KNOWLEDGE ABOUT THE EUROPEAN UNION AND ITS PREDICTORS IN TWENTY-FIVE EUROPEAN COUNTRIES

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1. Introduction

What explains the variance in knowledge about the European Union among European citizens? That is the intriguing question that I want to answer in this thesis.

There are various reasons to study political knowledge and knowledge about the European Union in particular (Dekker & Portengen, 2000; Rijkhoff & Dekker, 2009). Political knowledge is important to study because it is central to democracy theories and an important ingredient of democratic citizenship competence. Political knowledge is one of the most important ingredients of a well-functioning democracy. This was already an important thought during the Greek period of Socrates (Russell, 1946). Political knowledge is viewed as a necessary condition for comprehending the contents of public debate and for informed political participation (Westholm, et al., 1990). In all democracy and democratic citizenship models it is considered necessary that citizens have at least basic political knowledge. Political knowledge is also important to study because it tends to affect the content of beliefs, opinions, preferences, and attitudes; better informed publics have noticeable different policy and voting preferences (Andersen, et al., 2001; Luskin, 2002). Political knowledge also helps citizens understand their own interests and increases the stability of political attitudes and ideological consistency (Delli Carpini & Keeter, 1996). Finally, political knowledge is important to study because empirical studies have shown that it affects political behavior, and voting in particular (Delli Carpini & Keeter, 1996; Bartels, 1996; Popkin & Dimock, 1999; Wattenberg, et al., 2000; Milner, 2002; O'Toole, et al., 2003; Larcinese 2005). The referendum about the Treaty establishing a Constitution for Europe held on 1 June 2005 in the Netherlands offers a clear example of political knowledge's relevance for political behavior and orientations. Abstainers most indicated that they believed they were not sufficiently informed on the Constitution to go and vote (51%). Another quarter of the abstainers thought the Constitution was too complicated (26%). Asked for their reasons to the 'No' vote, again most voters indicated that the lack of information was the main reason (32%) (Commission, 2005: data from the post-referendum Flash Eurobarometer 172).

Generally, research findings are, not very positive about the citizens' levels of political knowledge of citizens (Delli Carpini & Keeter, 1996) although some scholars state that citizens tend to know more than factual knowledge questions can measure (Graber, 2001). Most political knowledge studies have been conducted in the United States, with a few studies carried out in other countries. These studies are generally limited in their national focus; the survey questions ask for knowledge about domestic politics.

My study focuses on the knowledge about the European Union (EU). Its aim is to explain the variance in this knowledge among Europeans. Thereto I conducted a theoretically well-founded analysis of data from all European populations. I have not found any other study with this ambition.

In this thesis I report about this study. First the theory will be presented. In the empirical part, the findings of the analysis of the whole dataset including the data from all respondents in Europe and the findings of the analysis per population/country will be presented. This latter analysis can be characterized as an international comparative analysis. Finally, the conclusions are presented together with a self-evaluation of the study and suggestions for a follow-up study, ultimately aiming to contribute to the development of a theory that can explain the variance in knowledge about the European Union.

2. Theory

2.1 Dependent variable

A fundamental task is defining what knowledge and political knowledge is. Knowledge relates to 'the truth', i.e. what has been or can be proven to be 'true'. Particularly the difference between knowledge and beliefs is important. A belief is something that one beliefs to be true but that cannot be proven to be 'true'). The proof cannot be given, because, among others, data are missing or the concept has more than one meaning. Knowledge is also to be distinguished from opinions, attitudes, emotions, values, behavioral intentions, and behavior (Krosnick & Brannon, 1993). I focus on objective knowledge, i.e. demonstrated knowledge. Subjective knowledge is self-assessed knowledge, i.e., the self-perception that one has or does not have knowledge. Congruence between objective and subjective knowledge is not self-evident; one may belief to know a lot but fail the test. Therefore I focus on objective knowledge. I also focus on low-level knowledge that includes memorization and reproduction. Middle-level knowledge (insight or understanding) and high-level knowledge that includes solving problems with theoretically more than one correct solution (Bloom, et al., 1956; Voss, et al., 1983) are excluded because I assume that these forms of political knowledge cannot realistically be expected among many 'ordinary' citizens.

There is no generally accepted conceptualization of political knowledge. I will use the definition of Delli Carpini & Keeter, probably the most cited authors in this field of study: 'We define political knowledge as the range of factual information about politics that is stored in long-term memory' (Delli Carpini & Keeter, 1996: 10). Political knowledge is knowledge of 'the political'. Several distinctions of 'the political' can be found in the literature. I prefer the distinction that Delli Carpini & Keeter has made. According to them knowledge about 'politics' is divided in three areas: 'the rules of the game, the substance of politics, and people and parties' (Delli Carpini & Keeter, 1996: 65). Taken as a whole these three broad areas 'provide a reasonable organizing principle for discussing what citizens should know about politics' (Delli Carpini & Keeter, 1996: 65). All three areas – rules, substance, and people and parties - are important, according to Delli Carpini & Keeter: 'Knowledge of public figures and of the institutions and processes of government serves little purpose if citizens are not also informed about the substance of politics itself' (1996: 65). The breadth of knowledge relates to the number of areas, while the depth of knowledge regards the level of detailed information within each area. 'The more citizens can draw on knowledge from these areas (breath) and the more detailed information within each area (depth), the better they are able to engage in politics' according to Delli Carpini & Keeter (1996: 65). Hence, the object of, and

the dependent variable in this study is objective low-level knowledge about the (rules, substance, and people and parties of the) European Union.

2.2 Independent variables

'Learning about politics requires the ability, motivation and opportunity to do so', according to Delli Carpini & Keeter (1996: 106). To explain the variance in knowledge about the EU I used these three categories of independent variables – ability, motivation, and opportunity.

'Ability' is the first set of variables and is mainly about the means to get information. Does the respondent have the resources to inform him/herself about the European Union? The following variables can be considered as ability variables: cognitive capacity and having an income.

Cognitive capacity is the first ability variable. This capacity is often measured by the IQ of a person, but because IQ data are not available I take the *years of education* as a proxy measure. 'The primacy of formal education as a facilitator of political knowledge lies in its relevance to all components of the opportunity-motivation-ability triad: it promotes the opportunity to learn about politics by transmitting specific information and influencing career paths and social networks; it increases the motivation by socializing students to the political world and stimulation their interest in it; and it develops the cognitive ability necessary for effective learning", according to Delli Carpini & Keeter (1996: 190). The hypothesis is: the more years of education one has enjoyed the more knowledge about the EU one has.

Income is the second ability variable. This is because becoming informed usually costs money and people need the financial means to buy the information. 'Access to cable television, computer bulletin boards, and other information services can be costly …' state Delli Carpini & Keeter (1996: 182). Communications devices require an investment; this is often not possible for citizens with no or a low income. Because income figures create difficulties in international comparative studies I take *having or not having an occupation* as a proxy measure. The hypothesis is that people with an occupation have more knowledge about the EU than people with no occupation. On the other hand, citizens with an occupation tend to have less free time to consume information and may therefore have less knowledge about the EU.

'Opportunity' is the second set of explanatory variables. 'Opportunity' is not about the resources to grasp information but the opportunities to get the information. The following variables can be considered as opportunity variables: mass media use, discussing politics with others, and convincing others.

Mass media use is the most important source of political information for many people (Hendriks Vettehen, et al., 2004). It includes the use of different media channels. The hypothesis is: the more one watches the television news, reads newspaper, and listens to the radio, the more knowledge about the European Union one has.

Discussing politics with friends is one of the most important variables that explain variance in political knowledge according to Delli Carpini and Keeter. Discussing politics may imply that one learns from other people about the European Union. The hypothesis is: the more one discuss politics with others, the more knowledge about the EU one has. *Convincing others* also includes exchange of information with others. The hypothesis is: the more one tries to convince others the more knowledge about the EU one has.

'Motivation' is the third set of variables to explain political knowledge. 'Motivation is certainly critical to the development of an informed citizenry' state Delli Carpini & Keeter (1996: 187). People may be motivated to inform themselves about the European Union because of particular cognitions and affects. The following variables can be considered as motivation variables: a positive image of the EU, feeling European, feeling involved in European affairs, pride to be European, and positive emotions with respect to the EU.

Image of the EU may have a positive effect on knowledge acquisition if this image is positive. Positive images usually create interest to learn more. Negative images usually result in indifference and thus to ignorance and no or a low level of knowledge. The hypothesis is: the more one has a positive image of the EU the more knowledge about the EU one has.

Feeling involved in European affairs is the next motivation variable. When people feel involved they will probably be more interested in the subject and more inclined to search for information than if they do not feel involved. The hypothesis is: the more one feels involved in European affairs, the more knowledge about the EU one has. We can expect the same effects from *feeling European* and *proud to be European.* We may assume that people who feel European and/or are proud to be European are more inclined to search for information about the EU than people who do not have these feelings. The hypotheses are: the more one feels European and the more one is proud to European the more knowledge about the EU one has.

Emotions with respect to the European Union are also expected to have an effect on knowledge acquisition. Generally people seek positive emotions and try to avoid negative emotions. If the European Union evokes positive emotions, people will like to spend more time to get information about the European Union. If the European Union evokes negative emotions, people will try to avoid any reading and hearing about the European Union. The hypotheses are: the more positive

emotions with respect to the EU one has the more knowledge about the EU one has, and the more negative emotions with respect to the EU one has the less knowledge about the EU one has.

