006).

However, online participation is where the Internet offers the greatest advantages. The ease of contact and communication through the Net enables traditional participation activities to be carried out which were previously relatively costly, such as contacting politicians, working with organisations, joining a party, working on campaigns and/or participating in forums and discussion groups, 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 prove 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 the Internet resources - without motivation - is a sufficient factor to explain participation. This idea can be found in the article by Xenos and Moy (2007), in which the authors show that both the search for information on an online campaign and the acquisition of the political knowledge which results from being exposed to this information are independent from motivation or an interest in politics. Xenos and Moy (2007) carried out this analysis with the aim of testing the validity of two approaches (the instrumental and psychological approaches), in order to explain participation. They consider that this discovery confirms that the instrumental approach is more appropriate than the psychological approach, at least to explain this form of participation. Although these authors' interpretation of both approaches is very debatable, they are not wrong in assuming that, *ceteris paribus*, from an instrumental approach a reduction in costs will have a direct effect on participation - by increasing the utility of the action. What these authors do not take into account is that depending on the activity - specifically for very low-cost and very low-benefit activities - the instrumental approach will be quite unsuitable for making predictions of any kind. In other words, for actions with costs and benefits below a certain threshold, such as voting and online participation, the rational choice will have very little to say as to what will govern a particular kind of behaviour. In these cases, as Aldrich (1983) explained, any outside event that occurs could have a significant effect on the result.

This discussion leads us to formulate the two 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. Both propositions result from the fact that participating on the Internet can be considered a low-cost and low-benefit activity. 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 that it will 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 to explain the different levels of online and offline participation observed, but that it has ceased to be a relevant factor to explain the levels of online participation of frequent Internet users. In fact, what we are saying is that it is enough to be a skilful Internet user in order for the probability to participate in politics through the Net to increase independently of motivation. 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 have a direct effect on participation, independently of motivation.

Secondly, taking into account that participating on the Internet can be considered a low-cost and low-benefit activity, lower even than the action of voting, we would expect that given a certain level of Internet use, any minor outside event, such as for example being contacted online, may affect the probability of participating. Of course, the probability of there being any outside event, such as for example being contacted, will increase the more time is spent online; however, the probability of response will depend not only on the time spent online but also on how Internet browsing is undertaken – that is, whether browsing is undertaken with or without a specific purpose in mind. The greater the time spent online and the more aimless the browsing undertaken, the more likely it is that there will be a response to any outside event. We would therefore expect both browsing aimlessly on the Internet and being contacted online to affect the probability of participating online⁷. We will formulate our second hypothesis as follows:

H2. In addition to the direct effect that having Internet skills will have on online participation, browsing aimlessly on the Internet and being contacted online will increase the probability of online participation.

DATA AND MEASURES

To explore the relationship between use of the Internet, motivation and online participation we use a representative survey conducted in November 2007 by the Center for Sociological Research (CIS) in Spain⁸. This survey was purposively designed to test the

⁷ These two factors have been also analysed as possible mechanisms that might explain the shrinking knowledge gap between the political interested and uninterested for daily Internet users (Anduiza, Gallego and Jorba, 2009).

⁸ The size of the survey is 3716 interviewed people and the sample error is $\pm 1.64\%$ for a 95.5% level of confidence. The sampling procedures were the commonly used by the CIS: multistaged, stratified by clusters of population and selection of the individuals by random routes and quotes. The questionnaire was designed by the POLNET team from the UAB and it has been part of a

relationships between Internet and political participation and therefore contains the classical 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 and uses of the Internet, including several forms of online participation. This survey has been abundantly exploited by the POLNET team, whose researchers have published several articles and papers using this survey data⁹. Therefore, we will not show again how much online participation there is in Spain or the modes of the different forms of participation or the profiles of the participants¹⁰, but we will focus strictly in disentangling the direct and indirect effects of motivation and Internet skills on online participation. We want to know if Internet skills are having an impact on participation independently of the level of political motivation. Furthermore, we want to ascertain the role of being contacted via email and surfing with no aim on undertaking online political activities because these two factors might weaken the relevance of political motivation for participation.

