The Influence of using the Internet on Citizens' Participation in Politics

Bachelor thesis

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Abstract

Research has shown a positive relationship between using the Internet and citizens' participation in politics. However, there has not been given much consideration to the role that using the Internet plays in predicting different, separate forms of political participation, for example voting behaviour or signing petitions. Based on the European Social Survey round 5 (2010), this study investigates the influence of using the Internet on whether citizens participate in politics. Therefore, the following research question is examined: *How does using the Internet affect the extent to which citizens participate in politics?* It was expected that using the Internet on the individual level influences political participation in three ways: political participation generally, political participation divided into three dimensions, and political participation divided into separate modes. This was done with the use of logistic regression and ordinary linear regression, and 41,041 respondents from 24 European countries were used. Overall, it was found that using the Internet on the individual level does positively influence political participation significantly in this study.

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1. Introduction

As of January 2021, the Internet has over 4.5 billion active users (Statista, January 2021). The universal network that connects computers of universities, governments, companies and private users, keeps rising in popularity and, therefore, in importance. This can be seen as a positive development as people have continuous access to news and knowledge, and they can get in contact with each other more easily through social networks. It was found that, by following the news or reading more information on the Internet, citizens tend to participate in their society and, therefore, in politics more often than they did before (De Zúñiga et al., 2009; Shah et al., 2005). Therefore, it can be stated that the more citizens use the Internet, the more they tend to participate in politics (Norris, 2007). However, this rising importance of the Internet and its networks, and the rising extent to which people use them can also have a negative effect on political participation. In 2021, former Facebook employee Frances Haugen blew the whistle (Helmore, 2021). She collected internal company research that showed the ineffectiveness of Facebooks attempts to regulate and decrease misinformation and hate on the social network. Haugen's accusations were not only aimed generally. Various newspapers put a focus on the citizen attack on the Capitol in Washington DC of the 6th of January, earlier that year (Helmore, 2021; Bartz, 2021; Bateman, 2021). It was, among others, stated that the hate, polarization and misinformation on Facebook contributed to the attack. Therefore, it is important to study the effects of using the Internet on the extent to which citizens participate in politics.

Political participation is a complex construct, and researchers seem to avoid conceptualizing it. It is often approached as a construct existing of modes and instead of defining the construct political participation, examples of participation in politics are often given; voting, commenting on political blogs, or attending demonstrations (Anduiza et al., 2010; Gerl et al., 2018; Seongyi & Woo-Young, 2010; Shah et al., 2005; Vesnic-Alujevic, 2012). Political participation is highly important, because it helps governments to understand what citizens want. In addition, the more citizens participate in politics, the better they tend to understand policy decisions (Seongyi & Woo-Young, 2010). By using the Internet, this effect can be strengthened even more, as using the Internet contributes to the development of a knowledge society, where citizens are embedded in social networks and have knowledge and information available to them at all times (Norris, 2007). However, more factors are influencing political participation, such as interest in politics, use of traditional media, and social-structural characteristics such as income and educational level (De Zúñiga et al; Norris, 2007; Gerl et al., 2018). The possible influence of these kinds of factors on the relation between using the Internet and political participation will be touched upon and examined in this study.

As outlined above, it is important to study the relation between using the Internet and political participation, as using the Internet can have dangerous consequences that can (indirectly) cost lives, for example the attack on the Capitol. A significant amount of research has been done on the influence of using the Internet on whether citizens participate in politics (e.g. Anduiza et al., 2010; De Zúñiga et al., 2009; Norris, 2007; Shah et al., 2005; Towner, 2013). In these studies, the relationship between using the Internet and participating in politics was often established inconclusively. For example, Norris (2007) found that using the Internet is one of multiple factors predicting political participation. In addition, Anduiza et al. (2010) focus on online participation only, and leave offline political participation out of their study completely. Moreover, other factors influencing the relationship between using the Internet and political participation are not always taken into account (Shah et al., 2005), such as traditional media use or interest in politics. Therefore, these studies are not always conclusive, sometimes focus on online political participation only, and do not examine the role of other factors influencing the studied relationship entirely. Furthermore, the effect of using the Internet on various separate aspects of political participation is examined relatively little, and researchers often focus on using one form of social network (for example, blog posts) instead of the

Internet as a whole. In this study, it will therefore be examined to what extent the general use of the Internet influences citizens' political participation, not only separated by modes of political participation, but also combined into one latent variable. To conclude, the purpose of this research is to find out to what extent the Internet influences citizens' political participation. Therefore, the explanatory research question is formulated as follows: *How does using the Internet affect the extent to which citizens participate in politics?*

2. Theoretical framework

In this section, the concepts of the Internet and political participation as constructs are elaborated on. In addition, it is explained how using the Internet influences the extent to which citizens participate in politics according to other studies in this field of research. Furthermore, antecedents influencing the relationship will be explained and possibly ruled out already.

2.1 The Internet as a construct

In this study, the network Internet will be examined. On the Internet, news and information constructed by various specific "types, features and designs of online sources" can be found (Towner, 2013, p. 529). In addition, Tolbert and McNeal (2003) explained that the technological development of the Internet can be seen as a combination of the visual and audio elements of traditional media, for example television and newspapers, and the quick activity of telephones. The Internet has thus become one of the largest sources of (fast) knowledge for citizens and its growth has been spectacular (Curran et al., 2016). However, the Internet is more than a source of knowledge. It provides a platforms for citizens to communicate with each other, such as Whatsapp and Facebook (Gerl et al., 2018). Moreover, these platforms can be used for public debate, next to platforms as blogs (Anduiza et al., 2010). Therefore, it can be said that researchers agree on three favourable facets of the Internet (Anduiza et al., 2010; Curran et al., 2016; Gerl et al., 2018; Polat, 2005):

1) the Internet as a continuous source of information;
2) the Internet as a medium for communication;
3) the Internet as a virtual public debate.

As each of these facets can also be divided into smaller, sometimes overlapping facets, it is nearly unfeasible to find how much time citizens spend on each of these facets specifically. Another reason for this unfeasibility is that the Internet is a continually changing environment, and so the behaviour of citizens on the Internet changes frequently. However, users all over the world have free access to information and news, can communicate with others regardless of geographical distance and users can express their opinion or activate others to do something online (Polat, 2005). Therefore, researchers seem to agree on the conceptualization of the Internet in the form of three facets: a source of information, a medium for communication, and a virtual public debate.

As stated before, the Internet has more than 4.66 billion active users worldwide since January 2021 (Statista, 2021). These users spend on average 170 minutes per day on the Internet. This can have a positive effect on citizens, as studies often find the Internet to be helpful for communication, reading, writing and information processing skills (Suhail & Bargees, 2006; Gerl et al., 2018). However, the amount of time spent per day on the Internet can also have negative consequences, as it can lead to physical or psychological problems (Suhail & Bargees, 2006). Therefore, it is important to keep an eye on the always growing and expanding network called the Internet.

2.2 Political participation as a construct

Political participation is a broad construct, that is often examined in research by dividing the construct into different modes. Researchers regularly choose not to specify political participation in their literature review or theories, but they mention the construct in their methods or operationalizations, where it is explained what modes are used for political participation (Anduiza et al., 2010; Gerl et al., 2018; Norris, 2007; Seongyi & Woo-Young, 2010; Shah et al., 2005; Vesnic-Alujevic, 2012). However, Towner (2013, p. 529) states that political participation includes the "ability to exert political influence and express political opinions, in both offline and online worlds". Offline political participation consists of, for example, voting, attending a demonstration or being a member of a political party, while online political participation includes signing an online petition or posting comments on a political blog (Towner, 2013). Nevertheless, signing petitions, for example, can both

occur offline and online (Anduiza et al., 2010). Therefore, no distinction between offline and online political participation will be made in this study.

To decide whether activities can be seen as political participation, Van Deth (2014) created a "conceptual map of political participation". He explains that the minimalist definition of political participation consists of four conditions: the observed action must be "voluntary behaviour, done by citizens, located in the sphere of government, state or politics" (Van Deth, 2014, p. 354-355). If the observed action is not located in the sphere of government, state or politics, the activity must be targeted at this sphere or "aimed at solving collective or community problems" (Van Deth, 2014, p. 357), to be called targeted political participation. Lastly, if the activity is not aimed at solving problems or takes place in the spheres described above, it must be "used to express political aims and intentions of participants" (Van Deth, 2014, p. 359). Therefore, the modes of political participation used in this study will be analysed with this framework.

Norris (2007) explained that there are four dimensions in the domain of civic participation. However, in this study, only three of these dimensions are recognized as dimensions of political participation. The dimensions Norris (2007) found, are voting (1), campaign-oriented participation (2), cause-oriented participation (3) and civic-oriented participation (4). It is explained that voting (1) "is central to citizenship in a representative democracy", but differs from other dimensions, as it has lower costs and is less demanding (Norris, 2007, p. 28). Campaign-oriented forms of participation (2) focus on all forms of (voluntary) work for political parties or candidates, and cause-oriented (3) forms of participation are more focused on the political outcome of activities that can be done, for example, demonstrating against a policy with the hope that the policy will be changed. Lastly, the civic-oriented dimension (4) focuses on activities and membership of organisations, for example, sports clubs. Nevertheless, this dimension is not recognized as a definitive part of the construct of political participation in this study, because the activities that are part of this dimension according to Norris (2007) are not specifically and only "located in the sphere of government, state or politics" (Van Deth, 2014). Therefore, this study makes a distinction between three different dimensions of political participation: voting (1), campaign-oriented political participation (2), and cause-oriented political participation (3).