Background variables for the explanation of variance in political knowledge are age and gender. *Age* groups considerably differ in political knowledge (Hendriks Vettehen, et al., 2004; Larcinese, 2005; Delli Carpini, 2005). In general, young people are politically less knowledgeable compared to older people. Age partly stands for personal characteristics such as cognitive ability and presence or absence of political experience (Delli Carpini and Keeter, 1996: 200), and political and politically relevant age group socialization. With respect to the latter we have to take into account that countries vary in duration of membership of the EU; many eastern European countries were till recently communist states and not a member of the European Union. The younger generation in these states may have more knowledge of the European Union than older people thanks to more personal experiences and more formal school education about the EU. Therefore we may expect that age has different effects on knowledge about the EU in western and eastern European countries. All of this is speculation, therefore I prefer the hypothesis which is in line with findings from previous studies: the older one is the more knowledge about the EU one has.

Gender is also an important variable in political knowledge studies (Jones, 1980; Cassel & Lo, 1997; Larcinese, 2005). Important variables that are related to sex/gender are personal characteristics such as ambition, political experiences, and political and politically relevant gender socialization (Burns, 2002). In general, boys/men are politically more knowledgeable compared to girls/women. This is closely related to the 'gender-poverty-gap' (Wiepking & Maas, 2005); in almost every country women tend to be social disadvantaged compared to men. We may assume that due to these social advantages or disadvantages gender can have an effect on knowledge about the EU. The hypothesis is boys/men have more knowledge about the EU than girls/women.

2.3 Model

Summarizing, I expect to be able to explain the variance in knowledge of the European Union for a considerable proportion by the following combination of ability, opportunity and motivation variables: years of education (proxy for IQ), having a job (proxy for income), discussing politics with others, convincing others, mass media use, image of the EU, feeling involved in European affairs, feeling to be a European, proud to be a European, emotions with respect to the EU, together with the background or structural variables age and gender.

3. Method

3.1 Survey data set

To find an answer to the research question I analyzed an existing data set. I checked various data sets to find out which one offered data about all variables that I wanted to include in my analysis. The data from an Eurobarometer survey in 2005 fulfilled most of my wishes. Eurobarometer surveys are commissioned by the European Commission twice a year since 1973. The official website for the Public Opinion Analysis sector of the European Commission states that 'Since 1973, the European Commission has been monitoring the evolution of public opinion in the Member States, thus helping the preparation of texts, decision-making and the evaluation of its work'. The Eurobarometer survey that I used is the 64.2 October-November 2005 ZA No. 44 survey. I obtained the dataset from the GESIS Data Archive for the Social Sciences at the Leibniz Institute for the Social Sciences (http://www.gesis.org/eurobarometer/survey-series/standard-special-eb/study-profiles/eurobarometer-642-za-4414-oct-nov-2005). The title of the survey is 'Eurobarometer 64.2 (2005), The European Constitution, Globalization, Energy Resources, and Agricultural Policy'. Data collection took place from 11 October to 15 November 2005. The sample size varied from 299 in Northern Ireland to 1.096 in Slovakia. The total number of respondents was 29.430.

3.2 Measures

For *knowledge about the EU* – our dependent variable – I used the answers to five questions. Four questions were asked as statements and could be answered by 'True', 'False' or 'Don't know'. The first question asks for a response the statement 'The European Union currently consists of fifteen Member States'. The second question includes the statement 'The European Union has its own anthem'. The third statement is 'Members of the European Parliament are elected directly by European Union citizens'. The fourth question asks for a response to the statement 'The last European elections were held in June 2002'. The fifth question differs from the others as respondents were asked 'On which of the following do you think most of the European Union budget is spent on?'. The respondents had to choose one of the following departments: Employment and social affairs, Agriculture, Scientific research, Regional aid, Foreign policy and aid to countries outside the European Union, Administrative and personnel costs, buildings, and Other. As we discussed before these questions should assess the breadth and the depth of knowledge about the European Union. The question about the number of member states can be considered as a 'people

and parties' question. The questions about the election of the members of the European Parliament and the year of the last European Parliament elections can be considered as 'rules of the game' questions. The questions about the anthem of the European Union and the European Union budget can be considered as 'substance of politics' questions. One may say that the set of questions meets the breadth requirement. The depth requirement is however not met because only one or two questions were asked per domain.

For *years of education* I have used the answers to the following question: 'How old were you when you stopped full-time education?'. The main reason to use this question - instead of asking for the highest finished education - is that education in years is comparable over countries.

For *having an occupation or not* I had to rely on the following indirect question: 'What is your current occupation?' The answers were divided into two categories: whether or not having a job.

Mass media use was measured by three questions. The first question asked for the frequency of watching television news programmes. The second question asked for the frequency of reading the news in daily newspapers. The third question asked for the frequency of listening to radio news programmes. These questions were answered using a scale that runs from one to six, with one being 'every day' and six being 'never'. Because I expected that the different media have different effects on the level of knowledge I used the individual television, radio and newspaper items in the analysis rather than combining the three in a kind of general mass media use index.

Discussing politics with friends was measured by the following question: 'When you get together with friends, would you say you discuss political matters frequently?' The answer to this question is a scale from one to three with one for 'frequently' and three for 'never'.

Convincing others is measured by the following question: 'When you hold a strong opinion, do you ever find yourself persuading your friends, relatives or fellow workers to share your views?' The answer to this question is a scale from one to four with one for 'often' and four for 'never'.

Emotions with respect to the European Union were measured by the following question: 'Does the European Union give you personally the feeling of...?'. Respondents could select more than one emotion. I used the data about three positive, one neutral, and three negative emotions - 'Enthusiasm', 'Hope', 'Trust', 'Indifference', 'Anxiety', 'Mistrust', and 'Rejecting' - for the analysis. These emotions will be analyzed separately because they probably have different impacts on knowledge about the European Union.

Image of the EU is measured by the following question: 'In general, does the European Union conjure up for you a very positive, fairly positive, neutral, fairly negative or very negative image?'. The scale runs from 'very positive' to 'very negative'.

Feeling European was measured by the question 'Do you ever think of yourself as not only [nationality] but also European? Does this happen often, sometimes or never?' *Feeling involved in European affairs* was asked in a question with the following statement: 'I feel very much involved in European affairs'. The answer to this question is a scale from one to four with one for 'totally agree' and four for 'totally disagree'. *Proud to be European* was measured by the question 'And would you say you are very proud, fairly proud, not very proud, not at all proud to be European?'

Age was measured by asking 'What is your age?' For *gender* the respondents could select 'male' or 'female'. For *nationality* respondents could answer the open question 'What is your nationality? *Please tell me the country that applies'*.

Figure 1 presents an overview of the variables and their operationalizations.

Figure 1:	Overview of variables and their operationalization
Knowledge about the European Union	Question: 'For each of the following statements about the European Union could you please tell me whether you think it is true or false: . The European Union currently consists of fifteen Member States . The members of the European Parliament are directly elected by the citizens of the European Union . The European Union has its own anthem . The last European elections took place in June 2002 Answer options: 1) True, 2) False, 3) Don't know Question: 'On which of the following do you think most of the European Union budget is spent?'. Answer options: 1) Employment and social affairs, 2) Agriculture, 3) Scientific research, 4) Regional aid, 5) Foreign policy and aid to countries outside the European Union, 6) Administrative and personnel costs, buildings, 7) Other, 8) Don't know
Years of education	Question: 'How old were you when you stopped full-time education?'.
Occupation or not	Question: 'What is your current occupation?'. Answer options: 1) Self-employed, 2) Managers, 3) Other white collars 4) Manual workers 5) House persons, 6) Unemployed, 7) Retired, 8) Students. Recoded in 'having' and 'not having an occupation'.
Mass media use	Question: How often do you… . Watch television news programmes? . Read the news in daily newspapers? . Listen to radio news programmes? Answer options: 1) Every day, 2) Several times a week, 3) Once or twice every week, 4) Less often, 5) Never, 6) Don't know
Discussing politics with friends	Question: 'When you get together with friends, would you say you discuss political matters frequently, occasionally, or never?' Answer options: 1) Frequently, 2) Occasionally, 3) Never, 4) Don't know
Convincing others	Question: 'When you hold a strong opinion, do you ever find yourself persuading your friends, relatives or fellow workers to share your views? Does this happen…?'. Answer options: 1) Often, 2) From time to time, 3) Rarely, 4) Never, 5) Don't know.