In the questionnaire there are up to 8 political activities undertaken through the Internet that might be considered as participation in politics. We have selected 5 of them after carrying out several tests of reliability and dimensionality¹¹. These 5 pertain to the same construct and are the following: contacting a politician or political party; making a donation of money for a campaign or association; posting or writing comments in a forum, blog or webpage about current issues or political or social issues; signing a petition or joining a campaign or manifesto; and consulting the web page of a political party or a candidate. For the analysis, the five activities were examined both as a summatory index ranging from 0 to 5 activities and as a dummy variable (0 activities or at least 1 activity). The purpose of the two alternative measures of the dependent variable is to test if the effects of the key variables from our hypothesis differ depending on the level of participation. That is, we expect Internet skills to have more direct and important effect on participating at least in one activity rather than in the accumulation of a number of activities. This last process is

competitive research project on participation and the Internet financed by the Spanish Ministry of Science and Innovation. 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>

⁹ Cantijoch (2009); Anduiza, Gallego & Jorba (2009); Anduiza, Gallego & Cantijoch (2010); Anduiza, Cantijoch, Gallego & Salcedo (2010); Anduiza, Cantijoch, Colombo, Gallego & Salcedo (2010).

¹⁰ For a description of the situation of the online participation in Spain (frequencies, modes of participation, profiles of participants, some explanations) and of the main data from the survey, see the monographic by Anduiza, Cantijoch, Gallego & Salcedo (2010) and a shorter report by Anduiza, Cantijoch, Colombo, Gallego & Salcedo (2010).

¹¹ Kuder-Richardson coefficient of reliability is 0.6307 and the principal components analysis show that the five activities have an important weight (over 0.30) in the first component.

more demanding and costly and in that sense we will expect to be ruled more by traditional resources and motivations.

Regarding the explanatory variables, we include in our model 5 blocks of variables.

Table 1. Blocks of explanatory variables.

Block 1 Socio-demographics	Block 2 Political attitudes and orientations	Block 3 Political information through media consumption	Block 4 Internet skills Political interest	Block 5 Causal mechanisms
Level of education	Internal efficacy	Acquiring information on current political affairs through the Internet	Political interest	Browsing aimlessly
Working condition	External efficacy	Listening and watching the news (radio or TV)	Internet skills	Being contacted by email
Gender	Trust in political institutions	Listening and watching other programs about politics (radio or TV)	Interaction term: Political interest by Internet skills	
Income	Citizen-duty conception	Reading a newspaper (in paper format or on the Internet)		
Age	Engaged conception of being a good citizen			

The fourth block contains our two key explanatory variables: political interest (as the main indicator of political motivation) and Internet skills. Political interest refers to four levels of interest and Internet skills are measured by a proxy composed of an index of 6 online non-political activities¹². In this block, political interest is placed next to Internet skills because we want to explore their combine and independent effect on participation. That is, in this fourth block we add the interaction term between political interest and Internet skills because we want to check if the two variables have a combine influence on online participation that reinforces their possible individual impact.

In the fifth block, we include two factors that may affect the probability of participating online regardless of the level of interest in politics. We want to test whether browsing or surfing online without purpose and being contacted online increase the probability of participating online regardless of the level of political interest. If we find that Internet skills increase the probability of participating online regardless of political motivation, we should next identify the causal mechanisms through which being a skilful Internet user affects participation. The two causal mechanisms that we propose (stated in hypothesis 2) are: browsing or surfing online without purpose and being contacted online.