2.3 The relation between using the Internet and political participation

In recent years, the number of studies on the relation between using the Internet and the extent to which citizens participate in politics has increased. Polat (2005) explains that the Internet contributes to higher levels of political participation because of the high volume of information that the Internet offers. It is argued that this will lead to a better-informed society, and therefore to more political participation. This corresponds with how Norris (2007) describes the Internet as a virtual agora, where the possibilities that the Internet provides for citizens regarding education and knowledge, in addition to its facet as a place for public debate, are central and have the potential to increase political participation. Likewise, Shah et al. (2005) emphasise that online informational seeking leads to more political engagement and interaction with others, which can cause more political engagement. De Zúñiga et al. (2009) expand on this theory and argue that because of the increase in public debate through the use of the Internet, citizens feel the need to participate in politics more. Nevertheless, other studies focus more on the theory that the Internet makes participation in politics easier: participating on the Internet is, under the condition that one is computer literate, simpler, faster and there is less social pressure (Anduiza et al., 2010; Hirzalla et al., 2011; Norris, 2007). However, Norris (2007) emphasises the need to include other views on the relation between using the Internet and participating in politics. For example, cyber-sceptics focus on the embedded status quo, and the lack of possibilities to change the political environment, and therefore the less motivation for citizens to participate. Nevertheless, there has not been a study yet that confirms this theory. To conclude,

studies usually find a significant relation between using the Internet and political participation. Therefore, the following hypothesis can be derived from this part of the theory:

> H1: *Using the Internet on the individual level positively influences the extent to which citizens participate in politics.*

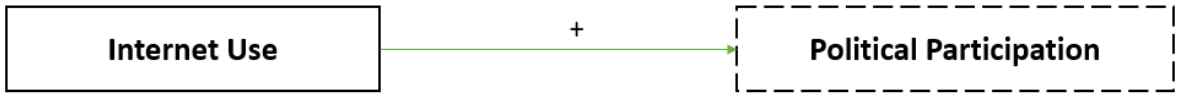

Figure 2.1: The hypothesised relationship between Internet Use and Political Participation

2.4 Modes of political participation

As explained before, researchers often choose not to specify the modes of political participation in their theory section. However, this often leads to unclarity regarding the concept of participation, how the modes were chosen or found, and there is more focus on the analysis part of the study, instead of the theoretical background. In this study, the three dimensions of political participation, voting (1), campaign-oriented participation (2), and cause-oriented participation (3), will be used to explain and categorise the modes of political participation. There are about ten main modes of political participation, however, this number differs per study. The modes that are used by researchers most frequently are voting, contacting politicians or government officials, working in political or action groups, working in other organisations that aim to influence politics or democracy, wearing or displaying campaign material, signing petitions, participating in lawful demonstrations, boycotting certain products, and being a member of a political party (see, for example, Anduiza et al., 2010; Calenda & Meijer, 2009; De Zúñiga et al., 2009; Gerl et al., 2018; Norris, 2007; Shah et al., 2005). Therefore, in this section, these modes will be explained and placed into political dimensions.

Table 2.1: Modes of political participation divided by dimensions

Voting (1)
Voting
Campaign-oriented (2)
Contacting politicians or government officials
Working in political or action groups
Working in other organisations or associations that aim to influence politics or democracy
Wearing or displaying campaign material
Being a member of a political party
Cause-oriented (3)
Signing petitions
Participating in lawful demonstrations
Boycotting certain products

First, voting was identified as a mode of political participation in the majority of studies on this subject (Anduiza et al., 2010; De Zúñiga et al., 2009; Gerl et al., 2018; Norris, 2007). As voting is voluntary behaviour, focused on government, state and politics and done by citizens, it can be seen as

political participation according to the framework developed by Van Deth (2014). In addition, it is the main mode in the dimension voting (1) by Norris (2007). It is expected that Internet use influences voting, because it is easier to make an informed choice with the use of the Internet, for example for swing voters (Norris, 2007), and the possibility of online voting also removes a hurdle (Tolbert & McNeal, 2003). Therefore, the following hypothesis was derived:

> H2: *Using the Internet on the individual level positively influences whether citizens vote.*

Second, the campaign-oriented dimension (2) concerns voluntary activities, focused on the campaign-side of government and state, and in particular politics. In this dimension, five modes of political participation are placed: contacting politicians or government officials, working in political or action groups, working in other organisations or associations that aim to influence politics or democracy, wearing or displaying campaign material, and being a member of a political party (Anduiza et al., 2010; Calenda & Meijer, 2009; Gerl et al., 2018; Norris, 2007; Shah et al., 2005). These modes all fit in the framework developed by Van Deth (2014). However, one might argue that working for political parties, action groups or other organisations aimed at influencing politics or democracy are not voluntary, because of financial matters. Nevertheless, it can be assumed that, if citizens work for these kinds of parties, groups or organisations, they have at least some kind of interest in the matter and, thus, choose to participate in politics specifically voluntary (Anduiza et al., 2010). It is assumed that the Internet can provide more information on politics and possibilities to become politically active, for example, to contact politicians (Anduiza et al., 2010; Norris, 2007). Therefore, the following hypothesis was derived:

> H3: *Using the Internet on the individual level positively influences whether citizens participate in campaign-oriented politics.*

Third, there are three modes of political participation that are recognized by the framework developed by Van Deth (2014) and fit into the cause-oriented dimension (3) developed by Norris (2007): signing petitions, participating in lawful public demonstrations, and boycotting certain products (Anduiza et al., 2010; De Zúñiga et al., 2009; Norris, 2007). These modes are focused on causing something to be done, and are thus part of the cause-oriented dimension (3). As explained above, the Internet can provide possibilities or nudge citizens to become active, for example by reading discussions on online platforms (Norris, 2007). Therefore, the following hypothesis was derived:

> H4: *Using the Internet on the individual level positively influences whether citizens participate in cause-oriented politics.*

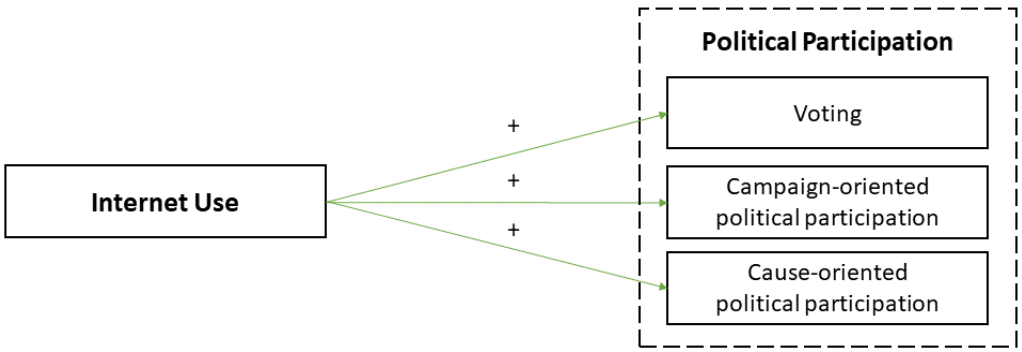

Figure 2.1: The hypothesised relationship between Internet use and Political Participation (extended).

2.5 Antecedents of political participation and Internet use

Researchers seem to agree that antecedents are the largest threats for causal inference regarding the relationship between using the Internet and political participation. As an antecedent of political participation might be a reason why citizens participate in politics, it is important to look at the influence of this antecedent within the relationship between using the Internet and participating in politics. This means, to make sure one's participation in politics is not mainly caused by the antecedent, instead of participation being caused by using the Internet. Therefore, the following ten antecedents of political participation will be explained in this section: resources, descriptors of the Internet, frequency of political discussion, use of traditional media, social trust, political trust, internal political efficacy, civic duty, interest in politics, and satisfaction with politics in citizens' countries.

First, Anduiza et al. (2010) and Gerl et al. (2018) emphasise the importance of the civic voluntarism model developed by Verba et al. (1995). This model states that the more resources citizens have access to, the more they tend to participate in politics, because "they can more easily afford the costs of participation and develop more positive attitudes towards politics" (Anduiza et al., 2010, p. 357). However, it is stated that a revision of the resource model is needed because of the digital developments of information and communication. For example, the model now also includes computer skills (Gerl et al., 2018). Resources can thus be seen as an antecedent that can partially explain the relationship between the use of the Internet and the extent to which citizens participate in online politics. However, it was shown in the studies of Anduiza et al. (2010) and Gerl et al. (2018), that resources have more influence on using the Internet than on political participation.

Second, "the place of the Internet connection and years of Internet use", frequency of political discussion, and traditional media use should be seen as antecedents for political participation according to past research from De Zúñiga et al. (2009, p.560) and Norris (2007). With 'traditional media use', researchers aim to find a concept that combines watching television, listening to the radio and reading a 'traditional' newspaper. Traditional media and frequency of political discussion are treated as antecedents of political participation, as citizens are more likely to participate in politics if they hear about politics more often (Norris, 2007). Descriptors of the Internet can be seen as antecedents that influence Internet use more than political participation, whereas the use of traditional media and frequency of political discussion seem to be more of an addition to the relationship studied. Nevertheless, it was found that Internet use remained the most significant predictor of political participation in comparison with descriptors of the Internet, frequency of political discussion, and using traditional media (De Zúñiga et al., 2009; Norris, 2007).

Third, social trust and political trust, internal political efficacy and civic duty are found to be predictors of political participation. It was explained that the more citizens trust others, trust the political system in their country, and trust political parties, the more they tend to participate in politics (Norris, 2007). Therefore, these antecedents can cause an increase in the extent to which citizens participate in politics. Moreover, Norris (2007, p. 38) found that internal political efficacy and civic duty were the antecedents that had the largest influence on political participation, together with age and education. Therefore, internal political efficacy and civic duty might have a higher influence on political participation than the use of the Internet.

Fourth, Norris (2007) and Tolbert and McNeal (2003) found that interest in politics and satisfaction with politics can (indirectly) predict the extent to which citizens participate in politics. It was found by Norris (2007) that the more interested citizens are in politics, the more they tend to participate in politics. However, the more satisfied citizens are with the political and legal system in their country, and the political parties that are in office, the less they tend to participate in politics (Tolbert & McNeal, 2003). Nevertheless, interest in politics and satisfaction with politics did not influence the relationship between Internet use and political participation significantly in these studies. Therefore, the antecedents of political participation found by researchers are important to

keep in mind, as these antecedents have an influence on the relationship between Internet use and political participation as a whole, whereas the antecedents of Internet use do not directly influence political participation.

3. Data and Operationalization

3.1 Research design

To test the hypotheses and answer the research question, quantitative data is derived from the European Social Survey round 5 (2010). The European Social Survey is an "academically driven cross-national survey, that measures attitudes, beliefs and behaviour patterns of diverse populations across Europe" (European Social Survey, n.d.). The population exists of European citizens, and the data is retrieved via face-to-face personal interviews. While more recent data from the ESS exists, the data from 2010 is conducted, as this dataset includes most modes of political participation, and it includes most antecedents of political participation that can influence the relation between using the Internet and political participation. In this study, only the data from citizens from democratic European countries will be conducted, to avoid misconceptions of the construct of political participation. Only countries that are recognised as full or flawed democracy (Economist Intelligence Unit, 2021), and as semi-consolidated or consolidated democracy (Freedom House, 2021) will be retained in the dataset. Therefore, The Russian Federation (RU) and Ukraine (UA) will be excluded. In addition, as the data from Slovenia (SI) is missing, this country will be excluded as well. Furthermore, countries that could threaten the validity of the relationship between the independent variable and voting as a mode of political participation, such as Belgium (BE), where the voting mandate is enforced, will not be excluded from regression (International Institute for Democracy and Electoral Assistance, 2021). Instead, countries will be controlled for in each sub-analysis. Therefore, in this study, a total of 41,041 respondents from 24 European countries are included.