Emotions with respect to the EU	Question: 'Does the European Union give you personally the feeling of...?'. Answer options: Enthusiasm, Hope, Trust, Indifference, Anxiety, Mistrust, Rejecting (multiple answers allowed).
Image of the EU	Question: 'In general, does the European Union conjure up for you a very positive, fairly positive, neutral, fairly negative or very negative image?' Answer options: 1) Very positive, 2) Fairly positive, 3) Neutral, 4) Fairly Negative, 5) Very negative, 6) Don't know
Feeling involved in European affairs	Question: 'To what extend do you agree with each of the following?' … 'I feel very much involved in European affairs '. Answer options: 1) Totally agree, 2) Tend to agree, 3) Tend to disagree 4) Totally disagree, 5) Don't know
Feeling European	*Question: 'Do you ever think of yourself as not only [nationality], but also European? Does this happen often, sometimes or never?'.* *Answer options: 1) Often, 2) Sometimes, 3) Never, 4) Don't know*
Proud to be European	*Question: 'And would you say you are very proud, fairly proud, not very proud, and not at all proud to be European?'.* *Answer options: 1) Very proud, 2) Fairly proud, 3) Not very proud, 4) Not at all proud, 5) I do not feel European*
Gender	*1) Male, 2) Female*
Age	Question: 'How old are you?'. Open answers, recoded into 6 categories: 1) 15 - 24 years, 2) 25 - 34 years, 3) 35 - 44 years, 4) 45 - 54 years, 5) 55 - 64 years, 6) 65 years and older
Nationality	*Question: 'What is your nationality? Please tell me the country that applies'.* *Answer options: all European Union and candidate European Union countries*

3.3 Data analyses

The scales were checked for reliability by computing the Cronbach's alpha. The Cronbach's alpha of the knowledge index is quite low (.382). This may be due to various reasons. First, the Cronbach's alpha is a good reliability measure for Likert scales including more than two answer options while four of the knowledge questions ask for only a 'true' and a 'false' response. Secondly there is the problem of questions that invite to guess the answer. Knowledge questions with the options 'True' or 'False' offer the opportunity to guess, giving the respondents a fifty percent chance to guess the correct answer, and thus providing a false picture. A final problem is created by the 'Don't Know' answer option (Mondak, 2001). I solved this problem by recoding these 'Don't Knows' as a wrong answer. I use the knowledge index despite the low alpha because the data set does not include other knowledge questions. In addition to the index I will also analyze the answers to the individual knowledge questions.

Correlations between the dependent and the individual independent variables were computed by ordering the Pearson correlation coefficient *r*. The dichotomous variables were computed by Point Biserial Correlation, this has the same mathematical formula as the Pearson correlation coefficient. The purpose of correlation analysis is to measure the strength and direction of a relationship between two variables (Zou, et al., 2003: 618). However, correlation is not the same as causation because variables can influence each other and a third variable may be involved. From a correlation analysis we cannot conclude that 'one variable predicts the other one' (Zou, et al., 2003: 618). .

Regression analyses were conducted to analyze the effects of all independent variables on the dependent variable. Regression analysis 'focuses on the form of the relationship between variables …' (Zou, et al., 2003: 619). The purpose of simple regression analysis is 'to evaluate the relative impact of a predictor variable on a particular outcome' (Zou, et al., 2003: 618). However, even regression analysis does not proof causality. 'No matter how strong a relationship is demonstrated with regression analysis, it should not be interpreted as causation (as in the correlation analysis)' (Zou, et al, 2003: 619).

4. Knowledge about the EU

4.1 Knowledge

What do Europeans know about the European Union? First we analyze the answers to the five individual knowledge questions for the whole sample. The answers are presented in Table 1.

The question whether it is 'true' or 'false' that 'Members of the European Parliament are elected directly by European Union citizens' has been correctly answered by a little more than half of the respondents (53%). This question received the highest number of correct answers compared to the other four knowledge questions. Yet this is a very low score for something as important as voting for the European Parliament. The question whether it is 'true' or 'false' that 'The European Union currently consists of fifteen Member States' has been correctly answered by almost half of the respondents (49%). The question whether it is 'true' or 'false' that 'The European Union has its own anthem' received a correct 'true' answer from less than four out of ten respondents (37%). The question whether it is 'true' or 'false' that 'The last European elections were held in June 2002' was answered correctly by only a small minority of the respondents (28%). The multiple choice question 'On which of the following do you think most of the European Union budget is spent?' was answered correctly by even less respondents (19%). Less than two out of ten respondents know that the largest budget is spent on agriculture. This question received the lowest number of correct answers compared to the other four knowledge questions. One of the reasons for this lowest number may be that guessing between 'true' or 'false' was not possible here rather one had to select one out of seven answer options. However, it is clear that the European citizenry in general does not know much about the budget of the European Union.

From the figures in Table 1 - the percentages of correct answers per question - we may conclude that Europeans know very little about the European Union. On the one hand this may be understandable because the European Union is an international organization and people probably know much more about their own national polity. On the other hand one may expect a lot of knowledge among people who have the right to vote in elections for the European Parliament every five years/ Now let us turn to the question which people know most about the European Union and who know least.

Table 1: Percentages of correct answers to five knowledge questions and number of correct answers, per country and for whole EU.

	Population	Nr of Member States	EP Election	EU Anthem	EP last Election	Highest Budget	Score 0	Score 1	Score 2	Score 3	Score 4	Score 5	AVG
Countries	N	% correct	% correct	% correct	% correct	% correct	% correct	% correct	% correct	% correct	% correct	% correct	% correct
Austria	1020	54.60	42.90	54.40	28.40	12.50	14.80	22.80	34.00	15.40	8.90	4.00	1.93
Belgium	1024	57.90	58.40	31.30	27.40	18.80	11.80	24.70	32.70	20.80	8.40	1.60	1.94
Cyprus	1002	69.80	59.20	43.80	36.40	12.10	14.40	16.00	24.30	27.40	15.40	2.60	2.21
Czech Republic	1161	46.60	46.80	22.90	29.00	14.90	19.60	31.90	25.40	16.10	6.10	0.90	1.60
Germany	1534	36.00	49.90	22.00	20.10	15.80	22.60	32.90	28.00	11.90	4.20	0.50	1.44
Denmark	1032	57.40	66.60	36.90	35.10	45.60	8.70	18.50	25.60	23.00	18.10	6.10	2.42
Estonia	1000	45.60	44.60	37.60	26.10	16.10	19.30	27.40	28.10	16.20	7.20	1.80	1.70
Spain	1015	39.70	51.20	33.70	19.20	10.20	25.10	25.60	25.70	17.70	5.20	0.60	1.54
Finland	1028	47.50	62.90	23.20	30.30	21.40	12.60	27.50	32.20	18.10	8.60	1.00	1.85
France	1009	61.60	44.10	35.90	24.90	21.50	14.40	24.80	32.40	17.40	8.90	2.10	1.88
Greece	1000	60.70	73.70	28.30	28.10	7.40	6.20	25.20	39.00	23.70	5.60	0.30	1.98
Hungary	1000	50.60	35.40	54.30	32.60	15.40	15.60	22.90	32.30	19.00	7.20	3.00	1.88
Ireland	1009	42.10	64.40	25.40	19.60	18.40	18.50	26.20	29.70	19.00	5.50	1.10	1.70
Italy	1000	30.70	53.10	31.90	17.10	9.50	23.80	29.40	32.00	10.60	3.90	0.30	1.42
Lithuania	1020	39.20	54.50	40.90	20.70	23.40	18.20	24.40	28.40	19.90	7.40	1.70	1.79
Luxembourg	510	79.40	65.10	47.50	58.80	20.00	5.10	15.90	21.60	25.30	24.90	7.30	2.71
Latvia	1033	42.90	34.80	40.40	20.90	23.00	20.60	27.50	29.90	14.90	5.40	1.60	1.62
Malta	500	64.40	78.40	54.40	36.20	10.20	9.40	14.20	27.20	26.40	18.20	4.60	2.44
Netherlands	1041	43.00	50.10	11.60	28.00	33.50	16.40	32.10	28.80	15.40	6.10	1.20	1.66
Poland	1000	44.10	52.40	62.70	32.00	28.70	12.30	20.80	26.50	20.90	14.10	5.40	2.20
Portugal	1003	55.00	51.70	33.20	26.00	6.10	18.70	22.80	33.70	17.40	6.90	0.40	1.72
Sweden	1033	48.70	47.20	42.60	32.30	39.50	13.00	23.70	26.50	18.50	13.40	4.90	2.10
Slovenia	1034	66.20	62.70	61.90	51.30	23.00	7.80	15.70	21.80	22.10	23.60	9.00	2.65
Slovakia	1096	46.50	49.30	47.60	27.60	5.00	16.60	24.50	31.80	20.70	6.00	0.40	1.76
United Kingdom	1320	33.90	47.90	18.80	18.00	14.80	28.00	32.40	22.60	12.90	3.60	0.50	1.33
EU	25424	49.18	52.97	36.57	28.01	18.72	16.38	25.08	28.87	18.32	9.04	2.31	1.85

4.2 Independents

Who is most knowledgeable about the European Union and why it is that the one European knows more than the other? To answer this question we analyzed the data about the independent variables that were introduced earlier in the theory section. The answers are presented in Table 2.

Years of education very weakly correlates with knowledge about the European Union (r = .14). One of the reasons why this correlation is lower than in other studies into political knowledge (e.g., Carpini & Keeter, 1996: .55) may be the differences in school systems in Europe. Two respondents with the same years of education may have finished their education on different levels of formal schooling. In the regression analysis years of education has also a weak effect (β = .098). We may conclude that education is a predictor of knowledge of the European Union, though a very weak one.

Having an occupation or not does not significantly correlate with knowledge about the EU. In the regression analysis there is a very small effect of having a job or not on the knowledge about the EU (β = -.21). A reason for this finding may be that people without a job may still have enough money to inform themselves about the EU. Another reason may be that people with a job do not have enough free time to find, receive and process information about the EU.

Discussing politics with friends is very weakly correlated with knowledge about the EU (r = -.16). The regression also shows a very weak effect (β = -.086). Delli Carpini & Keeter came to the conclusion that discussing politics is one of the most important factors in political knowledge explanations. My analysis partly confirms this finding: this variable receives almost the highest correlation coefficient but this coefficient is low. *Convincing friends* also has a very weak correlation with knowledge about the EU (r = .08) and does not show a significant effect in the regression analysis.