ANALYSIS AND DISCUSSION

We analyse the effect of all the variables mentioned before using hierarchical multiple regression and logistic regression analyses. Each block of variables is entered separately in order to see the effects and explanatory power of each of the main classical explanations of political participation based on the resource model: socio-demographics, political attitudes, and attention to political information. But we are interested mainly in testing how the irruption of Internet is changing the traditional model. The fourth and fifth blocks gather some novelties affecting this traditional model due to the irruption of the Internet. In the fourth block, the possible new effect of online resources or skills and, specifically, their interaction with political motivation are included. In the fifth block, browsing on the Internet without a specific aim is introduced as a possible explanation of why Internet users could be exposed to political initiatives without planning it or being

¹² We consider that a skilful person on the Internet is the one that performs several and different activities online. Although in the questionnaire there up to 9 activities we have selected 6 that are the most associated between them taking into account the results of the Kuder-Richardson coefficient of reliability -0.555- and of the principal components analysis that shows that the 6 activities selected have an important weight (over 0.30) in the first component. The 6 online activities selected are: buying a product or a service (food, books, cinema, travel, etc.); using online banking; receiving or sending emails; phoning over the Net (skype, etc.); downloading files (documents, music, video, software, etc.) and keeping your own blog or web page.

motivated to undertake them. In this last block, being contacted by email is also introduced because it could be another possible explanation of why Internet users without planning it or being politically motivated end up participating in online politics¹³. In short, the principal aim was to test for main effects and indirect effects of Internet skills and political interest (hypothesis 1), as well as direct effects of browsing aimlessly and being contacted online (hypothesis 2), while controlling for each block of other affecting variables.

The variables that are not significant in all the runs of both types of regression are ruled out from the analysis. These are the following: the labour situation of being currently working, or being retired or pensioner or unemployed (from the first block), external efficacy (from the first block, as well), engaged conception of being a good citizen (from the second block) and reading newspapers in paper format or on the Internet (from the third block).

The results of the five regression models are presented in tables 2 (multiple regression), 3 (logistic regression) and 4 (comparison between the two types of regression). The two different regression procedures correspond to the two different measures of the dependent variable: in the multiple regression the dependent variable is the summatory index of activities (0-5) and in the logistic regression is 0 activities or at least 1 activity.

In table 2 and 3 we can see the progression on explanatory capacity of the different blocks of variables entered. The increase in explanatory capacity is continuous and, logically, the final model that includes all the variables explains better the dependent variables.

In both types of regression the inclusion of the variables Internet skills, political interest and the interaction term (conforming block 4) changes substantially the weight of most of the socio-demographic and attitudinal variables, and also of the acquisition of political information by traditional media. That is, most of them lose significance which proves the relevance in explaining online participation of Internet skills and political interest over other variables. This fact is even more acute when explaining participation in at least one activity (logistic regression displayed at table 3): when Internet skills, political interest and the interaction term, as well as browsing aimlessly and being contacted by email are included in the model only to be a student remains as an influential factor among socio-demographic characteristics. In addition, the other variable that is significant in both types of regression is using Internet to get information on current political affairs.

¹³ In any case, the mobilizing efforts form part of the classical resource model of participation, that was composed of three key elements: resources, psychological engagement with politics and recruitment networks (Verba, Scholzman and Brady, 1995: 269). The novelty here is that this call for political action is made through a new media that is the Internet, and that we hypothesize, contrary to Verba, Scholzman and Brady (1995: 270) that in absence of political engagement participation can take place if it is online.

Table 2. Multiple linear regression of the index of online participation (0-5) by 4 blocks of explanatory variables