It is argued in various studies that conducting survey data will not lead to the most significant outcomes. The cross-sectional design of this method of data collection does not exclude the possibility that the causality of the relationship is the other way around: participation in politics may also cause more (extensive) use of the Internet. However, in the studies covered in the theoretical framework, it became clear that the causal relationship mostly runs from using the Internet towards political participation. Therefore, it can be assumed that the cross-sectional design of this study is not of significant influence on the relationship between using the Internet and participating in politics.

To carry out statistical analyses and test the hypotheses, logistic regression and ordinary least squares regression will be used. Moreover, averages, frequencies and correlations will be presented. The data will be tested using SPSS.

3.2 Independent and dependent variable

The ordinal independent variable, "Internet use", is derived from the survey item *netuse*. This item is measured on a 7-point scale ranging from 'Never use' to 'Every day'. This item was chosen because it shows the frequency of citizens' personal use of the Internet.

The dependent variable, political participation, will be measured in three different ways. Nine dichotomous survey items that portray the nine modes of political participation will be used. The survey question asked for every item was answered with either 'Yes' or 'No'. First, for the variable "Political participation", the nine survey items are combined into one index, ranging from 0 = 'Does not participate in politics' to 5 = 'Participates in politics very often', where categories 5, 6, 7, 8 and 9 are combined into category 5. A subsequent analysis found the survey items to be internally consistent, displaying a moderate, but acceptable Cronbach's alpha of α=.64. Second, the nine survey items will be divided into the three dimensions of political participation: voting, campaign-oriented and cause-oriented political participation. "Voting" is derived from the survey item *Voted last national election (1),* with 1 = 'Yes' and 0 = 'No'. Moreover, the variable "Campaign-oriented political participation" is derived from the survey items *Contacted politician or government official*

last 12 months (2), Worked in political party or action group last 12 months (3), Worked in another organisation or association last 12 months (4), Worn or displayed campaign badge/sticker last 12 months (5), and *Member of political party (6)*, ranging from 0 = 'Does not participate in politics' to 3 = 'Participates in politics very often', where categories 3, 4, 5 and 6 are combined into category 3. A subsequent analysis found the survey items to be internally consistent, displaying a moderate, but acceptable Cronbach's alpha of α=.61. In addition, the variable "Cause-oriented political participation" includes *Signed petition last 12 months (7), Taken part in lawful public demonstration last 12 months (8), Boycotted certain products last 12 months (9)*, ranging from 0 = 'Does not participate in politics' to 3 = 'Participates in politics very often', with Cronbach's alpha α=.52. Last, eight survey items that portray the modes of political participation will be analysed separately. *Voted last national election (1)* is not included in this analysis, as that mode is already analysed separately for dimension 1, voting. The items were chosen as they approach the three dimensions of political participation outlined in the theoretical framework best.

Therefore, there will be three ways in which the dependent variable will be used in the analysis. First, the variable "Political participation", in which all nine survey items portraying the three dimensions of political participation are combined, is used as a variable. Second, the three dimensions of political participation, in which the nine survey items are assigned to their fitting dimension, are used as three separate variables in the analyses. Third, the remaining eight dichotomous survey items will be analysed separately in relation with "Internet use".

3.3 Third variables and control variables

Other variables can influence the relationship between using the Internet and political participation as well. These variables are called third variables. Therefore, they will be controlled for in this study as extensively as possible with the ESS dataset. Nevertheless, a large number of these third variables have already been ruled out by other studies, so the chances of these variables being of high influence are reduced. The variables that will be controlled for are derived from the antecedents of political participation. The third variables that will be controlled for are use of traditional media*,* the cultural attitudes of frequency of political discussion, social trust, political trust, interest in politics, and satisfaction with politics. First, the variable "traditional media" is derived from the survey items *tvtot, rdtot* and *nwsptot,* which portray the total time on an average weekday that citizens watch tv, listen to the radio, or read the newspaper. These survey items will be combined into one variable by calculating the mean, as all items are measured at the same scale, with Cronbach's alpha α=.12. Second, the variable "frequency of political discussion" is derived from the survey items *tvpol, rdpol* and *newsppol*, which portray the total time on an average weekday that citizens watch tv, listen to the radio, or read the newspaper related to news, politics or current affairs. These items will also be combined into one variable by calculating the mean, with Cronbach's alpha α=.52. Third, the ordinal variable "social trust" is derived from the survey item *ppltrst*, that shows if citizens think '*most people can't be trusted, or you can't be too careful'*. Fourth, the variable "political trust" is derived from the survey items *trstplt, trstprt, trstprl,* and *trstlgl*. These items portray citizens' trust in politicians, political parties, their country's parliament and the legal system. To combine the items into the variable "political trust", the mean will be calculated, with Cronbach's alpha α=.90. Fifth, "interest in politics" is derived from the survey item *polintr,* which portrays how interested citizens are in politics. Sixth, third variable "satisfaction with politics" is derived from the survey items *stfgov* and *stfdem*, that portray how satisfied citizens are with national government and the way democracy works in their country. Again, the mean answer will be calculated to combine these survey items into one variable, with Cronbach's alpha α=.77. The items were chosen because they approach the antecedents of political participation best.

Third variables and control variables are used to confirm nonspuriousness, that is, to limit the possibility of other variables causing the variation in the hypothesised relation between using the Internet and participating in politics. In this study, the demographics age, education and gender are conducted as control variables, as these are all associated with political participation in the majority of studies on this subject (Anduiza et al., 2010; De Zúñiga et al., 2009; Hirzalla et al., 2011; Norris, 2007; Towner, 2013; Vesnic-Alujevic, 2012). "Age" is derived from *agea*, with a range of 14 to 101 years. "Education" is derived from *edulvlb*, which portrays the highest level of education participants successfully completed. "Gender" is derived from *gndr*, which shows if the participant is either male or female. In addition, the clustered structure of the dataset will be used to control for countries in each sub-analysis. Therefore, the variables age, education and gender will be controlled for in this study, and dichotomous variables will be used to control for countries.

Table 3.1 Descriptive Statistics (N = 41,041)

	Min	Max	Mean	S.d.	Frequency
Internet use	.00	4.00	2.22	1.82	
Never use					37.7
Less than once a month					1.3
Monthly					3.6
Weekly					15.6
Every day					41.8
Political participation	.00	5.00	1.53	1.29	
Does not participate in politics					17.1
					47
					16.7
					9.3
					5.0
Participates in politics very often					5.0
Voting (*dimension 1*)	.00	1.00	.77	.42	
No					23.0
Yes					77.0
Campaign-oriented (*dimension 2*)	.00	3.00	.39	.76	
Does not participate in politics					74.4
					16.2
					5.7
Participates in politics very often					3.7
Cause-oriented (*dimension 3*)	.00	3.00	.39	.71	
Does not participate in politics					72.3
					18.0
					7.9
Participates in politics very often					1.9
Voted last national election	.00*	1.00*	.77	.42	
Contacted politician	.00*	1.00*	.13	.34	
Worked for a political party	.00*	1.00*	.03	.18	
Worked for another organisation*	.00*	1.00*	.13	.34	
Worn or displayed campaign badge/information	.00*	1.00*	.06	.24	
Member of a political party	.00*	1.00*	.05	.21	
Signed petition	.00*	1.00*	.19	.39	
Taken part in lawful public demonstration	.00*	1.00*	.06	.23	
Boycotted a certain product	.00*	1.00*	.14	.35	
Traditional media	.00	7.00	2.91	1.25	
Frequency of political discussion	.00	7.00	1.66	1.03	
Social trust	.00	10.00	4.94	2.44	
Political trust	.00	10.00	3.78	2.20	
Interest in politics	.00	3.00	1.35	.92	
Satisfaction with politics	.00	10.00	4.33	2.26	

Gender					
Male					45.9
Female					54.1
Age	14.00	101.00	50.31	17.83	
Education	.00	800.00	361.10	191.21	

NB: distributions of the dichotomous variables and countries are visible in Appendix A

Source: European Social Survey, 2010 (own calculations)

The sample examined in this study is composed of 40,041 participants. The mean age of this sample is 50.31, SD = 17.83. In addition, 54.1% of all participants is female, whereas 45.9% is male. Of all participants, 41.8% state that they use the Internet every day, while 37.7% never use the Internet. Moreover, 5% of all participants participate in five or more modes of political participation, while 17.1% of all participants do not to participate in politics at all.

4. Data analysis

In this section, the quantitative data from the ESS sample will be analysed to test the hypotheses, to eventually answer the research question on how Internet use affects whether and the extent to which citizens participate in politics. First, the bivariate relations between relevant variables will be analysed. Second, the hypotheses will be tested and the outcomes will be interpreted with the use of ordinary least squares regression (OLS) and logistic regression. Ordinary least squares regression (OLS) will be used with the ordinal independent variable "Internet use" and political participation-indices constructed out of the dichotomous mode-variables to test H1, H3 and H4. Moreover, logistic regression will be used with the ordinal independent variable "Internet use" and the dichotomous dependent variable "Voting" to test H2. Last, after testing the hypotheses, the dichotomous modes of political participation will be analysed separately in relation with the ordinal independent variable "Internet use" with the use of logistic regression, to investigate the importance and effect of each separate mode of political participation in the larger construct of political participation.

4.1 Correlations

First, the bivariate relationships between all relevant variables are analysed. To measure the statistical relation between the ordinal variables, the Spearman rank-order correlation coefficient is used (r_s). In addition, the Spearman rank-order correlation coefficient will also be used to measure the association between continuous and ordinal variables. To measure the statistical correlation between continuous and dichotomous variables, point-biserial correlation is used. This point-biserial correlation will also be used to measure the statistical correlation between two dichotomous variables. Therefore, Pearson's correlation will be computed for these variables (r_{pb}). Lastly, the association between ordinal and dichotomous variables will be approached with the use of the Mann-Whitney U test.