Mass media use – watching television news, listening radio, and reading a daily newspaper - is the next variable that is analyzed. Because it is more interesting to see the effects separately, I have treated the different media individually. Thanks to this separate treatment we can better investigate their unique relations with and effects on knowledge about the EU. Watching television news has only a very weak correlation with the knowledge about the EU (r = -.04) and no significant effect in the regression analysis. One of the reasons for this finding may be that there is very little news about the European Union shown on television. Listening to radio news and reading newspaper have a little stronger correlation

with (r = -.11 and -.12 respectively) and a little more effect on knowledge about the EU (β = -.056 and -.034, respectively). The correlation and regression coefficients are, however, very low. The conclusion therefore is that mass media use is a very weak predictor of knowledge about the EU.

Emotions with regard to the European Union have different effects on knowledge about the EU. Positive emotions do have more effects on knowledge than negative emotions. Hope and trust have most effect. However, the correlations are very weak (r = .11 and .09 respectively) and the regression coefficients are very low (β =.037 and .026 respectively).

Image of the EU has also a very low correlation with knowledge about the EU (r = -.13). The regression analysis shows no significant effect on knowledge.

Feeling involved in European affairs also very weakly correlates with knowledge about the EU (r = -.09) and has a very weak effect on this knowledge (β = -.051).This means that people who feel involved in European affairs are a very little more likely to have more knowledge about the EU than individuals who do not feel involved in European affairs. This may be the case thanks to possible effects of feeling involved on other independent variables. One may feel involved because of a positive image of the EU resulting in positive emotions such as hope. These possible interaction effects are beyond the scope of this study but may be explored in a follow-up study. *Proud to be European* correlates with and has an effect on knowledge about the EU (r = -.17 and β = -.054 respectively). Again this variable could influence other independent variables. *Feeling European* also correlates with and has an effect on knowledge about the EU (r = -.16 and β = -.072, respectively). People who feel European are a little more likely to have more knowledge about the European Union than people without this feeling.

Gender also correlates very weakly with, and has a very weak effect on knowledge about the EU (r = -.15 and β = -.101 respectively). Gender receives the highest beta of all independent variables with a variance of more than β =.1. However, it is interesting to note that the relationship is not as strong as in other political knowledge studies (e.g., Delli Carpini & Keeter, 1996; correlation of -.27). Emancipation may be one of the reasons. Women are catching up to men in education, work, and social life. Still, we may conclude that gender is a predictor of knowledge about the EU.

Age does not correlate with knowledge about the EU and its effect is very weak in the regression analysis (β = -.027). This negative effect may have to do with the fact that citizens with a higher age have received less education on the European Union than younger respondents.

Summarizing, the following independent variables have no significant correlation with knowledge about the EU: *having or not having an occupation* and *age*. The independent variable feeling *proud to be European* and *discussing politics with friends* receive the highest correlation coefficients. The lowest significant correlations were for the variables *watching television news* and *anxiety*. The regression coefficients are not significant for the following independent variables: *watching television news*, *convincing friends*, *enthusiasm*, *anxiety*, and *image of the EU*. The variables with the lowest beta's are the emotions *rejection*, *mistrust* and *indifference*. The variables which receive the highest beta's are *gender, years of education*, *discussing politics with friends*, and *feeling European*.

The percentage explained variance, including all independent variables in the analysis, is very low (adjusted R^2 = .091) This is one of the reasons why we continued our analysis; in addition to the analysis of the data from all respondents in all twenty-five countries, I also analyzed the data per country, that is per nationality. The research question remains the same: What explains the variance in knowledge about the European Union?

Table 2: Correlation and regression analysis coefficients of all independent variables and the R^2 (* is 0.05 en ** is 0.01 significant).

	Correlation	Beta
Education years	.140**	.098**
Occupation or no occupation	-,004	-.021**
Watching Television News	-.043**	.000
Reading Newspaper News	-.123**	-.034**
Listening to Radio News	-.110**	-.056**
Discussing politics with friends	-.163**	-.086**
Convincing others	-.077**	.003
Enthusiasm with respect to the EU	.064**	.008
Hope with respect to the EU	.114**	.037**
Trust with respect to the EU	.091**	.026**
Indifference with respect to the EU	-.071**	-.013*
Anxiety with respect to the EU	-.055**	-.006
Mistrust with respect to the EU	-.063**	.013*
Rejection with respect to the EU	-.059**	-.012*
Image of the EU	-.130**	-.022
Feeling involved in European affairs	-.089**	-.051**
Feeling European	-.157**	-.072**
Proud to be European	-.169**	-.054**
Gender	-.145**	-.101**
Age	-.007	-.027**
R^2	-	.091

5. Cross national comparison

In this chapter, I present a comparative analysis of the data from individual countries (using the same Eurobarometer data). A comparative approach includes 'the systematic comparison between countries, with the intention of identifying and eventually explaining the differences or similarities between them with respect to the particular phenomenon being analyzed' (Mair, 1996: 93). By analyzing and comparing the data from the individual countries we hope to get more insight into the predictors of knowledge about the EU.

The history of Europe has been different for the various countries. The Iron Curtain divided Europe for decades. The Western European states were capitalistic while the Eastern part was under communistic rule and part of the Soviet hemisphere. Citizens in Central and Eastern Europe looked more in the direction of Moscow than to the rest of Europe. When the European Communities were established in 1957, it consisted of only six member states. States in Central and Eastern Europe became member in the last decades, following the end of the Soviet Union. Countries do not differ only in duration of membership of the (European Communities, European Community and) European Union but also with respect to various other systemic variables, such as the political system, economic system, formal schooling system, and the mass media system. All these differences may ultimately have an effect on the levels of knowledge about the EU in these countries. For an analysis of all these factors (for example in a multi-level analysis) more and other data than the Eurobarometer data are needed.

What I could do and what I have done is to examine the level of knowledge about the EU in all individual countries - average scores and percentages of total number of correctly answered questions - and to examine the level of knowledge about the EU per knowledge question looking for particular patterns. Thereto I have made Table 1. In order to make the data more visible and to see patterns at a glance I have also made so called heat maps. A heat map is a visualization of data through the use of cold to warm colors on a map. To produce these heat maps I used a Geographical Information System (GIS). Finally I examined which variables have an important effect on knowledge about the EU and their relative effect in the various countries of Europe. First the analysis of the knowledge test will be presented, followed by the analysis of the answers to each individual knowledge question.