	Block 1	B1+B2	B1+B2+B3	B1+B2 +B3+B4	B1+B2 +B3+B4+B5
Level of education	0.328 ^{***}	0.204 ^{***}	0.138 ^{**}	0.09388 [*]	0.0576
Student	0.323 ^{***}	0.225 ^{**}	0.220 ^{**}	0.2712 ^{***}	0.218 ^{***}
Homemaker	-0.276 ^{***}	-0.251 ^{***}	-0.221 ^{**}	-0.1977 ^{***}	-0.187 ^{**}
Man	0.0953 [*]	0.0681	0.00341	-0.00511	-0.00681
Income	0.125 ^{***}	0.100 ^{***}	0.0901 ^{***}	0.0561 ^{***}	0.0466 ^{**}
Age	0.00414	-0.00346	-0.00580 [*]	-0.00273	-0.000303
Internal efficacy		0.286 ^{***}	0.180 ^{***}	0.0919 ^{***}	0.0851 ^{***}
Trust in pol. institutions		0.0529 ^{***}	0.0417 ^{***}	0.02123	0.0197
Engaged concp. of good citizen		0.0366 ^{**}	0.0324 ^{**}	0.021997	0.0183
Pol. Info. through Internet			0.726 ^{***}	0.5280 ^{***}	0.488 ^{***}
Listen and watch the news (radio or TV)			-0.0544 ^{**}	-0.0527 ^{**}	-0.0434 [*]
Listen and watch other programs about politics (radio or TV)			0.0695 ^{***}	0.031102	0.0289
Political interest				,2235 ^{***}	0.166 ^{***}
Internet skills				,12955 ^{***}	0.0728 ^{***}
Interest*Skills (centered)				,07641 ^{***}	0.0734 ^{***}
Browsing aimlessly					0.163 ^{***}
Being contacted by email					0.550 ^{***}
_cons	-1.016 ^{***}	-1.605 ^{***}	-1.007 ^{***}	-1,146 ^{***}	-1.121 ^{***}
F	27.09	24.01	27.02	32.54	36.89
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000
R-squared	0.0871	0.1590	0.2488	0.3171	0.3730
N	2110	1855	1834	1736	1736

Only displayed the regression coefficients and their significance * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3. Logistic regression of online (0-1) participation by 4 blocs of explanatory variables

	Block 1	B1+B2	B1+B2+B3	B1+B2 +B3+B4	B1+B2 +B3+B4+B5
Level of education	0.674 ^{***}	0.481 ^{***}	0.371 ^{***}	.249575 [*]	0.133
Student	0.683 ^{***}	0.509 ^{***}	0.542 ^{***}	.7279 ^{***}	0.612 ^{***}
Homemaker	-0.675	-0.524	-0.492	-.490232	-0.550
Man	0.322 ^{***}	0.272 ^{**}	0.150	.0882658	0.104
Income	0.215 ^{***}	0.176 ^{***}	0.164 ^{***}	.090960 [*]	0.0630
Age	-0.00141	-0.0148 ^{**}	-0.0205 ^{***}	-.011925	-0.00473
Internal efficacy		0.502 ^{***}	0.322 ^{***}	.102723	0.0807
Trust in pol. institutions		0.122 ^{***}	0.107 ^{***}	.06937 [*]	0.0666
Engaged concp. of good citizen		0.0591 [*]	0.0495	.02700	0.0192
Pol. Info. through Internet			1.270 ^{***}	.8774 ^{***}	0.847 ^{***}
Listen and watch the news (radio or TV)			-0.0498	-.051891	-0.0281
Listen and watch other programs about politics (radio or TV)			0.133 ^{***}	.041602	0.0434
Political interest				.6148 ^{***}	0.481 ^{***}
Internet skills				.4192 ^{***}	0.305 ^{***}
Interest*Skills (centered)				-.01502	-0.0252
Browsing aimlessly					0.318 ^{**}
Being contacted by email					1.542 ^{***}
_cons	0.674 ^{***}	0.481 ^{***}	0.371 ^{***}	-4.806 ^{***}	-4.920 ^{***}
Wald chi2(17)	93.72	127.88	194.57	253.96	331.62
Prob > chi2	0.0000	0.0000	0.0000	0.0000	0.0000
Pseudo R2	0.0612	0.1016	0.1522	0.2138	0.2789
N	2110	1855	1834	1801	1736

Only displayed the regression coefficients and their significance * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

With regard to the testing of the hypothesis, the analyses support hypothesis 1 as it shows the comparison of both models of regression (see table 4 below).