The results in table 4.1 show that the correlation between the ordinal variables "Internet use" and the index for "Political participation" are significant, and the correlation can be seen as moderately strong, $r_s = .22$. In addition, the correlation between "Internet use" and "Campaign-oriented political participation" is significant, however, somewhat weaker, $r_s = .19$. Moreover, table 4.1 shows that the correlation between "Internet use" and "Cause-oriented political participation" is significant, and even stronger, $r_s = .26$. From the Mann-Whitney U test presented in table 4.3, it became clear that the correlation between "Internet use" and "Voting" is not significant, which means that the mean ranks of citizens that do vote and citizens that do not vote are equal, based on this sample.

Table 4.1 Correlations (Spearman's rho, N = 41,041)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Internet use	1.00													
2. Political participation	0.22*	1.00												
3. Voting (*dimension 1*)			1.00											
4. Campaign-oriented (*dimension 2*)	0.19*	0.71*		1.00										
5. Cause-oriented (*dimension 3*)	0.26*	0.72*		0.37*	1.00									
6. Traditional media	-0.09*	0.02*		0.01	-0.03*	1.00								
7. Frequency of political discussion	-0.11*	0.12*		0.09*	0.04*	0.36*	1.00							
8. Social trust	0.20*	0.19*		0.16*	0.15*	0.01**	0.03*	1.00						
9. Political trust	0.18*	0.23*		0.20*	0.13*	0.04*	0.10*	0.40*	1.00					
10. Interest in politics	0.16*	0.37*		0.27*	0.25*	0.12*	0.33*	0.17*	0.29*	1.00				
11. Satisfaction with politics	0.16*	0.16*		0.14*	0.07*	0.02*	0.07*	0.35*	0.68*	0.20*	1.00			
12. Gender												1.00		
13. Age	-0.53*	0.02*		-0.02*	-0.10*	0.19*	0.31*	-0.03*	0.00	0.11*	0.01	0.03	1.00	
14. Education	0.44*	0.26*		0.19*	0.24*	-0.04*	-0.01	0.18*	0.14*	0.27*	0.12*	-0.02*	-0.25*	1.00

**p<.01; **p<0.05 (two-tailed test)*

Source: European Social Survey, 2010 (own calculations)

Table 4.2 Correlations (Pearson's r, N = 41,041)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Internet use	1.00													
2. Political participation		1.00												
3. Voting (*dimension 1*)			1.00											
4. Campaign-oriented (*dimension 2*)				1.00										
5. Cause-oriented (*dimension 3*)					1.00									
6. Traditional media			0.06*			1.00								
7. Frequency of political discussion			0.11*				1.00							
8. Social trust								1.00						
9. Political trust			0.16*						1.00					
10. Interest in politics										1.00				
11. Satisfaction with politics			0.12*								1.00			
12. Gender			0.00			-0.03*	-0.07*		-0.03*		-0.05*	1.00		
13. Age			0.17*										1.00	
14. Education			0.11*											1.00

**p<.01 (two-tailed test)*
Source: European Social Survey, 2010 (own calculations)

Table 4.3 Correlations (Mann-Whitney U test, N = 41,041)

	Voting	N	Mean Rank
Internet use	No	9,419	20,371.22
	Yes	31,622	20,565.61

Mann-Whitney U	147513038.5
Z	-1.499
Significance (2-tailed)	0.134

Source: European Social Survey, 2010 (own calculations)

4.2 Results

First, ordinary least squares regression (OLS) is used to test the first hypothesis: *Using the Internet on the individual level positively influences the extent to which citizens participate in politics (H1).* Therefore, the null hypothesis represents the idea that using the Internet on the individual level has no significant impact on the extent to which citizens participate in politics. For this regression, the ordinal independent variable "Internet use" is used in combination with the ordinal dependent variable in the form of an index: "political participation". In addition, all control variables are included. To test H1, a multiple linear regression was executed. Table 4.4 shows that the effect of Internet use on political participation was found to be significant in this sample, b = 0.082, SE = 0.004, t(41041) = 19.150, p < .001. Therefore, a positive influence was found, and it indicates that when citizens use the Internet more often, they tend to participate in politics more often. However, it is visible in table 4.4 that interest in politics is the most influential predictor of political participation, b = 0.384, SE = 0.007, t(41041) = 53.882, p < .001, would the difference between countries not play a role in this sample. Therefore, it can be stated that the more citizens are interested in politics, the more they tend to participate in politics, and this relation was found to be stronger than the relation between Internet use and participation in politics. Moreover, living in certain countries can also be significant predictors for political participation. Nevertheless, this significance is not only caused by the differences between these countries and their influence on political participation, but also by the reference category: Belgium. However, there is a large difference between living in Lithuania, b = -0.653, SE = 0.042, t(41041) = -15.607, p < .001, and living in Sweden, b = 0.505, SE = 0.042, t(41041) = 11.904, p <.001, as visible in Appendix B. Therefore, the regression shows that there are differences between the influence of the countries citizens live in on the extent to which they participate in politics. The regression that was executed found an explained variance of $R^2 = .252$, which means that 25.2% of the variation in the dependent variable is accounted for by the predictors

in the model. Therefore, 25.2% of the variation in political participation can be explained by all independent variables that were entered in the regression. In this regression, it was found that, after citizens' interest in politics, using the Internet has the largest effect on political participation. Consequently, the analysis revealed that, even though this influence is not particularly strong, Internet use is a significant predictor of political participation. Therefore, the null hypothesis that using the Internet does not influence the extent to which citizens participate in politics, is rejected.

Second, binary logistic regression is used to find the relationship between Internet use and the first dimension of political participation: voting. It was hypothesised that: *Using the Internet on the individual level positively influences whether citizens vote (H2).* Therefore, the null hypothesis represents the idea that using the Internet on the individual level has no significant impact on whether citizens vote. For this regression, the independent variable "Internet use" and the dichotomous dependent variable "Voting", with 1 representing 'Yes' and 0 representing 'No', are used. In addition, all control variables are included. To test H2, a binary logistic regression was executed. Table 4.5 shows that the effect of Internet use on voting was found to be significant in this sample, $b = 0.052$, $SE = 0.010$, $p < .001$, with an Odds ratio of 1.053, which means that use of the Internet on the individual level increases the chance of voting with 5.3%. However, it is found that interest in politics is a stronger significant predictor of voting, $b = 0.562$, $SE = 0.017$, $p < .001$, with an Odds ratio of 1.754, as visible in table 4.5. This means that interest in politics increases the chance of voting with 75.4%, which is stronger than the predictive value of using the Internet. Again, it is visible in Appendix C that living in certain countries is often found to be a significant predictor of the chance of voting. However, in this regression, almost all countries were found to have a negative influence on the chance that citizens would vote. For example, for living in Belgium a positive influence would be expected, as voting is not only obligatory in Belgium, but this mandate is also enforced. Nevertheless, the Odds ratio shows a value of 0.243, which means that living in Belgium decreases the chance of voting with 75.7%, $b = -1.418$, $SE = 0.112$, $p < .001$. However, the Economist Intelligence Unit (2021) explained that Belgium is a flawed democracy, and the main reason for this is the low political participation rate. Thus, this could be an explanation for the negative influence of living in Belgium. As there is no measure equal to the explained variance of a model as described for linear regression, the Hosmer and Lemeshow test is used to find the significance of the fit of the model. For this regression, the Hosmer and Lemeshow test shows $p < .001$, which means that there is no evidence that the model is demonstrating acceptable fit to the data. Consequently, the analysis revealed that Internet use is a significant predictor of voting. Therefore, the null hypothesis that using the Internet does not influence whether citizens vote or not, is rejected. However, it must be stated that the model is not significantly fitting the data, and the correlation between Internet use and voting was also found to be nonsignificant.

Third, ordinary least squares regression (OLS) is used to test the third hypothesis: *Using the Internet on the individual level positively influences whether citizens participate in campaign-oriented politics (H3).* Therefore, the null hypothesis represents the idea that using the Internet on the individual level has no significant impact on whether citizens participate in campaign-oriented politics. For this regression, the ordinal independent variable "Internet use" and the ordinal dependent variable "Campaign-oriented political participation" are used. In addition, all control variables are included. To test H3, a multiple linear regression was executed. Table 4.4 shows that the effect of Internet use on campaign-oriented political participation was found to be significant in this sample, $b = 0.034$, $SE = 0.003$, $t(41041) = 12.673$, $p < .001$. However, it is visible in table 4.4 that interest in politics is a stronger significant predictor of campaign-oriented political participation, $b = 0.174$, $SE = 0.004$, $t(41041) = 39.300$, $p < .001$. The regression that was executed found an explained variance of $R^2 = .158$, which shows that 15.8% of the variation in the dependent variable campaign-oriented political participation is accounted for by the predictors in the model. Moreover, the different

countries where citizens live were often found to be significant predictors of campaign-oriented political participation, with Belgium as a reference category. For example, Appendix B shows that there is a large difference between living in Norway, b = 0.347, SE = 0.026, t(41041) = 13.265, p < .001, and living in Bulgaria, b = -0.244, SE = 0.024, t(41041) = -10.308, p <.001. Therefore, the regression shows that there are differences between the influence of the countries citizens live in on participating in campaign-oriented politics. Consequently, the analysis revealed that, even though this influence is not particularly strong, Internet use is a significant predictor of campaign-oriented political participation. Therefore, the null hypothesis that using the Internet does not influence whether citizens participate in campaign-oriented politics, is rejected.

Fourth, ordinary least squares regression (OLS) is used to test the fourth hypothesis: *Using the Internet on the individual level positively influences whether citizens participate in cause-oriented politics (H4).* Therefore, the null hypothesis represents the idea that using the Internet on the individual level has no significant influence on whether citizens participate in cause-oriented politics. For this regression, the ordinal independent variable "Internet use" and the ordinal dependent variable "Cause-oriented political participation" are used. In addition, all control variables are included. To test H4, a multiple linear regression was executed. Table 4.4 shows that the effect of Internet use on cause-oriented political participation was found to be significant in this sample, b = 0.042, SE = 0.002, t(41041) = 17.206, p < .001. However, in this regression, interest in politics was found to be significant with b = 0.141, SE = 0.004, t(41041) = 34.258, p < .001. Therefore, interest in politics was found to be a stronger predictor of cause-oriented political participation than using the Internet. In addition, the differences between countries where citizens live are often found to be significant with Belgium as a reference category. As visible in Appendix B, large difference was found between living in France, b = 0.400, SE = 0.023, t(41041) = 17.048, p < .001, and living in Belgium, b = 0.012, SE = 0.025, t(41041) = 0.476, p = .634. Therefore, the regression shows that there are differences between the influence of the countries citizens live in on participating in cause-oriented politics. The regression found an explained variance of R^2 = .181, which shows that 18.1% of the variation in the dependent variable cause-oriented political participation is accounted for by the predictors in the model. Consequently, the analysis revealed that, even though this influence is not particularly strong, Internet use is a significant predictor of cause-oriented political participation. Therefore, the null hypothesis that using the Internet does not influence whether citizens participate in cause-oriented politics, is rejected.