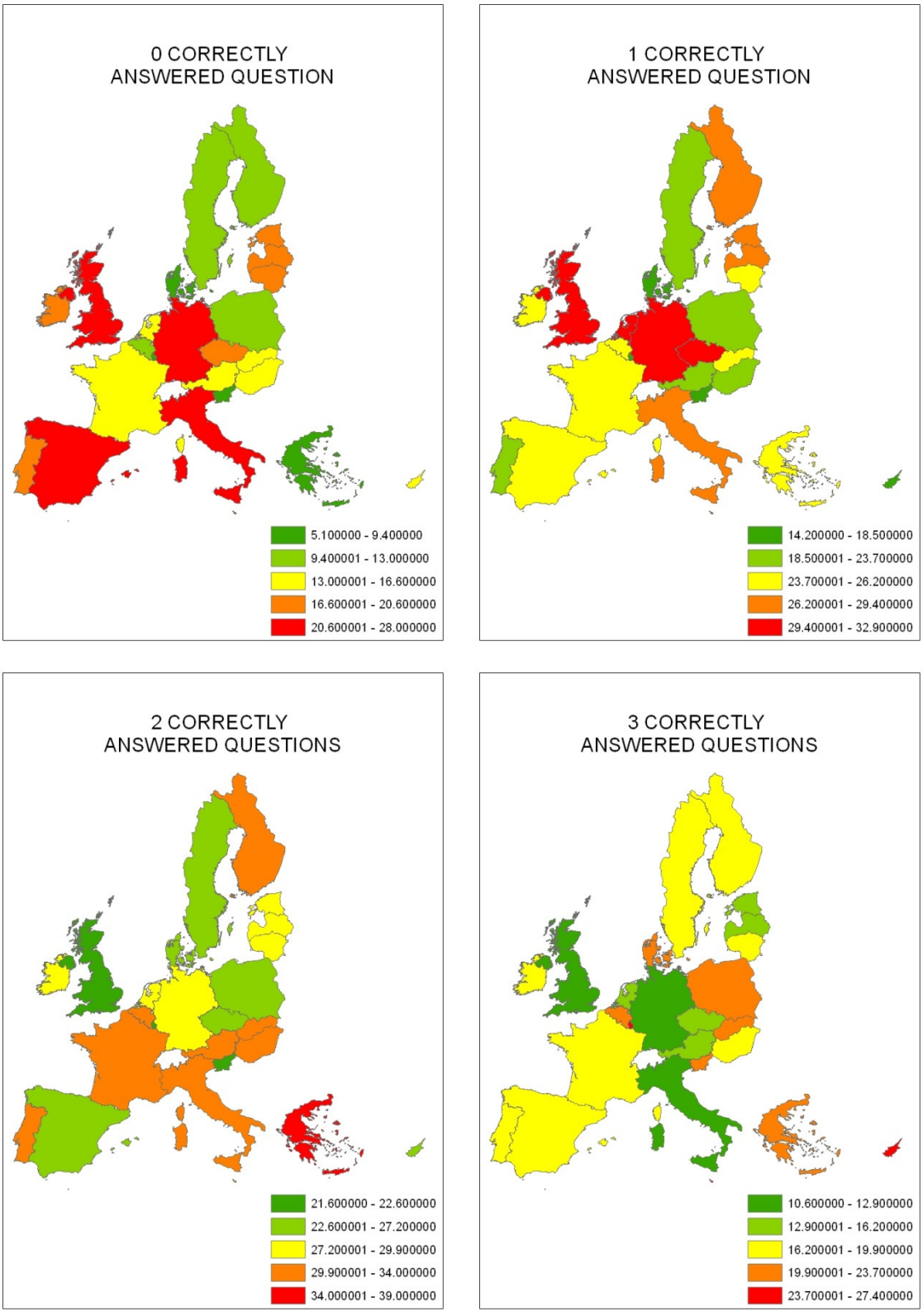
5.1 Knowledge per country

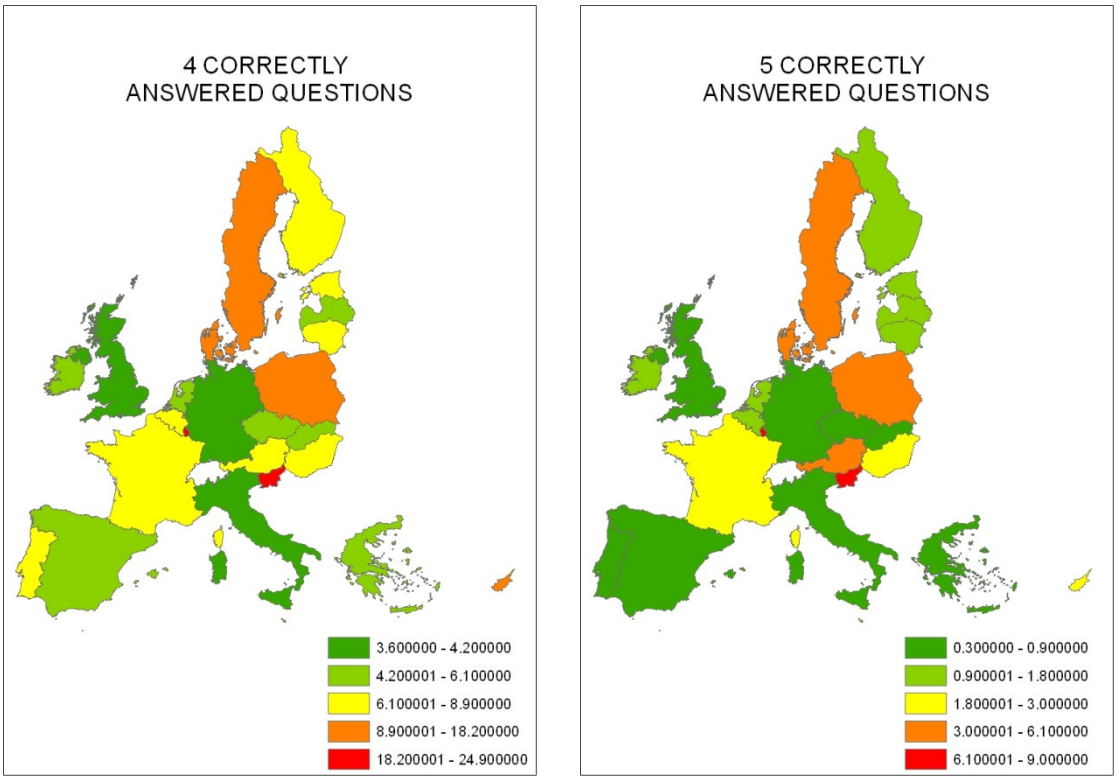
A close inspection of the average scores on the knowledge test, including the answers to all five knowledge questions, per country (Table 1) shows that citizens in smaller countries have higher scores than citizens in larger countries. The top 5 of the average scores includes the populations of Luxembourg, Slovenia, Malta, Denmark and Cyprus. The scores for these countries are not very high, but at least fifty percent of the answers given to these questions were correct. One of the reasons that these populations score relatively well on the knowledge test may be that these populations are aware of the fact that their small country is more dependent of foreign countries and of international cooperation. Another reason may be, and this applies to the population of Denmark, that the referendums about the EU held in this country have stimulated public debate and have raised not only the interest but also the knowledge about the EU among the population.

The lowest scores on the knowledge test (in Table 1 and Figure 2) are received by the populations of the United Kingdom, Spain, the Czech Republic, the Netherlands and Ireland. It is remarkable that four out of these five populations are from countries that belong to the group of the older member states of the EU. One could have expected that populations of the older member states with a long experience of the EU are more familiar with the EU than populations of the new member states and thus that they are more knowledgeable about the EU. This is clearly not always the case. One of the reasons could be that membership of the EU has become more or less self-evident and not a topic of frequent public debate in these countries.

Concluding, a close inspection of the average scores on the knowledge test including all five knowledge questions per country shows that two country characteristics may be important to explain variance in knowledge about the EU: the seize of the population/country and the duration of state membership of the EU.

Figure 2: Heat maps of Europe per number of correctly answered questions about the EU.





A logical next step is to analyze whether these country characteristics are also observable in the answers to the individual knowledge questions (Table 1 and Figure 3) and whether citizens of larger countries and citizens of the old member states have a different knowledge than citizens of smaller countries and citizens of the new member states?

The question including the statement 'Members of the European Parliament are elected directly by European Union citizens' tends to be better answered by the citizens of smaller countries. The top 5 includes Malta, Greece, Denmark, Finland and Slovenia. The new member states have the lowest percentages, but also the populations of three of the original six member states score low when it comes to knowledge about elections in the European Union for the European Parliament.

The answers to the 'The European Union currently consists of fifteen Member States' question show that the populations of the following five countries score relatively high: Luxemburg, Slovenia, Cyprus, Malta and France. Again four populations belong to smaller countries. The lowest scores receive the populations of Italy, the United Kingdom, Spain, Germany and Latvia. Here we see no general pattern with respect to the two country characteristics of size and duration of membership of the EU.

The answers to the question whether it is true or false that 'The European Union has its own anthem' show that the populations of Poland, Slovenia, Austria, Malta and Slovakia are

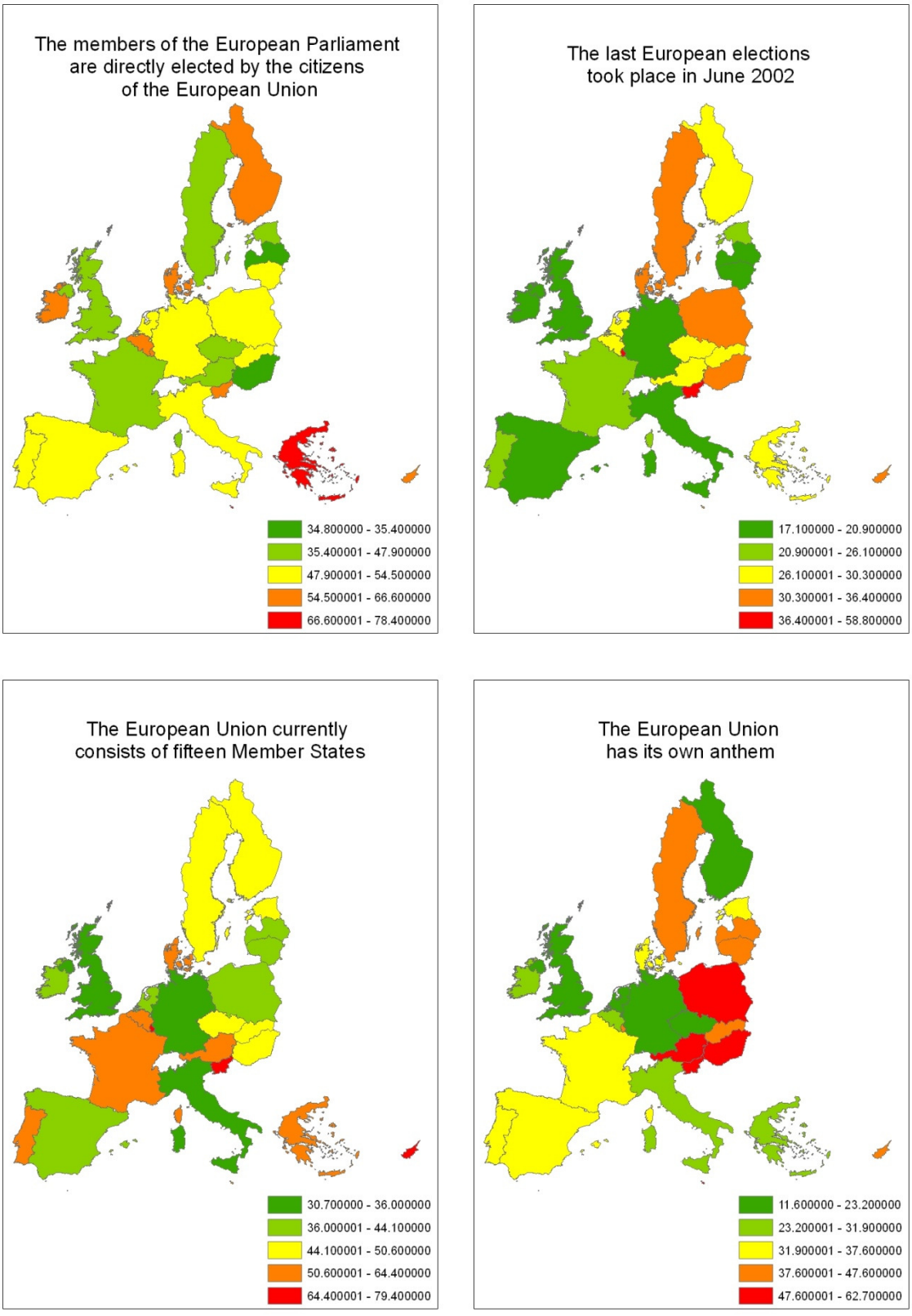
relatively knowledgeable about this topic. The lowest scoring populations are those of the Netherlands, the United Kingdom, Germany, and Czech Republic. The Dutch score lowest. The tendency is clear: the populations of the new member states score higher on this question then those of the older member states.