Table 4. Multiple and logistic regression compared (all explanatory variables)

	Number of online activities (0-5)	Dummy (0 or at least 1 online activity)
Level of education	0.0576	0.133
Student	0.218 ^{***}	0.612 ^{***}
Homemaker	-0.187 ^{**}	-0.550
Man	-0.00681	0.104
Income	0.0466 ^{**}	0.0630
Age	-0.000303	-0.00473
Internal efficacy	0.0851 ^{***}	0.0807
Trust in pol. Institutions	0.0197	0.0666
Engaged concp. of good citizen	0.0183	0.0192
Pol. Info. through Internet	0.488 ^{***}	0.847 ^{***}
Listen and watch the news (radio or TV)	-0.0434 [*]	-0.0281
Listen and watch other programs about politics (radio or TV)	0.0289	0.0434
Political interest	0.166 ^{***}	0.481 ^{***}
Internet skills	0.0728 ^{***}	0.305 ^{***}
Interest*Skills (centered)	0.0734 ^{***}	-0.0252
Browsing aimlessly	0.163 ^{***}	0.318 ^{**}
Being contacted by email	0.550 ^{***}	1.542 ^{***}
_cons	-1.121 ^{***}	-4.920 ^{***}
F or Wald chi2(17)	36.89	331.62
Prob > F or Prob > chi2	0.0000	0.0000
R-squared or Pseudo R2	0.3730	0.2789
N	1736	1736

Only displayed the regression coefficients and their significance * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In the case of the index of activities the effect of the interaction term is significant and positive as well as the specific effect of political interest and Internet skills (second column, table 4). That means, on one side, that the number of online participatory activities rises when there is a combine increase of Internet skills and political interest and in that sense the Internet skills reinforce the effect of political interest on participation. On the other side, political interest and Internet skills influence separately the number of participatory activities undertaken. In the case of taking part in at least one activity or not participating at all, the interaction term is not significant, but political interest and Internet skills remain significant (third column, table 4). This result implies that the Internet skills are not intensifying the impact of political interest on participation. There is not a combine effect of

both variables on participation and political interest and Internet skills have a specific and independent effect on carrying out at least one activity. The differences in significance of the interaction terms and the significant specific effect of Internet skills in both models of regression, show that, as was expected, Internet skills have more direct impact, regardless of the level of political interest, on participating at least in one activity rather than in the accumulation of a number of activities. This last process demands more resources and attitudinal predispositions, as it is confirmed by the relevance that several socio-demographic variables such as income or being homemaker (negative sign), and attitudinal variables such as internal efficacy, maintain in the multiple regression model in contrast with the logistic model.