Table 4.4 Linear Regression analyses H1, H3 and H4 (N = 41,041)

	H1				H3				H4			
	b	s.e.	t	p	b	s.e.	t	p	b	s.e.	t	p
Constant	.275	.043	6.332	<.001	-.077	.027	-2.843	.004	.012	.025	.476	.634
Internet use	.082	.004	19.150	<.001	.034	.003	12.673	<.001	.042	.002	17.206	<.001
Traditional media	-.017	.005	-3.445	.001	-.012	.003	-3.977	<.001	-.014	.003	-5.057	<.001
Frequency of political discussion	.013	.006	2.020	.043	.008	.004	2.166	.030	.013	.004	3.694	<.001
Social trust	.024	.003	9.194	<.001	.007	.002	4.208	<.001	.016	.002	10.370	<.001
Political trust	.030	.004	7.863	<.001	.024	.002	10.065	<.001	-.005	.002	-2.532	.011
Interest in politics	.384	.007	53.882	<.001	.174	.004	.211	<.001	.141	.004	34.258	<.001
Satisfaction with politics	-.031	.003	-9.032	<.001	-.016	.002	-7.613	<.001	-.026	.002	-12.983	<.001
Gender	.002	.011	.215	.829	-.068	.007	-.045	<.001	.045	.007	6.833	<.001
Age	.005	<.001	12.102	<.001	.002	<.001	6.326	<.001	-.001	<.001	-5.858	<.001
Education	.001	<.001	27.870	<.001	<.001	<.001	17.347	<.001	<.001	<.001	22.290	<.001
R^2	.252				.158				.181			

Dependent variable H1: Political participation Index
Dependent variable H3: Campaign-oriented political participation
Dependent variable H4: Cause-oriented political participation
Source: European Social Survey, 2010 (own calculations)

Table 4.5 Logistic Regression analysis H2 (N = 41,041)

	H2			
	b	s.e.	p	Exp(B)
Constant	-1.416	.112	<.001	.243
Internet use	.052	.010	<.001	1.053
Traditional media	.060	.011	<.001	1.062
Frequency of political discussion	-.025	.014	.085	.975
Social trust	.023	.006	<.001	1.023
Political trust	.085	.009	<.001	1.089
Interest in politics	.562	.017	<.001	1.754
Satisfaction with politics	.040	.008	<.001	1.041
Gender	.146	.026	<.001	1.157
Age	.029	.001	<.001	1.030
Education	.001	<.001	<.001	1.001

Dependent variable H2: Voting
Source: European Social Survey, 2010 (own calculations)

Last, binary logistic regressions will be run for eight of the nine modes of political participation, as one of the modes, voting, is already tested in H2. Therefore, the modes contacting politicians or government officials, working in political or action groups, working in other organisations that aim to influence politics or democracy, wearing or displaying campaign material, being a member of a political party, signing petitions, participating in lawful public demonstrations, and boycotting certain products will be analysed in relation with Internet use. In addition, all control variables are included.

First, the effect of Internet use on contacting politicians in this sample was found to be significant as visible in table 4.6, b = 0.142, SE = 0.012, p < .001, with an Odds ratio of 1.152, which means that use of the Internet on the individual level increases the chance of contacting politicians with 15.2%. In this regression, gender (with 0 = 'male' and 1 = 'female'), b = -0.226, SE = 0.031, p < .001, and interest in politics, b = 0.563, SE = 0.202, p < .001, were found to have a stronger effect on contacting politicians than using the Internet, with an Odds ratio of 0.798 and 1.756 respectively. As explained before, the Hosmer and Lemeshow test is used to find the significance of the fit of the model to the data. For this regression, the Hosmer and Lemeshow test shows p = .010, which means that there is no evidence that the model is not demonstrating acceptable fit to the data. Therefore, it can be stated that, after interest in politics (75.6%) and gender (-20.2%), Internet use (15.2%) is the strongest predictor of contacting politicians.

Second, the effect of Internet use on working for political parties was found to be significant as well, b = 0.147, SE = 0.023, p < .001, with an Odds ratio of 1.159, which means that use of the Internet on the individual level increases the chance of working for political parties with 15.9%. This is visible in table 4.6. In this regression, political trust, b = 0.166, SE = 0.019, p < .001, and interest in politics, b = 1.152, SE = 0.041, p < .001, were found to have a stronger effect on working for political parties than using the Internet, with an Odds ratio of 1.181 and 3.164 respectively. However, for this regression, the Hosmer and Lemeshow test shows p < .001, which means that there is evidence that the model is not demonstrating acceptable fit to the data. Therefore, it can be stated that, after interest in politics (316.4%) and political trust (18.1%), Internet use (15.9%) is the strongest predictor of working for political parties in this sample. Nevertheless, it must be stated that evidence was found that the model is not demonstrating acceptable fit to the data.

Third, the effect of Internet use on working for other organisations that aim to influence politics or democracy was found to be significant, b = 0.187, SE = 0.013, p < .001, with an Odds ratio of 1.206, which means that use of the Internet on the individual level increases the chance of working

for organisations that aim to influence politics or democracy (excluding political parties) with 20.6%. This is visible in table 4.6. In this regression, interest in politics, b = 0.450, SE = 0.022, p < .001, was found to have a stronger effect on working for organisations that aim to influence politics or democracy (excluding political parties) than using the Internet, with an Odds ratio of 1.568. For this regression, the Hosmer and Lemeshow test shows p < .001, which means that there is evidence that the model is not demonstrating acceptable fit to the data. Therefore, it can be stated that, after interest in politics (56.8%), Internet use (20.6%) is the strongest predictor of working for other organisations that aim to influence politics or democracy in this sample. Nevertheless, it must be stated that evidence was found that the model is not demonstrating acceptable fit to the data.

Fourth, the effect of Internet use on wearing or displaying campaign material was found to be significant, b = 0.100, SE = 0.018, p < .001, with an Odds ratio of 1.105, which means that the use of the Internet on the individual level increases the chance of wearing or displaying campaign material with 10.5%. This is visible in table 4.6. In this regression, gender, b = 0.233, SE = 0.044, p < .001, and political interest, b = 0.636, SE = 0.029, p < .001, were found to have a stronger effect on wearing or displaying campaign material than using the Internet, with an Odds ratio of 1.263 and 1.890 respectively. For this regression, the Hosmer and Lemeshow test shows p = .675, which means that there is no evidence that the model is not demonstrating acceptable fit to the data. Therefore, it can be stated that, after interest in politics (89%) gender (26.3%), Internet use (10.5%) is the strongest predictor of wearing or displaying campaign material in this sample.

Fifth, the effect of Internet use on being a member of a political party was found to be nonsignificant, b = 0.026, SE = 0.019, p = 0.174, with an Odds ratio of 1.027. This is visible in table 4.7. Therefore, Internet use is not a significant predictor of being a member of a political party. In addition, the Hosmer and Lemeshow test shows p = .001 for this regression, which means that there is evidence that the model is not demonstrating acceptable fit to the data. Therefore, Internet use has no significant effect on being a member of a political party.

Sixth, the effect of Internet use on signing petitions was found to be significant, b = 0.192, SE = 0.011, p < .001, with an Odds ratio of 1.212, which means that the use of the Internet on the individual level increases the chance of signing petitions with 21.2%. This is visible in table 4.7. In this regression, gender, b = 0.241, SE = 0.028, p < .001, and interest in politics, b = 0.456, SE = 0.018, p < .001, were found to have stronger effect on signing petitions than using the Internet, with an Odds ratio of 1.272 and 1.578 respectively. For this regression, the Hosmer and Lemeshow test shows p < .001, which means that there is evidence that the model is not demonstrating acceptable fit to the data. Therefore, it can be stated that, after interest in politics (57.8%) and gender (27.2%), Internet use (21.2%) is the strongest predictor of signing petitions. Nevertheless, it must be stated that evidence was found that the model is not demonstrating acceptable fit to the data.

Seventh, the effect of Internet use on taking part in lawful demonstrations was found to be significant, b = 0.107, SE = 0.018, p < .001, with an Odds ratio of 1.113, which means that the use of the Internet on the individual level increases the chance of taking part in lawful demonstrations with 11.3%. This is visible in table 4.7. In this regression, satisfaction with politics, b = -0.132, SE = 0.014, p < .001, and interest in politics, b = 0.586, SE = 0.029, p < .001, were found to have a stronger effect on taking part in lawful demonstrations than using the Internet, with an Odds ratio of 0.876 and 1.797 respectively. For this regression, the Hosmer and Lemeshow test shows p = .507, which means that there is no evidence that the model is not demonstrating acceptable fit to the data. Therefore, it can be stated that, after interest in politics (79.7%) and satisfaction with politics (-12.4%), Internet use (11.3%) is the strongest predictor of taking part in lawful demonstrations.

Last, the effect of Internet use on boycotting certain products was found to be significant, b = 0.173, SE = 0.013, p < .001, with an Odds ratio of 1.189, which means that the use of the Internet on the individual level increases the chance of boycotting certain products with 18.9%. This is visible in

table 4.7. In this regression, gender, b = 0.201, SE = 0.031, p < .001, and interest in politics, b = 0.488, SE = 0.020, p < .001, were found to have a stronger effect on boycotting certain products than using the Internet, with an Odds ratio of 1.223 and 1.629 respectively. For this regression, the Hosmer and Lemeshow test shows p = .088, which means that there is no evidence that the model is not demonstrating acceptable fit to the data. Therefore, it can be stated that, after interest in politics (62.9%) and gender (22.3%), Internet use (18.9%) is the strongest predictor of boycotting certain products.

Therefore, it was found that using the Internet significantly affects contacting politicians, working for political parties, working for organisations that aim to influence politics or democracy, wearing or displaying campaign material, signing petitions, taking part in lawful demonstrations and boycotting certain products in a positive way. However, using the Internet is not a significant predictor of being a member of a political party. In addition, the model was not demonstrating acceptable fit to the data for working for political parties, working for organisations that aim to influence politics or democracy, and signing petitions. Moreover, interest in politics, gender and political trust also have a significant influence on political participation, and sometimes play stronger roles than using the Internet. Thus, it can be stated that the Internet influences almost all separate modes of political participation addressed in this study positively. Nevertheless, using the Internet is not the only or the strongest predictor of political participation, and the relationship is not always significant.