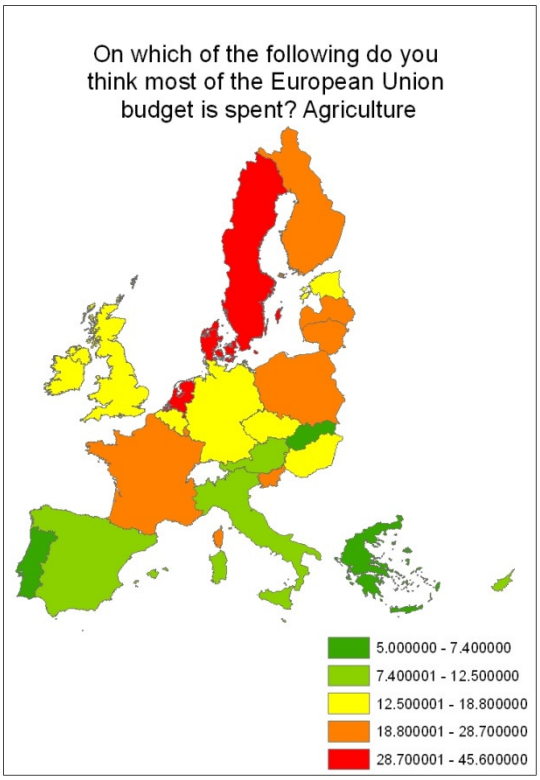
The least correct answers to the question whether it is 'true' or 'false' that 'The last European elections were held in June 2002' are from the populations of Italy, the United Kingdom, Spain, Germany and Latvia. Four of these five countries belong to the relatively larger countries in the EU. The best scoring populations are those from Luxembourg, Slovenia, Cyprus, Malta and Denmark, again all relatively small countries.

The last question asked 'On which of the following do you think most of the European Union budget is spent?' This was a multiple choice question and only seventeen percent of the whole sample answered this question correctly. For this question the percentages of correct answers are much lower than those to the other questions. The pattern that I observe is that populations in northern European countries tend to answer this question more correctly, with the top three of Sweden, Denmark and the Netherlands. The populations of Slovakia and Portugal receive the lowest scores of correct answers. Here it is difficult to observe any pattern.

Concluding, also with respect to the individual questions, citizens of larger countries tend to know less about the European Union while citizens of the smaller and the new member states tend to know more about the EU.

Figure 3: Heat maps of Europe, with percentages of correct answers per knowledge question about the EU.





5.2 Independents per country

To examine the effects of the various independent variables on knowledge about the EU per country I computed the correlation coefficients between these independent variables and the score on the knowledge test, i.e. the answers to all five knowledge questions per country (Table 3) and I included all these independent variables in a multivariate regression analysis for each individual country (Table 4). Below I report the numbers of countries with significant correlation and regression analysis coefficients per independent variable. I also report about which countries receive the highest coefficients in order to find possible patterns in the analyses' outcomes.

Years of education correlates with knowledge about the EU in 24 of the 25 countries (the exception is Luxembourg). The correlation is the highest in Poland, Spain and Belgium (r = .26, .23 and .19, respectively). The standardized regression coefficients are significant in 19 out of the 25 countries. The highest regression coefficients are in Belgium, Greece and Cyprus (β = .222, .212 and .189, respectively). In general, the standardized regression coefficients are in contrast to the correlations higher in the older member states.

Having an occupation or not correlates significantly with knowledge about the EU in 5 out of the 25 countries. The correlations are highest in France, Spain and Cyprus (r = -.12, .11

and .08, respectively). The standardized regression coefficients are significant in 3 of the 25 countries. The highest regression coefficients are in Austria, Cyprus and France (β = .081, .080 and -.069, respectively). There is no pattern to discover because the correlations and the regression coefficients are in most countries not significant.

Discussing politics with friends correlates with knowledge about the EU in 17 out of the 25 countries. The correlations are highest in Luxembourg, Spain and Denmark (*r* = -.37, -.28, and -.27, respectively). The regression coefficients for discussing politics with friends are also significant in all 25 countries. The highest are the coefficients in Luxembourg, Finland and Cyprus (β = -.226, -.213 and -.188, respectively). In various countries, the regression coefficients for discussing politics with friends are higher than for years of education, which indicates that discussing politics with friends is a more important predictor than years of education (e.g. in Austria, Spain, Denmark, Finland and Luxembourg).

Convincing friends correlates with knowledge about the EU in 21 out of the 25 countries. The correlations are highest in Spain, Hungary and Malta (*r* = -.19, -.19 and -.17, respectively). The regression coefficients are significant in only 2 of the 25 countries: Hungary and the Czech Republic (β = .080 and .081, respectively).

Mass media included in the questionnaire were, watching television news, listening to radio news and reading a newspaper. *Watching television news* correlates significantly with knowledge about the EU in 11 out of the 25 countries. In general the correlations are very weak. The correlations are highest in Malta, Luxembourg and the Netherlands (*r* = -.17, -.15 and -.12, respectively). The regression coefficients are significant in only 3 of the 25 countries: Malta, Greece, and Spain (β = -.128, -.111, and -.089, respectively). *Listening to radio news* correlates with knowledge about the EU in more countries: 19 out of the 25 countries. The correlations are highest in Malta, Italy and France (*r* = -.21, -.18 and -.18, respectively). The regression coefficients are significant in 10 of the 25 countries. The coefficients are highest in Malta, Sweden, and Italy (β = -.142, -.120 and -.112, respectively). *Reading newspaper* correlates with knowledge about the EU in again more countries: 23 out of the 25 countries. The correlations are highest in Luxembourg, Malta and Denmark (*r* = -.31, -.29 and -.26, respectively). The regression coefficients are significant in 7 of the 25 countries. The coefficients are highest in Luxembourg, Portugal and Denmark (β = -.148, -.142 and -.137, respectively). Summarizing, in the data about *mass media use* is no pattern to discover in the differences in the correlations and the regression coefficients.

The *emotions* included in the questionnaire were anxiety, mistrust, rejection, indifference, enthusiasm, trust and hope.

The emotion '*anxiety*' correlates with knowledge about the EU in 9 out of the 25 countries. The correlations are highest in France, Hungary and Slovakia (r = -.15, -.11 and -.09, respectively). Again, these correlations are very low. The regression coefficient is significant in only 1 of the 25 countries. This significant coefficient is from the United Kingdom (β = -.067)

The emotion '*mistrust*' correlates with knowledge about the EU in 12 out of the 25 countries. The correlations are highest in Austria, Malta and Poland (r = -.20, -.12 and -.12, respectively). Again the correlations are very low (all below .15 with the exception of Austria). The regression coefficients are significant in 2 of the 25 countries. The coefficients that are significant are from Malta and Belgium (β = .138 and .067, respectively).

The emotion '*rejection*' correlates with knowledge about the EU in 10 out of the 25 countries. The correlations are highest in Austria, Malta and Germany (r = -.16, -.14 and -.11, respectively). The regression coefficients are significant in 3 of the 25 countries. The coefficients are highest in Hungary, Spain, and Belgium (β = .077, .077 and -.075, respectively). In general, negative emotions do not correlate with knowledge about the EU.

The emotion '*indifference*' correlates with knowledge about the EU in 12 out of the 25 countries. The correlations are highest in Poland, Spain, and France (r = -.17, -.15 and -.12, respectively). The correlations are stronger in southern and eastern countries than in the northern countries. The regression coefficients are significant in 2 of the 25 countries. The coefficients that are significant are from Slovakia and United Kingdom (β = -.082, and .018, respectively).

Now we will look at the three positive emotions of enthusiasm, trust and hope.

The emotion '*enthusiasm*' correlates with knowledge about the EU in 11 out of the 25 countries. The correlations are highest in Poland, Malta and Denmark (r = .14, .11 and .11, respectively). In general the correlations are very weak. The regression coefficient is significant in only 1 of the 25 countries. The only significant coefficient is from The Netherlands (β = -.071).

The emotion '*trust*' correlates with knowledge about the EU in 17 out of the 25 countries. The correlations are highest in Malta, Poland and Austria (r = .21, .18 and .17, respectively). The regression coefficients are significant in 8 of the 25 countries. The coefficients are highest in Finland, Italy, and Portugal (β = .096, .087 and -.087, respectively). With respect to the difference in these coefficients I do not see any pattern.

The emotion '*hope*' correlates with knowledge about the EU in 19 out of the 25 countries. The correlations are highest in Malta, Poland and United Kingdom (r = .31, .21 and .17,

respectively). The regression coefficients are significant in 3 of the 25 countries. The coefficients that are significant are in Malta, United Kingdom, and Poland (β = .249, .119 and .095, respectively). With respect to the difference in these coefficients I do not see any pattern within the EU.

Summarizing, negative emotions do not predict knowledge about the EU across Europe while for the positive emotions only trust is a weak predictor for this knowledge across Europe. In northern countries the correlation coefficients for positive emotions are somewhat stronger than in southern countries.

Image of the EU correlates with knowledge about the EU in 23 out of the 25 countries. The exceptions are Finland and Belgium. The correlations are highest in Malta, Poland and France (*r* = -.31, -.25 and -.24, respectively). The regression coefficients are significant in 4 of the 25 countries. The coefficients are highest in Ireland, Slovakia and Poland (β = -.119, -.104 and -,102, respectively). I do not see any pattern in the differences between the countries' coefficients.