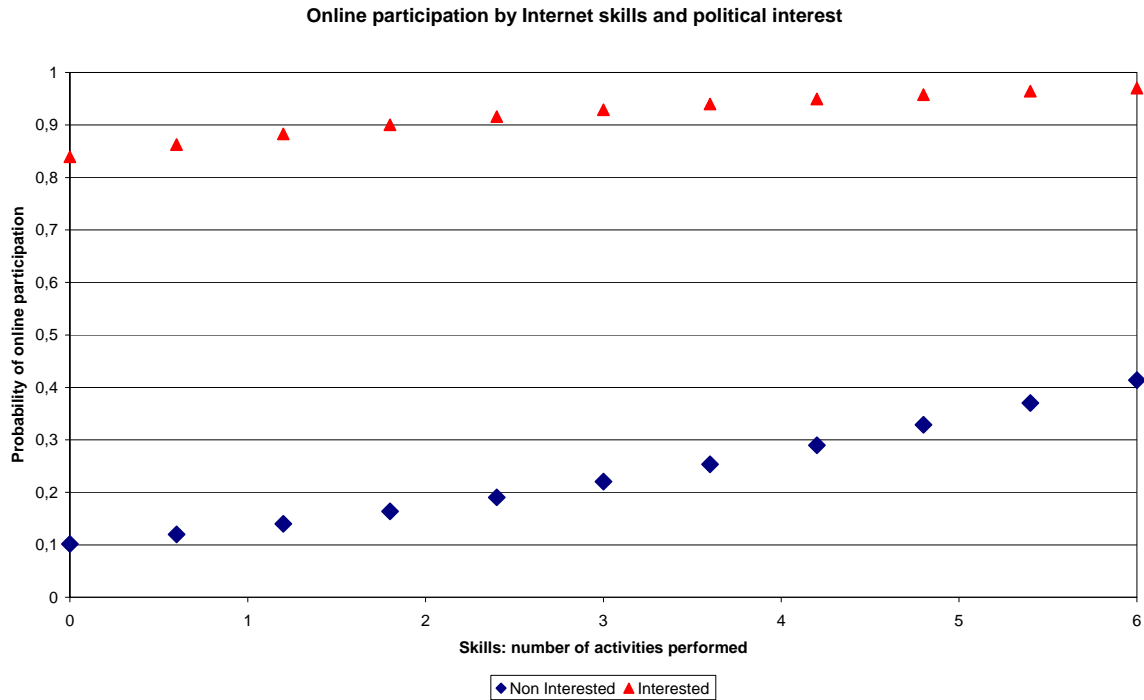
As a result, we can confirm our first hypothesis that states that having Internet skills will not make disappear the effect of political interest on participation, but having Internet skills has a direct effect on participation, independently of political interest. Therefore, this is an indicator that Internet is having a substantial impact on political engagement that moves beyond mere reinforcement of existing profiles of participants. The support to this hypothesis implies that new types of participants -skilful Internet users without political motivation- are starting to take part at least in one online activity. When people are skilful Internet users the importance of political motivation for undertaking at least one online political activity decreases.

For a better understanding of the size and direction of the interaction terms in the regression models, it is highly recommended to depict graphically the interaction and the dependent variable. In our case, that means to depict the levels of the dependent variable by combined levels of political interest and Internet skills. We display in figure 1 the probability of participating (from 0 to 1) of people without interest in politics and of people who are very interested in politics sorted by their level of Internet skills. In order to depict a specific probability of participation related to the interaction between interest and skills we should choose a profile of a person with enough theoretical significance for our hypothesis. That is, a typical profile of a person not very much interested in politics but frequent user of the Internet. So, the profile selected is a 25 years old man with a level of studies corresponding to the mean of his age and gender¹⁴. The rest of the values are set to their means with the exception of the dummy variables included in the model¹⁵.

¹⁴ The level of studies mean for a man of 25 years old is 2.7, that is between primary and secondary level of education. The level of studies established in the survey is: 1= Less than Primary; 2= Primary; 3= Secondary; 4=Tertiary.

¹⁵ Homemaker (set to 0); getting political information using Internet (set to 1 for the very interested and 0 for the uninterested); browsing aimlessly (set to 1 for the very interested and 0 for the uninterested) and being contacted by email (set to 1 for the very interested and 0 for the uninterested).