Table 4.6 Logistic Regression analyses separate modes 1-4 (N = 41,041)

	Contacting politicians				Working for political party				Working for another organisation				Wearing/displaying campaign information			
	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)
Constant	-3.815	.124	<.001	.022	-6.178	.223	<.001	.002	-3.871	.122	<.001	.021	-4.131	.168	<.001	.016
Internet use	.142	.012	<.001	1.152	.147	.023	<.001	1.159	.187	.013	<.001	1.206	.100	.018	<.001	1.105
Traditional media	-.007	.014	.587	.993	-.032	.026	.225	.969	-.024	.015	.101	.976	-.019	.020	.352	.982
Frequency of political discussion	.024	.018	.181	1.024	.011	.032	.725	1.011	.025	.020	.201	1.026	.062	.025	.015	1.064
Social trust	-.007	.007	.363	.993	.004	.014	.762	1.004	.060	.008	<.001	1.062	.062	.011	<.001	1.064
Political trust	.067	.011	<.001	1.069	.166	.019	<.001	1.181	.049	.012	<.001	1.051	.069	.015	<.001	1.071
Interest in politics	.563	.020	<.001	1.756	1.152	.041	<.001	3.164	.450	.022	<.001	1.568	.636	.029	<.001	1.890
Satisfaction with politics	-.053	.010	<.001	.949	-.100	.017	<.001	.905	-.028	.011	<.001	.973	-.065	.014	<.001	.937
Gender	-.226	.031	<.001	.798	-.393	.059	<.001	.675	-.268	.033	<.001	.765	.233	.044	<.001	1.263
Age	.004	.001	<.001	1.004	.005	.002	.015	1.005	.009	.001	<.001	1.009	-.012	.002	<.001	.988
Education	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001

Source: European Social Survey, 2010 (own calculations)

Table 4.7 Logistic Regression analyses separate modes 5-8 (N = 41,041)

	Being a member of political party				Signing petitions				Taking part in lawful demonstration				Boycotting certain products			
	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)
Constant	-5.366	.192	<.001	.005	-2.865	.106	<.001	.057	-3.603	.172	<.001	.027	-3.790	.130	<.001	.023
Internet use	.026	.019	.174	1.027	.192	.011	<.001	1.212	.107	.018	<.001	1.113	.173	.013	<.001	1.189
Traditional media	<.001	.022	.990	1.000	.009	.012	.453	1.009	-.002	.020	.917	.998	-.064	.014	<.001	.938
Frequency of political discussion	-.058	.028	.037	.943	.022	.016	.171	1.023	.040	.025	.118	1.040	.063	.018	.001	1.065
Social trust	-.015	.012	.211	.985	.059	.007	<.001	1.060	.083	.011	<.001	1.086	.046	.008	<.001	1.047
Political trust	.207	.017	<.001	1.230	-.014	.010	.136	.986	.009	.015	.571	1.009	-.060	.011	<.001	.942
Interest in politics	.936	.034	<.001	2.550	.456	.018	<.001	1.578	.586	.029	<.001	1.797	.488	.020	<.001	1.629
Satisfaction with politics	-.074	.015	<.001	.928	-.063	.009	<.001	.939	-.132	.014	<.001	.876	-.089	.010	<.001	.915
Gender	-.405	.051	<.001	.667	.241	.028	<.001	1.272	-.119	.045	.008	.887	.201	.031	<.001	1.223
Age	.014	.002	<.001	1.014	-.008	.001	<.001	.992	-.016	.002	<.001	.984	<.001	.001	.946	1.000
Education	<.001	<.001	.289	1.000	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001	.002	<.001	<.001	1.002

Source: European Social Survey, 2010 (own calculations)

5. Conclusion and discussion

In this cross-sectional study, the question *How does using the Internet affect the extent to which citizens participate in politics?* was addressed. Four hypotheses and eight separate modes of political participation were tested to provide an answer to this research question. The hypotheses were formulated based on theoretical background and past research that showed a positive association between Internet use and political participation. Consequently, it was assumed that differences in the extent of Internet use on the individual level affect the extent to which and whether citizens participate in politics. Specifically, it was hypothesised that Internet use on the individual level positively influences political participation in general, and the three dimensions of political participation: voting, campaign-oriented political participation, and cause-oriented political participation. Furthermore, the influence of Internet use on the modes of political participation was analysed. Control variables were added and the difference between countries citizens live in was included in the analyses.

Several main conclusions can be drawn after executing the linear and logistic regression analyses. First, Internet use seems to have a positive influence on whether citizens participate in politics. Even though this influence is not particularly strong, Internet use was, after interest in politics, found to be the strongest predictor of political participation in this study. This is consistent with past research and the theoretical background laid out in chapter 2. However, it must be stated that the difference between the strengths of interest in politics and using the Internet is rather large. Second, it was found that Internet use has a positive influence on voting, however, interest in politics was again found to be a stronger predictor. In addition, it must be stated that the difference between Internet use and interest in politics is substantial in this regression. Nevertheless, these findings align with the assumption that voting is easier for citizens that use the Internet, because of the information available and the possibility of online voting. Third, regression showed that Internet use significantly influences campaign-oriented political participation. This aligns with the assumption that Internet use provides information and possibilities to participate in campaign-oriented politics more. Again, only interest in politics was found to be a stronger predictor than using the Internet. Fourth, Internet use significantly influences cause-oriented political participation. Again, it was found that even though its influence is not particularly strong, Internet use is the strongest predictor of cause-oriented political participation after interest in politics. This is consistent with the assumption that the Internet can play a nudging role for citizens to become more politically active. Last, it was found that Internet use positively influences contacting politicians, working for political parties, working for organisations that aim to influence politics or democracy, wearing or displaying campaign material, signing petitions, taking part in lawful demonstrations and boycotting certain products separately. However, gender, political trust and interest in politics were often found to be stronger predictors of certain modes of political participation. It was repeatedly visible that interest in politics is the strongest predictor of political participation. Although it was theorised that interest in politics could have a strong influence on political participation, studies did not always find this predictor to be significant. Therefore, it is important to focus on this predictor more when searching for a relationship between Internet use and political participation in future research. Nevertheless, one of the modes was not found to be significant: the association between Internet use and being a member of a political party was found to be nonsignificant. Thus, as an answer to the research question, it can be stated that using the Internet significantly affects the extent to and whether citizens participate in politics in a positive way. However, this influence is not always substantial and is usually weaker than the influence of citizens' interest in politics.

5.1 Strengths and limitations

In this study, several limitations can be found. First, quantitative data was used to answer the research question. Therefore, the data does not provide highly detailed insight into the motives and argumentation of the respondents. In addition, it can be expected that there is a discrepancy between the extent to which citizens use the Internet and what is reported in the dataset. Another limitation on the measuring of Internet use concerns that it is not examined what citizens do when using the Internet (for example, emailing), why they use it, or where they search for information. Moreover, as mentioned before, the cross-sectional design of collecting surveys as a method of data collection

cannot exclude the possibility that the relationship between Internet use and political participation is the other way around; and the extent to which citizens participate in politics influences the extent to which they use Internet. Furthermore, not all antecedents of Internet use and political participation were included in the analyses, as that was not possible with the existing dataset. Last, the implications of using a dataset from 2010 for a quick developing technology as the Internet must be acknowledged. Therefore, it is possible that the findings from this study do not correspond with contemporary society.

Strengths can also be recognised in this study. First, the sample selection of the European Social Survey dataset can be viewed as unbiased sample selection. There is equal opportunity for citizens in Europe to be selected for this survey. Moreover, although it is impossible to infer generalisations to all world citizens, it can be stated that the results are representative for the citizens of Europe due to, among others, the large sample size. Last, one of the strengths of this study contains the testing of the influence of Internet use on separate modes of political participation. This was visible for the mode of being a member of political parties, that was found to be nonsignificant in relation to Internet use.

5.2 Implications and recommendations for further research

Overall, the findings of this study are corresponding with the expectations laid out in the theoretical framework and past research. Therefore, this study contributes to the existing evidence that Internet use positively influences political participation. Hence, the implications for this trend and the investigated patterns of technology influencing democracy are of high importance. First, as the Internet serves as a continuous source of information for all citizens, it is a priority to ensure the information that can be found online is correct. The aim would be to exclude misinformation as a basis of citizens' motives to participate in politics and influence democracy. Second, the role of the Internet as a medium for communication can also serve as an opportunity, as well as a challenge for democracies. The Internet can serve as a place where citizens and government meet each other, and where political parties can connect with citizens. However, the role as a medium for communication can also serve as a challenge, as the Internet makes it possible for citizens to organise themselves into, for example, one-issue groups. This can lead to a more segregated society and can even be threatening for democracy. Third, the Internet is a place where virtual public debates can be held. This gives citizens the opportunity to talk about government, democracy and participating in politics with each other more. However, it can also lead to more harmful discussions, resentful statements and more attention on the segregation of society. An example of the dangers of the roles of the Internet for democracy was mentioned at the beginning of this paper: the citizen attack on the Capitol in Washington in 2021. It is possible that misinformation, the ability to organise and the emphasis on hate and polarised opinions contributed to the attack. It remains to be seen to what extent these developments will alter society and its citizens, but it is clear that the consequences not only provide opportunities, but also challenges for democracy.

In general, this study provided insight into how using the Internet on the individual level influences whether citizens participate in different kinds of political participation. However, it is important to consider and study other forms of political participation separately as well. Moreover, more antecedents of Internet use and political participation should be included in the analyses to portray a more extensive image of the relationship. In addition, the influence of the different roles of the Internet could be investigated with an expanded dataset. Therefore, the dataset might be improved by adding questions on more different forms of political participation, antecedents of Internet use and political participation, and by measuring the different reasons to use the Internet. For example, antecedents as civic duty and political efficacy were not available in this dataset, but are in other studies found to be influencing the relationship between Internet use and political participation. Another suggestion is to conduct a study in which the role that gender plays in these kinds of models is enlarged on. In conclusion, more constructs possibly influencing the studied relationship between Internet use and political participation should be investigated.