Feeling involved in European affairs correlates with knowledge about the EU in 24 out of the 25 countries. The exception is Cyprus. The correlations are highest in Malta, Netherlands and Denmark (*r* = -.25, -.25 and -.25, respectively). The regression coefficients are significant in 9 of the 25 countries. The coefficients are highest in Portugal, Italy, and Cyprus (β = -.145, .-142 and .139, respectively). There is no real pattern, and the scores are different from one country to another throughout the EU.

Feeling European correlates with knowledge about the EU in 24 out of the 25 countries. The exception is Ireland. The correlations are highest in Austria, France and Lithuania (*r* = -.30, -.26 and -.21, respectively). The correlations in the central part of the European Union are higher than in southern part. The regression coefficients are significant in 9 of the 25 countries. The coefficients are highest in Austria, Lithuania, and Belgium (β = -.216, -.108 and -.097, respectively). The highest coefficients are from the central and northern part of Europe

Proud to be European correlates with knowledge about the EU in 19 out of the 25 countries. The correlations are highest in Malta, Lithuania and Spain (*r* = -.26, -.19 and -.17, respectively). The regression coefficients are significant in 4 of the 25 countries. The coefficients are highest in Cyprus, Latvia, and Hungary (β = -.111, -.101 and -.098, respectively). The western countries in the EU have lower coefficients then the rest of Europe.

Gender correlates with knowledge about the EU in 24 out of the 25 countries. The exception is Austria. The correlations are highest in The Netherlands, Denmark and Sweden

(r = -.27, -.24 and -.21, respectively). The regression coefficients are significant in 15 of the 25 countries. The coefficients are highest in The Netherlands, Denmark and Sweden (β = -.237, -.188 and -.185, respectively). The northern European countries tend to have higher negative scores.

Age correlates with knowledge about the EU in 11 out of the 25 countries. The correlations are highest in Luxembourg, Spain and Poland (r = .26, -.18 and -.14, respectively). The regression coefficients are significant in 4 of the 25 countries. The coefficients are highest in Luxembourg, France, and Spain (β = .180, .145 and -.119, respectively). The correlations and regression show an interesting pattern: only in the six old member states (except Italy), older respondents know more about the European Union than the youth. This is also the case in the United Kingdom and Denmark. In the new European Union member states, the correlations are different: younger people know more than older people. But, these correlations and regression are not statistically significant. One reason could be that the European Union is a relatively new phenomenon for old and young in these eastern and southern European countries. Moreover, the young may receive education about the EU at school which may compensate the lack of experience with the European Union of the older respondents. Another interesting observation is that countries where the youth have more knowledge were dictatorships (either right or left) till recently. These dictatorships did not offer many opportunities to gain knowledge about foreign policy.

The percentage of explained variance, including all independent variables in the regression, is highest for the population of Malta (R^2 = .24). The lowest percentage of explained variance is for the population of Slovenia (R^2 = .05), probably because only three variables were significant in the regression analysis for this country. In general the percentages of explained variance for the various countries are low.

By analyzing and comparing the data from the individual countries I hoped to get more insight into the predictors of knowledge about the EU. First (in paragraph 5.1), I examined the level of knowledge about the EU in all individual countries - average scores and percentages of total number of correctly answered questions - and I examined the level of knowledge about the EU per knowledge question looking for particular patterns. The conclusions (of paragraph 5.1) were that two country characteristics may be important to explain variance in knowledge about the EU: the seize of the population/country and the duration of state membership of the EU, and that also with respect to the individual questions, citizens of larger countries tend to know less about the European Union while citizens of the smaller and the new member states tend to know more about the EU. In this paragraph 5.2, I examined the

effects of the various independent variables on knowledge about the EU per country, I computed the correlation coefficients between these independent variables and the score on the knowledge test, i.e. the answers to all five knowledge questions per country, and I included all these independent variables in a multivariate regression analysis for each individual country. I reported the numbers of countries with significant correlation and regression analysis coefficients per independent variable, and I reported about which countries received the highest coefficients in order to find possible patterns in the analyses' outcomes. Although most of the variables have low or not significant regression scores I observed various differences between populations in northern and southern countries and between populations in older en newer member states. Because of this observation we may conclude that nationality has an effect on various independent variables. Summarizing, and answering my research question, the following independent variables are significant predictors in less than 5 countries: convincing friends, watching television, emotions (except trust), image of the EU, proud to be European, and age. The following variables were significant in more than 5 and less than 15 countries: having an occupation or not, listening to radio, reading newspaper, feeling involved in European affairs, feeling European, and the emotion of trust. The significant variables to explain variance in knowledge about the EU in at least 15 countries are: years of education, discussing politics with friends, and gender.

Table 3: Correlation coefficients (Pearson's r) between knowledge about the EU and the various independent variables per country. (* is 0.05 and ** is 0.01 significant).

Variable	Aust	Belg	Cypr	Czec	Denm	Germ	Esto	Spai	Finl	Fran	Gree	Hung	Irel	Ital	Lith	Luxe	Latv	Malt	Neth	Pola	Port	Swed	Slova	Slove	UK
Education years	.108**	.196**	.110**	.122**	.105**	.136**	.145**	.225**	.140**	.186**	.184**	.134**	.162**	.080*	.149**	.051	.150**	.199**	.155**	.264**	.117**	.142**	.174**	.126**	.151**
Occupation or no occupation	,044	,000	.078*	-.069*	-,044	,003	-,042	.112**	-,046	-.119**	.074*	-,004	-,020	,000	,036	-,014	-,045	-,003	-,038	,012	,030	-,060	,013	-,014	-,017
Watching Television News	-,046	-.072*	-.112**	-,014	-.094**	,002	-,051	-.095*	,029	,044	-.104**	-.107**	-.111**	,005	-,030	-.154**	-,062	-.169**	-.118**	-,021	-,068	-.070*	-,031	-,038	-,058
Reading Newspaper News	-.076*	-.086**	-.125**	-.064*	-.257**	-.094**	-.171**	-.203**	-,058	-.100**	-.158**	-.138**	-.150**	-.130**	-.199**	-.313**	-,052	-.293**	-.203**	-.159**	-.198**	-.068*	-.100**	-.107**	-,011
Listening to Radio News	-.139**	-.114**	-.105**	,018	-.136**	-.076**	-.091*	-.142**	-,008	-.175**	-.073*	-.080*	-,051	-.184**	-.077*	-,060	-,067	-.207**	-.077*	-.077*	-,057	-.146**	,029	-.134**	-.113**
Discussing politics friends	-.175**	-.189**	-.233**	-.147**	-.269**	-.138**	-.125**	-.277**	-.259**	-.197**	-.133**	-.210**	-.166**	-.169**	-.138**	-.372**	-.077*	-.204**	-.222**	-.181**	-.130**	-.152**	-.113**	-.107**	-.176**
Convincing others	-.080*	-.064*	-,068	-.134**	-.134**	-.081**	-,022	-.189**	-,027	-.101**	-.103**	-.185**	-.127**	-.076*	-.103**	-.106*	-.087*	-.170**	-,038	-.108**	-.107**	-.098**	-.071*	-.079*	-.086*
Enthusiasm with respect EU	,054	.108**	.074*	,021	.111**	,052	-,025	,020	,056	.102**	.068*	,028	,061	.098**	,032	,056	.071*	.111*	,045	.138**	.088*	,056	,031	,052	.068*
Hope with respect EU	.128**	.108**	,063	.111**	.095**	.109**	,074	.079*	.098**	.147**	,053	.111**	.096*	,062	.155**	,025	.071*	.313**	.130**	.211**	,064	.151**	.070*	.115**	.174**
Trust with respect to the EU	.173**	.080*	,035	.077*	.113**	.085**	.138**	.122**	.122**	.164**	,055	.117**	,062	.080*	.099**	,052	,033	.214**	,066	.178**	,007	.124**	.118**	,041	.085*
Indifference with respect EU	-,017	-.099**	-,066	-,041	-,039	-,019	-.099**	-.147**	-,026	-.123**	-,002	-.096**	-,072	-,061	-.090*	-,078	-,037	-,077	-.101**	-.167**	-,067	-.083*	-.076*	-.109**	-.115**
Anxiety with respect EU	-.088*	-.075*	-,066	-.066*	-.074*	-,020	-,010	-,031	-,063	-.146**	-.084**	-.109**	-,051	-,062	,001	-,049	-,013	-,021	-.077*	-,072	-,022	-,053	-.092**	-,059	,029
Mistrust with respect EU	-.196**	,024	-.094**	-.108**	-,066	-,043	-,043	-,023	-.072*	-.103**	-.076*	-,013	-,033	-,022	-.117**	-,027	-,029	-.123*	-.096**	-.121**	-,041	-.118**	-,020	-.087**	,005
Rejection with respect EU	-.164**	-.089**	-,040	-,030	-,048	-.112**	-.084*	,011	-,034	-.100**	-,019	,040	,030	,020	-.075*	-,016	,001	-.135**	-.081*	-,011	-.079*	-.106**	,011	-,032	-,043
Image of the EU	-.229**	-,036	-.094**	-.134**	-.179**	-.120**	-.109**	-.156**	-,008	-.236**	-.119**	-.142**	-.150**	-.091*	-.188**	-.098*	-.114**	-.307**	-.181**	-.254**	-.081*	-.159**	-.094**	-.169**	-.109**
Feeling involved in European	-.103**	-.179**	,000	-.111**	-.245**	-.093**	-.107**	-.223**	-.121**	-.181**	-.099**	-.191**	-.165**	-.204**	-.139**	-.160**	-.118**	-.248**	-.245**	-.161**	-.202**	-.197**	-.143**	-.089**	-.149**
Feeling European	-.296**	-.198**	-.131**	-.133**	-.107**	-.162**	-.104**	-.193**	-.177**	-.259**	-.157**	-.122**	-,064	-.119**	-.207**	-.147**	-.088*	-.188**	-.204**	-.181**	-.149**	-.154**	-.138**	-.082*	-.187**
Proud to be European	-.144**	-.098**	-.165**	-,028	-,038	-.114**	-.138**	-.174**	-.135**	-.166**	-.129**	-.146**	-,068	-.094**	-.188**	-,061	-.146**	-.263**	-.075*	-.097**	-,008	-,042	-.121**	-.109**	-.116**
Gender	-,043	-.207**	-.140**	-.103**	-.242**	-.116**	-.121**	-.147**	-.115**	-.192**	-.117**	-.127**	-.136**	-.099**	-.081*	-.128**	-.125**	-,082	-.265**	-.196**	-,065	-.213**	-.154**	-.075*	-.181**
Age	-,016	,015	.122**	,028	.101**	,013	-,011	-.179**	,001	.083*	-,039	-,034	,020	,007	-.108**	.261**	-,012	-,027	.085*	-.142**	-.086*	.068*	-,033	-.072*	,059