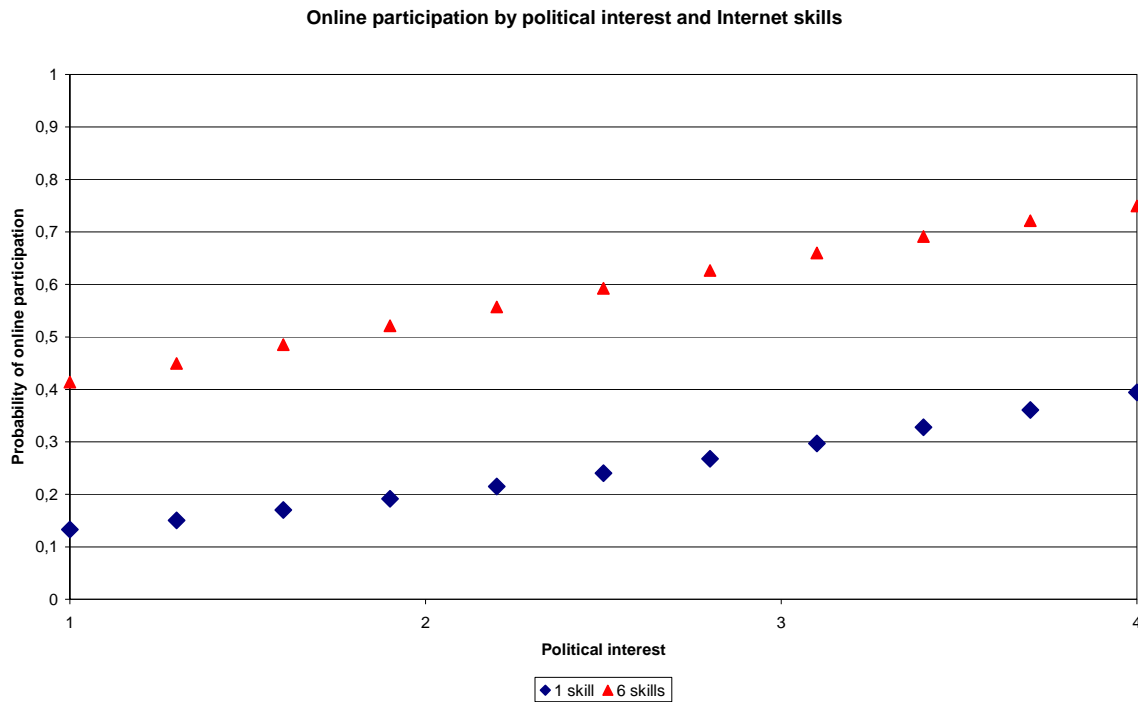
Figure 1



As we can see the lines are almost parallel indicating that there is almost no interaction between political interest and Internet skills, but the slope of the uninterested is somewhat steep while the corresponding line of the interested is much more monotonic. Taking into account that the sign of the coefficient of interaction is negative (although non significant, see Table 4) the form of the slopes seems to indicate a mild tendency for the non politically orientated but frequent and skilful Internet users to close the gap of the probability of participation with their counterparts much more interested in politics. Among the interested in politics the fact of rising the number of Internet abilities only increases the probability of participation in 16%, but in the case of the uninterested the increment reaches to 32%. Among the non interested in politics the probability of participating in at least one activity increases from 0.1 to 0.42 when the number of Internet skills rises. Therefore, Internet skills are having more impact on the people not interested at all on politics than in people very much interested in politics. Political motivation is less related to participation in the case of skilful users of the Internet, although it is clear that to be very much interested in politics is the key factor for participation with the highest probabilities ranging from 0.83 to 0.99.

In figure 2 we display the same interaction and profile but the other way round: the probability of participating (from 0 to 1) of 25 years old man that have only undertaken one activity on the Internet and of 25 years old man who have carried out till 6 online activities (that means very skilful on the Internet) sorted by their level of political interest that ranges from 1 (not at all interested) to 4 (very interested).

Figure 2



As in the other graphic the lines are almost parallel denoting no interaction between political interest and Internet skills. What this graphic displays more clearly than the previous graphic is the importance of Internet skills no matter the level of political interest. That is, in this graphic a very much political interested person (man of 25 years old with almost secondary studies) but who has only one Internet skill has the same probability (0.4) of participating online as a non interested but very skilful Internet users that carries out 6 online activities. On average very skilful users of the Internet participate more in politics, but when the number of abilities increases a lot the probability of participation does not depend so much on the level of political interest.

Highly illustrative are also the graphics of the predicted values of participation extracted from the multiple regression model. In these graphics the predicted values ranging from 1 to 6 online participatory activities are displayed also in relation to the level of interest and Internet skills for the same profile of person defined above. The graphics show very clearly the interaction between the two key explanatory variables, but we do not display it here for not loading too much the paper. As it is showed in table 2 and 4 the interaction term in the multiple regression model is significant and positive. So, the graphics depict two lines that move in divergent directions and start in almost the same level. That means that the effect of the two variables reinforces mutually so the number of online participatory activities rises when the level of interest increases but rises even more when, given that high level of interest, the number of Internet skills are also important (from 3 to 6 skills).