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Data Appendix

Appendix A: Descriptive statistics of all included variables

Table A Descriptive Statistics (N = 41,041)

	Min	Max	Mean	S.d.	Frequency
Internet use	.00	4.00	2.24	1.81	
Never use					37.2
Less than once a month					1.3
Monthly					3.6
Weekly					15.8
Every day					42.1
Political participation	.00	5.00	1.55	1.30	
Does not participate in politics					16.6
					46.8
					17.0
					9.5
					5.2
Participates in politics very often					5.1
Voting (*dimension 1*)	.00	1.00	.76	.42	
No					22.4
Yes					77.6
Campaign-oriented (*dimension 2*)	.00	3.00	.39	.76	
Does not participate in politics					73.9
					16.5
					5.9
Participates in politics very often					3.7
Cause-oriented (*dimension 3*)	.00	3.00	.40	.72	
Does not participate in politics					71.7
					18.4
					8.1
Participates in politics very often					1.9
Voted last national election	.00	1.00	.78	.42	
No					22.4
Yes					77.6
Contacted politician	.00	1.00	.14	.34	
No					86.5
Yes					13.5
Worked for a political party	.00	1.00	.04	.18	
No					96.5
Yes					3.5
Worked for another organisation*	.00	1.00	.13	.34	
No					86.7
Yes					13.3
Worn or displayed campaign badge/information	.00	1.00	.06	.25	
No					93.5
Yes					6.5
Member of a political party	.00	1.00	.05	.21	
No					95.4
Yes					4.6
Signed petition	.00	1.00	.20	.40	
No					80.3
Yes					19.7
Taken part in lawful public demonstration	.00	1.00	.06	.24	
No					94.1
Yes					5.9
Boycotted a certain product	.00	1.00	.15	.35	
No					85.4
Yes					14.6

Traditional media	.00	7.00	2.91	1.23	
Frequency of political discussion	.00	7.00	1.67	1.03	
Social trust	.00	10.00	4.94	2.44	
You can't be too careful					5.3
					5.0
					7.5
					10.9
					10.1
					20.1
					10.4
					14.5
					11.5
					3.1
Most people can't be trusted					1.7
Political trust	.00	10.00	3.83	2.20	
Interest in politics	.00	3.00	1.36	.92	
Satisfaction with politics	.00	10.00	4.37	2.26	
Gender	.00	1.00	.54	.50	
Male					45.9
Female					54.1
Age	14.00	101.00	50.21	17.80	
Education	.00	800.00	360.26	191.12	
Belgium	.00	1.00	.04	.19	
No					96.2
Yes					3.8
Bulgaria	.00	1.00	.05	.23	
No					94.6
Yes					5.4
Switzerland	.00	1.00	.03	.16	
No					97.2
Yes					2.8
Cyprus	.00	1.00	.02	.15	
No					97.6
Yes					2.4
Czechia	.00	1.00	.05	.22	
No					94.7
Yes					5.3
Germany	.00	1.00	.07	.25	
No					93.5
Yes					6.5
Denmark	.00	1.00	.03	.18	
No					96.6
Yes					3.4
Estonia	.00	1.00	.04	.19	
No					96.3
Yes					3.7
Spain	.00	1.00	.04	.19	
No					96.2
Yes					3.8
Finland	.00	1.00	.04	.20	
No					96.0
Yes					4.0
France	.00	1.00	.04	.19	
No					96.3
Yes					3.7
United Kingdom	.00	1.00	.05	.22	
No					94.7
Yes					5.3
Greece	.00	1.00	.06	.24	
No					94.0
Yes					6.0
Croatia	.00	1.00	.03	.18	

No					96.5
Yes					3.5
Hungary	.00	1.00	.04	.19	
No					96.4
Yes					3.6
Ireland	.00	1.00	.06	.23	
No					94.3
Yes					5.7
Israel	.00	1.00	.04	.20	
No					95.6
Yes					4.4
Lithuania	.00	1.00	.03	.18	
No					96.6
Yes					3.4
Netherlands	.00	1.00	.04	.20	
No					95.8
Yes					4.2
Norway	.00	1.00	.03	.18	
No					96.7
Yes					3.3
Poland	.00	1.00	.04	.19	
No					96.4
Yes					3.6
Portugal	.00	1.00	.05	.21	
No					95.2
Yes					4.8
Sweden	.00	1.00	.03	.18	
No					96.7
Yes					3.3
Slovakia	.00	1.00	.04	.20	
No					95.8
Yes					4.2

Source: European Social Survey, 2010

Appendix B: Complete table linear regression H1, H3, H4

	H1				H3				H4			
	b	s.e.	t	p	b	s.e.	t	p	b	s.e.	t	p
Constant	.275	.043	6.332	<.001	-.077	.027	-2.843	.004	.012	.025	.476	.634
Internet use	.082	.004	19.150	<.001	.034	.003	12.673	<.001	.042	.002	17.206	<.001
Traditional media	-.017	.005	-3.445	.001	-.012	.003	-3.977	<.001	-.014	.003	-5.057	<.001
Frequency of political discussion	.013	.006	2.020	.043	.008	.004	2.166	.030	.013	.004	3.694	<.001
Social trust	.024	.003	9.194	<.001	.007	.002	4.208	<.001	.016	.002	10.370	<.001
Political trust	.030	.004	7.863	<.001	.024	.002	10.065	<.001	-.005	.002	-2.532	.011
Interest in politics	.384	.007	53.882	<.001	.174	.004	.211	<.001	.141	.004	34.258	<.001
Satisfaction with politics	-.031	.003	-9.032	<.001	-.016	.002	-7.613	<.001	-.026	.002	-12.983	<.001
Gender	.002	.011	.215	.829	-.068	.007	-.045	<.001	.045	.007	6.833	<.001
Age	.005	<.001	12.102	<.001	.002	<.001	6.326	<.001	-.001	<.001	-5.858	<.001
Education	.001	<.001	27.870	<.001	<.001	<.001	17.347	<.001	<.001	<.001	22.290	<.001
Bulgaria	-.500	.08	-13.115	<.001	-.244	.024	-10.308	<.001	-.196	.022	-8.898	<.001
Switzerland	-.021	.044	-.479	.632	-.034	.027	-1.239	.215	.351	.025	13.777	<.001
Cyprus	.050	.046	1.071	.284	.086	.029	2.985	.003	-.042	.027	-1.573	.116
Czechia	-.201	.038	-5.344	<.001	-.044	.023	-1.877	.060	.031	.022	1.443	.149
Germany	.165	.036	4.581	<.001	-.011	.022	-.494	.621	.278	.021	13.401	<.001
Denmark	.064	.042	1.533	.125	-.008	.026	-.312	.755	.133	.024	5.529	<.001
Estonia	-.479	.041	-11.820	<.001	-.141	.025	-5.588	<.001	-.173	.023	-7.405	<.001
Spain	.384	.040	9.493	<.001	.132	.025	5.252	<.001	.298	.023	12.782	<.001
Finland	502	.040	12.561	<.001	.355	.025	14.300	<.001	.268	.023	11.618	<.001
France	.186	.041	4.570	<.001	-.018	.025	-.699	.484	.400	.023	17.048	<.001
United Kingdom	-.161	.037	-4.308	<.001	-.157	.023	-6.743	<.001	.169	.022	7.821	<.001
Greece	-.100	.037	-2.693	.007	-.093	.023	-4.036	<.001	-.003	.021	-.122	.903
Croatia	-.048	.042	-1.139	.255	-.082	.026	-3.160	.002	.109	.024	4.522	<.001
Hungary	-.467	.041	-11.312	<.001	-.169	.026	-6.602	<.001	-.184	.024	-7.731	<.001
Ireland	-.255	.037	-6.891	<.001	-.087	.023	-3.808	<.001	-.024	.021	-1.132	.257
Israel	-.449	.039	-11.469	<.001	-.249	.024	-10.263	<.001	-.120	.023	-5.306	<.001
Lithuania	-.653	.042	-15.607	<.001	-.229	.026	-8.811	<.001	-.19	.024	-8.244	<.001
Netherlands	-.149	.040	-3.750	<.001	-.037	.025	-1.485	.138	-.012	.023	-.535	.593
Norway	.496	.042	11.782	<.001	.347	.026	13.265	<.001	.257	.024	10.568	<.001
Poland	-.421	.041	-10.226	<.001	-.176	.026	-6.883	<.001	-.149	.024	-6.260	<.001
Portugal	-.267	.039	-6.842	<.001	-.135	.024	-5.566	<.001	-.08	.022	-3.902	<.001
Sweden	.505	.042	11.904	<.001	.152	.026	5.769	<.001	.388	.024	15.868	<.001
Slovakia	-.304	.040	-7.659	<.001	-172	.025	-6.998	<.001	-.020	.023	-.868	.386
R^2		.252				.158				.181		

**Dependent variable H1: Political participation index*

***Dependent variable H3: Campaign-oriented political participation*

****Dependent variable H4: Cause-oriented political participation*

Source: European Social Survey, 2010

Appendix C: Complete table logistic regression H2

	H2			
	b	s.e.	p	Exp(B)
Constant	-1.416	.112	<.001	.243
Internet use	.052	.010	<.001	1.053
Traditional media	.060	.011	<.001	1.062
Frequency of political discussion	-.025	.014	.085	.975
Social trust	.023	.006	<.001	1.023
Political trust	.085	.009	<.001	1.089
Interest in politics	.562	.017	<.001	1.754
Satisfaction with politics	.040	.008	<.001	1.041
Gender	.146	.026	<.001	1.157
Age	.029	.001	<.001	1.030
Education	.001	<.001	<.001	1.001
Bulgaria	-.675	.102	<.001	.509
Switzerland	-2.182	.108	<.001	.113
Cyprus	-.191	.126	.129	.826
Czechia	-1.304	.096	<.001	.272
Germany	-.847	.099	<.001	.429
Denmark	-.309	.131	.018	.734
Estonia	-1.406	.103	<.001	.245
Spain	-.100	.110	.363	.905
Finland	-1.060	.107	<.001	.346
France	-1.243	.104	<.001	.288
United Kingdom	-1.268	.099	<.001	.281
Greece	-.192	.099	.053	.825
Croatia	-.657	.107	<.001	.518
Hungary	-.920	.106	<.001	.398
Ireland	-1.014	.097	<.001	.363
Israel	-.712	.105	<.001	.491
Lithuania	-1.601	.103	<.001	.202
Netherlands	-.944	.109	<.001	.389
Norway	-.650	.119	<.001	.522
Poland	-.885	.106	<.001	.413
Portugal	.-454	.102	<.001	.635
Sweden	-.239	.010	.101	1.269
Slovakia	-.983	.112	<.001	.374