Table 4: Regression coefficients for knowledge about the EU and the various independent variables, per country. (* is 0.05 and ** is 0.01 significant).

Variable	Aust	Belg	Cypr	Czec	Denm	Germ	Esto	Spai	Finl	Fran	Gree	Hung	Irel	Ital	Lith	Luxe	Latv	Malt	Neth	Pola	Port	Swed	Slove	Slova	UK
Education years	.088*	.222**	.189**	.086*	.097**	.100**	.123**	.088	.111**	.166**	.212**	.072	.142**	.034	.056	.093*	.146**	.112*	.108**	.154**	.018	.159**	.180**	.062	.124**
Occupation or no occupation	.081*	-.010	.080*	-.052	-.009	.014	-.042	-.017	-.031	-.069*	.048	-.033	-.039	-.016	.008	.042	-.052	-.007	-.017	-.007	-.013	-.045	.027	-.058	-.013
Watching Television News	.014	-.060	-.029	.013	-.026	.042	-.039	-.089**	.053	.027	-.111**	-.046	-.064	.007	.029	-.037	-.057	-.128*	-.057	.014	-.066	-.042	-.005	.012	-.032
Reading Newspaper News	.022	.003	-.049	-.027	-.137**	-.042	-.132**	-.038	-.027	-.034	-.052	-.051	-.070	.000	-.133**	-.148**	.014	-.106*	-.125**	-.042	-.142**	.020	-.051	-.031	.038
Listening to Radio News	-.089*	-.075*	-.043	.046	-.075*	-.043	-.061	-.076	.034	-.099**	.037	-.020	.019	-.112**	-.058	-.001	-.075*	-.142*	-.049	-.016	.066	-.120**	.079*	-.090*	-.050
Discussing politics friends	-.154**	-.066*	-.188**	-.081*	-.159**	-.066*	-.059	-.149**	-.213**	-.057	-.018	-.092*	-.066	-.107**	-.092*	-.226**	-.022	-.129*	-.126**	-.110**	-.023	-.049	-.064	-.064	-.087*
Convincing others	.049	.019	.069	-.081*	-.055	.001	.075	-.049	.029	-.030	-.032	-.080*	-.023	.009	-.013	-.062	-.036	-.058	.035	.003	-.049	-.057	.009	-.019	-.032
Enthusiasm with respect EU	-.030	.059	.043	.007	.047	.007	-.027	-.028	.050	.025	.030	-.023	-.006	.043	-.043	.006	.037	.048	-.071*	.036	.035	-.034	-.015	.009	-.004
Hope with respect EU	-.010	.033	-.002	.083	-.012	.052	-.018	-.006	.058	-.015	-.024	.050	.052	.060	.055	-.054	.013	.249**	.027	.095*	-.073	.033	.061	-.014	.119**
Trust with respect to the EU	.060	.014	-.038	.064	.029	.062*	.081*	.045	.096**	.066	-.008	.053	.031	.087*	.033	.021	-.027	.069	-.079*	.084*	-.087*	.040	.064	-.076*	.037
Indifference with respect EU	.051	.002	-.040	.019	.043	.039	-.039	-.045	.016	-.046	.043	-.017	-.012	.012	-.014	-.042	.015	.056	-.030	-.039	-.067	-.043	-.032	-.082*	-.018*
Anxiety with respect EU	.027	-.033	-.027	-.025	-.008	.017	.023	-.001	-.005	-.037	.001	-.030	-.028	-.016	.073	-.043	.022	.074	-.020	.020	-.035	-.003	-.058	-.028	.067*
Mistrust with respect EU	-.075	.067*	-.052	-.041	.042	.025	.033	.052	-.016	.018	-.024	.064	.036	.019	-.011	-.007	.026	.138*	-.005	-.045	-.017	-.030	.068	-.022	.085
Rejection with respect EU	-.012	-.075*	-.010	.011	-.009	-.060	-.041	.077**	.020	-.023	.026	.077*	.041	.047	-.042	.047	.027	-.009	.026	.005	-.071	-.011	.034	.024	-.012
Image of the EU	-.035	.096*	.010	-.042	-.081	-.049	.011	-.090	.032	-.037	-.048	-.040	-.119*	-.009	-.072	-.049	-.079	-.079	-.070	-.102*	-.063	-.039	.022	-.104*	-.034
Feeling involved in European	.080*	-.080*	.139**	-.002	-.112**	.008	-.052	-.084**	-.029	-.001	-.007	-.039	-.075*	-.142**	.005	-.025	-.060	-.028	-.125**	.015	-.145**	-.047	-.085	-.019	-.061
Feeling European	-.216**	-.097**	-.027	-.072*	.002	-.095**	-.021	-.052	-.088**	-.077	-.066	-.056	.023	-.025	-.108*	-.079	.004	.009	-.087	-.045	-.096*	-.052	-.076*	-.011	-.085*
Proud to be European	.000	-.017	-.111**	.030	.041	-.056	-.032	-.026	-.058	.001	-.029	-.098**	.011	-.029	-.028	.022	-.101*	-.019	.021	.022	.082*	.029	-.057	-.035	.009
Gender	.022	-.175**	-.054**	-.068*	-.188**	-.093**	-.129**	-.095	-.079**	-.154	-.046	-.080*	-.122**	-.064	-.064	-.050	-.144**	.021	-.237**	-.133**	-.016	-.185**	-.105**	-.039	-.161**
Age	.086	.095	.192	.046	.068	.048	.000	-.119**	.038	.145**	.093*	-.015	.010	.009	-.056	.180**	.032	-.057	.019	-.021	-.037	.049	.070	-.064	.103
R^2	.144	.142	.120	.057	.191	.073	.082	.165**	.109	.151	.068	.098	.079	.080	.098	.184	.059	.241	.188	.148	.074	.118	.083	.050	.114

6. Conclusion

My study focused on knowledge about the EU. It was my aim to explain the variance in this knowledge among Europeans and to answer the question: *What explains the variance in the knowledge about European Union among European citizens*?

First I analyzed the level of knowledge in Europe and in the individual countries. It became clear that the European citizenry in general does not know much about the European Union. When analyzed per country to see whether country characteristics can give us more insight into the difference in knowledge about the European Union, we saw that the scores on the knowledge test were higher in smaller European countries and in new member states. By analyzing the individual questions the same conclusion can be made as the two groups scored for all the questions better than average.

To explain the variance in knowledge about the EU I used a theoretical model that included three categories of independent variables – ability, motivation, and opportunity variables – and two background variables - age and gender. The analysis of the data from all respondents in Europe showed that the following variables had most effect on the knowledge about the EU: *gender, years of education*, *discussing politics with friends*, and *feeling European*. The analyses per country showed that some variables were more important in particular countries. *Years of education* and *age* tend to have higher scores in older member states. *Positive emotions* and *gender* tend to score higher in northern European countries. *Feeling European* has the highest coefficients in the central and northern parts of Europe and *proud to be European* has lower scores in western European countries. From these patterns in the data I conclude that nationality has an effect on various independent variables. The model including all variables explained 9 percent of the variance in knowledge about the EU in the whole sample. The analyses per country showed that the explained variance ranged from 5 percent of explained variance in Slovenia to 24 percentage of explained variance in Malta. Variables that contributed to the explanation of the variance in knowledge about the EU in almost all countries are: *years of education*, *gender*, and *discussing politics with friends*.

My study suffers from various weaknesses partly because I had to make use of an existing data set. The Eurobarometer knowledge scale measures the breadth but not the depth of knowledge about the EU and its reliability is low. Not all theoretically relevant independent variables are represented in the survey. One may also question the validity of the measurements of some variables. Finally, the data were collected at a single juncture and as a result my study of these data has a correlational design,

which implies that I cannot exclude any other causal order between the dependent and independent variables.

In future studies a more comprehensive instrument to measure the knowledge about the EU is needed. Future research may also include independent variables proposed by for example, rational choice and socialization theories. The wording of various questions, for example the emotions question, should be improved. A panel design is to be preferred to check the hypothesized causal relationships.

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