After all these analyses where the impact of Internet skills on political participation appears to be very important and independent of political motivation we need to assure that this impact is not spurious, being motivation the real cause. That is, it could happen that the skilful Internet users were very much concentrated among the more interested in politics. In order to examine this possibility a multiple regression of Internet skills by the rest of variables (including political interest¹⁶) is carried out.

¹⁶ And excluding the two possible causal mechanisms (browsing aimlessly on the internet and being contacted online) stated in the second hypothesis that are very much related to Internet skills.

Table 5. Multiple regression of Internet skills by all the explanatory variables.

	Internet skills (0-6)
Level of education	0.244*** (0.069)
Student	-0.370** (0.108)
Homemaker	-0.179 (0.166)
Man	0.128* (0.073)
Income	0.168*** (0.026)
Age	-0.026*** (0.004)
Internal Efficacy	0.093* (0.048)
External Efficacy	-0.068* (0.039)
Trust in pol. institutions	0.011 (0.022)
Citizen duty conception	0.026 (0.022)
Engaged concp. of good citizen	-0.012 (0.021)
Pol. info. through Internet	0.620*** (0.094)
Listen and watch the news (radio or TV)	-0.059 (0.038)
Listen and watch other programs about politics (radio or TV)	0.0535* (0.030)
Reading a newspaper (in paper format or on the Internet)	0.033 (0.024981)
Political interest	-0.001 (0.054)
_cons	1.774*** (0.308)
F	19.66
Prob > F	0.0000
R-squared	0.1676
N	1772

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.001$

The results show that political interest has no significant impact on the developing of Internet skills, so we can disregard the idea that the most interested in politics are also the most skilful Internet users. The idea that the relationship between Internet skills and

participation is spurious due to political motivation is wrong. In this sense we find different results than Boullainne (2009) and Bimber (2001) (see second section of the present paper). Internet skills are independent of political interest.

Finally, with regard to the second hypothesis, where we state that browsing aimlessly on the internet and being contacted online will have a direct effect on online participation, the results in table 4 confirmed that these two variables are having an effect on online participation both in relation to the number of activities undertaken (multiple regression) and in the case of taking part in at least one activity (logistic regression). These two variables were proposed as possible causal mechanisms that could explain how the skilful Internet users not specially interested in politics end up participating online. These frequent and skilful users spend a lot of time online and in this sense is highly probable that they are exposed to unexpected requests for online participation, mostly if from time to time they surf the Net without a specific aim.

CONCLUSION

The analyses carried out do not show that use of the Internet eliminates the effect of motivation on participation, as some authors pointed out (DiGenaro & Dutton, 2006). However, it is in line with the more moderate thesis which states that use of the Internet has a direct effect on participation independently of motivation (Xenos & Moy, 2007). These results do not allow us to conclude that motivation has ceased to be an important factor to explain the different levels of online participation observed, but do enable us to conclude that among experienced Internet users the propensity to participate at least in one online activity does not depend on political interest. In fact, it is enough to be an experienced Internet user, independently of motivation, for the probability of participation in politics on the Net to increase. Therefore, we can confirm our first hypothesis that states that having Internet skills will not make disappear the effect of political interest on participation, but having Internet skills has a direct effect on participation, independently of political interest. Internet is having a substantial impact on political engagement that moves beyond mere reinforcement of existing profiles of participants. A new type of participants – the skilful Internet users without political motivation- are starting to take part at least in one online activity. Regarding our second hypothesis, we established two possible mechanisms that could give account of the online participation of frequent internet users non interested in politics: browsing aimlessly on the Internet and being contacted online. The results show that both of them have a direct effect on online participation and therefore they should be taken into consideration for understanding the process of participating online for a person not politically motivated but who spends a lot of time on the Net and masters the tools and opportunities offered by Internet.

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