Dependent variable: Voting

Source: European Social Survey, 2010

Appendix D: Complete table logistic regression separate modes 1-4

	Contacting politicians				Working for political party				Working for another organisation				Wearing/displaying campaign information			
	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)
Constant	-3.815	.124	<.001	.022	-6.178	.223	<.001	.002	-3.871	.122	<.001	.021	-4.131	.168	<.001	.016
Internet use	.142	.012	<.001	1.152	.147	.023	<.001	1.159	.187	.013	<.001	1.206	.100	.018	<.001	1.105
Traditional media	-.007	.014	.587	.993	-.032	.026	.225	.969	-.024	.015	.101	.976	-.019	.020	.352	.982
Frequency of political discussion	.024	.018	.181	1.024	.011	.032	.725	1.011	.025	.020	.201	1.026	.062	.025	.015	1.064
Social trust	-.007	.007	.363	.993	.004	.014	.762	1.004	.060	.008	<.001	1.062	.062	.011	<.001	1.064
Political trust	.067	.011	<.001	1.069	.166	.019	<.001	1.181	.049	.012	<.001	1.051	.069	.015	<.001	1.071
Interest in politics	.563	.020	<.001	1.756	1.152	.041	<.001	3.164	.450	.022	<.001	1.568	.636	.029	<.001	1.890
Satisfaction with politics	-.053	.010	<.001	.949	-.100	.017	<.001	.905	-.028	.011	<.001	.973	-.065	.014	<.001	.937
Gender	-.226	.031	<.001	.798	-.393	.059	<.001	.675	-.268	.033	<.001	.765	.233	.044	<.001	1.263
Age	.004	.001	<.001	1.004	.005	.002	.015	1.005	.009	.001	<.001	1.009	-.012	.002	<.001	.988
Education	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001
Bulgaria	-.673	.128	<.001	.510	-.217	.193	.259	.805	-2.667	.207	<.001	.069	-1.011	.187	<.001	.364
Switzerland	.384	.113	<.001	1.467	.154	.177	.384	1.166	-.538	.110	<.001	.584	-.513	.172	.003	.599
Cyprus	1.028	.118	<.001	2.795	.368	.210	.079	1.444	-.828	.150	<.001	.437	.135	.176	.444	1.144
Czechia	.684	.103	<.001	1.983	.146	.191	.443	1.157	-.692	.107	<.001	.500	-.265	.157	.091	.767
Germany	.189	.097	.052	1.208	-.413	.161	.010	.662	.302	.082	<.001	1.353	-.549	.137	<.001	.578
Denmark	.166	.108	.124	1.180	-.843	.189	<.001	.430	-.114	.094	.223	.892	-.265	.142	.062	.767
Estonia	.421	.108	<.001	1.523	.056	.189	.768	1.057	-1.337	.128	<.001	.263	-.470	.162	.004	.625
Spain	.540	.110	<.001	1.716	1.022	.163	<.001	2.779	.233	.096	.016	1.263	.702	.133	<.001	2.017
Finland	.763	.102	<.001	2.144	-.257	.185	.165	.774	.940	.086	<.001	2.559	.923	.123	<.001	2.517
France	.236	.110	.032	1.266	-.402	.192	.036	.669	-.185	.099	.063	.831	.380	.135	.005	1.462
United Kingdom	.310	.101	.002	1.364	-1.120	.212	<.001	.326	-1.311	.111	<.001	.270	-.180	.135	.185	.835
Greece	.126	.126	.252	1.135	.223	.180	.217	1.249	-1.106	.120	<.001	.331	-.474	.158	.003	.622
Croatia	-.310	.139	.026	.734	.386	.200	.053	1.471	-1.157	.144	<.001	.315	-.488	.190	.010	.614
Hungary	.265	.116	.022	1.303	-.277	.214	.197	.758	-.941	.126	<.001	.390	-.805	.194	<.001	.447
Ireland	.433	.101	<.001	1.542	-.148	.177	.403	.862	-.841	.103	<.001	.431	-.315	.142	.027	.730
Israel	-.248	.114	.030	.780	-.580	.194	.003	.560	-1.900	.141	<.001	.150	-.843	.165	<.001	.431
Lithuania	-.346	.136	.011	.707	-.075	.220	.732	.927	-1.708	.165	<.001	.181	-1.017	.215	<.001	.362
Netherlands	.232	.104	.026	1.261	-.565	.180	.002	.568	-.028	.090	.758	.972	-.969	.165	<.001	.379
Norway	.653	.105	<.001	1.921	.009	.177	.958	1.009	.301	.092	.011	1.352	1.481	.121	<.001	4.396
Poland	-.098	.123	.422	.906	-.345	.218	.114	.708	-.987	.124	<.001	.373	-.136	.157	.385	.872
Portugal	-.419	.134	.002	.657	-.218	.216	.312	.804	-1.143	.136	<.001	.319	-.698	.189	<.001	.497
Sweden	.185	.112	.096	1.204	-.546	.194	.005	.579	.239	.094	.011	1.270	.917	.126	<.001	2.501
Slovakia	.036	.116	.759	1.036	-.343	.216	.112	.709	-1.045	.124	<.001	.352	-.265	.160	.097	.767

Appendix E: Complete table logistic regression separate modes 5-8

	Being a member of political party				Signing petitions				Taking part in lawful demonstration				Boycotting certain products			
	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)	b	s.e.	p	Exp(B)
Constant	-5.366	.192	<.001	.005	-2.865	.106	<.001	.057	-3.603	.172	<.001	.027	-3.790	.130	<.001	.023
Internet use	.026	.019	.174	1.027	.192	.011	<.001	1.212	.107	.018	<.001	1.113	.173	.013	<.001	1.189
Traditional media	<.001	.022	.990	1.000	.009	.012	.453	1.009	-.002	.020	.917	.998	-.064	.014	<.001	.938
Frequency of political discussion	-.058	.028	.037	.943	.022	.016	.171	1.023	.040	.025	.118	1.040	.063	.018	.001	1.065
Social trust	-.015	.012	.211	.985	.059	.007	<.001	1.060	.083	.011	<.001	1.086	.046	.008	<.001	1.047
Political trust	.207	.017	<.001	1.230	-.014	.010	.136	.986	.009	.015	.571	1.009	-.060	.011	<.001	.942
Interest in politics	.936	.034	<.001	2.550	.456	.018	<.001	1.578	.586	.029	<.001	1.797	.488	.020	<.001	1.629
Satisfaction with politics	-.074	.015	<.001	.928	-.063	.009	<.001	.939	-.132	.014	<.001	.876	-.089	.010	<.001	.915
Gender	-.405	.051	<.001	.667	.241	.028	<.001	1.272	-.119	.045	.008	.887	.201	.031	<.001	1.223
Age	.014	.002	<.001	1.014	-.008	.001	<.001	.992	-.016	.002	<.001	.984	<.001	.001	.946	1.000
Education	<.001	<.001	.289	1.000	.001	<.001	<.001	1.001	.001	<.001	<.001	1.001	.002	<.001	<.001	1.002
Bulgaria	-.026	.151	.863	.974	-1.128	.113	<.001	.324	-.778	.179	<.001	.459	-.964	.146	<.001	.381
Switzerland	-.059	.154	.701	.943	.838	.093	<.001	2.312	-.410	.186	.027	.664	1.633	.112	<.001	5.120
Cyprus	.920	.154	<.001	2.509	-.825	.145	<.001	.438	-.102	.202	.613	.903	-.092	.169	.585	.912
Czechia	-.112	.163	.490	.894	.059	.089	.510	1.061	.006	.152	.967	1.006	.435	.115	<.001	1.545
Germany	-1.002	.152	<.001	.367	.521	.079	<.001	1.684	.151	.128	.239	1.163	1.324	.099	<.001	3.758
Denmark	-.573	.154	<.001	.564	.184	.091	.042	1.202	-.261	.153	.089	.770	.868	.111	<.001	2.381
Estonia	-.152	.164	.353	.859	-1.112	.116	<.001	.329	-1.280	.225	<.001	.278	.054	.125	.668	1.055
Spain	-.797	.205	<.001	.451	.655	.090	<.001	1.926	1.501	.127	<.001	4.487	.429	.120	<.001	1.536
Finland	.012	.146	.937	1.012	.464	.087	<.001	1.590	-1.716	.255	<.001	.180	1.739	.105	<.001	5.689
France	-1.048	.194	<.001	.351	.544	.089	<.001	1.723	1.137	.129	<.001	3.118	1.495	.107	<.001	4.460
United Kingdom	-1.202	.181	<.001	.301	.517	.082	<.001	1.678	-.981	.175	<.001	.375	.984	.104	<.001	2.676
Greece	.151	.152	.319	1.163	-1.334	.115	<.001	.263	.764	.131	<.001	2.146	.487	.111	<.001	1.628
Croatia	.983	.148	<.001	2.672	.455	.095	<.001	1.576	.519	.150	.001	1.681	.182	.130	.163	1.199
Hungary	-1.683	.275	<.001	.186	-2.022	.173	<.001	.132	-.640	.194	.001	.527	-.246	.142	.083	.782
Ireland	-.443	.158	.005	.642	-.350	.090	<.001	.704	.131	.137	.340	1.139	.004	.117	.976	1.004
Israel	-.282	.156	.070	.754	-.621	.097	<.001	.537	.032	.142	.819	1.033	-.515	.130	<.001	.597
Lithuania	-.260	.187	.166	.771	-.828	.116	<.001	.437	-.808	.202	<.001	.446	-1.236	.180	<.001	.290
Netherlands	-.492	.151	.001	.611	.198	.087	.023	1.219	-1.147	.193	<.001	.318	-.013	.121	.917	.987
Norway	.046	.150	.757	1.047	.693	.089	<.001	1.999	.394	.143	.006	1.483	.883	.113	<.001	2.418
Poland	-1.935	.323	<.001	.144	-.643	.108	<.001	.526	-1.133	.220	<.001	.322	-.557	.148	<.001	.573
Portugal	-.623	.194	.001	.536	-.943	.119	<.001	.389	-.281	.172	.103	.755	-1.160	.179	<.001	.314
Sweden	-.224	.154	.145	.800	.71	.090	<.001	2.161	-.297	.167	.076	.743	1.761	.108	<.001	5.821
Slovakia	-1.436	.247	<.001	.238	.251	.091	.006	1.285	-1.071	.212	<.001	.343	-.201	.132	.128	.818