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List of Abbreviations

AV	Alternative vote
BES	British Election Study
Con	Conservative Party
EC	European Communities
EU	European Union
Lab	Labour Party
MP	Member of Parliament
OLS	Ordinary least squares
SNP	Scottish National Party
UK	United Kingdom
UKIP	United Kingdom Independence Party

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Chapter 1: Introduction

The 2016 Brexit referendum¹ saw an unusually high turnout of 72.2%, the highest turnout in the UK since the 1992 General Election (Electoral Commission 2018a. 2018b). An older population, higher wages and greater proportions of people with qualifications where all associated with higher turnout, while more deprivation and higher unemployment were associated with lower turnout (Becker, Fetzer and Novy 2017: 637, Goodwin and Heath 2016: 326). Although these are factors often associated with turnout disparity, the size of the disparity was very different. Compared with turnout in the 2015 general election, the 5-percentage point gap in turnout by education level had shrunk to 3 percentage points (Birch 2016: 108). This is a much smaller turnout disparity between education groups than might be expected, considering the finding of education as generally being the strongest predictor of turnout (Sondheimer and Green 2010: 174, Brody 1978: 295). This means that a relatively larger number of less educated people decided to vote, and relatively fewer more educated people decided to vote, than would be expected based on the turnout of previous General Elections. Furthermore, people who did not vote in the previous General Elections were motivated to vote in this referendum. This makes it an ideal case study to examine the motivation for turning out to vote.

Although there is a significant amount of research into turnout in general elections, research into turnout in European referendums has not been widely developed, mainly due to historically high turnout across Europe in this kind of referendum compared to turnout in general elections (Szczerbiak and Taggart 2004: 565). The term European referendums is used throughout to refer to referendums held on issues pertaining to the EU/EC, such as entry into or withdrawal from the EU/EC or the acceptance or rejection of EU/EC treaties. General explanations for why there is a difference in turnout between education groups, mostly focussed on national elections, have centred around information acquisition, a sense of civic duty, socialisation, or higher political interest (Rolfe 2012: 10, Bowler and Donovan 2013: 270, Lassen 2005: 104, Sondheimer and Green 2010: 186). European referendums take place in a context with very different information available to national elections, where there are long established parties competing for seats. There are no seats allocated in European referendums, and instead a policy choice based on complex foreign policy to be

¹ this term is used throughout to refer to the United Kingdom European Union membership referendum held on 23rd June 2016

supported or rejected. Although some studies have found that this is more demanding for voters (Laycock 2013: 238, LeDuc 2015: 144), Hobolt (2005: 86) argues that the intense campaigns allow for easier acquisition of information and therefore a lower burden for voters to overcome in order to make a decision on the issue.

Research into European referendums has been mostly focussed on the outcomes, rather than the turnout. The main theories that have been developed on vote choice in European referendums have argued that people base how they vote on either the European issues related to the referendum, or on their opinions of the domestic parties and politicians (Garry, Marsh and Sinnott 2005: 204-205). This thesis takes this as a starting point to investigate whether these determinants of vote choice also form the basis for the motivation to decide to turn out to vote. This is accompanied by an investigation into why these factors would be expected to differ between education groups, drawing from theories of turnout in elections, and how this affects turnout.

The specific research question is:

RQ: How and why does the motivation to vote in a European referendum vary with education?

The aim of this thesis is to provide a deeper understanding of the effect that education has on turnout. Turnout is an important topic to research, especially with regards to the enduring turnout disparities between different demographic groups. Turnout is vital to the functioning of a democracy and an integral part of legitimacy (LeDuc 2015: 147), including in referendums, where turnout is connected to the legitimacy of the outcome (Hobolt 2006: 156). As well as being important for the legitimacy of the outcomes or system, there is a normative goal to aim for universal turnout to ensure increased equality because "unequal participation spells unequal political influence" (Lijphart 1998: 2), and inequalities in turnout based on demographic factors undermine the equality of a democratic system. If interests differ between different groups, then a continuing turnout disparity can lead to the underrepresentation of the interests of some socio-economic groups. What has been observed is a systematic bias towards the more educated and wealthier participating more, and therefore gaining more political influence (Lijphart 1998: 1). Understanding how and why the motivation for turning out differs between education groups is especially important because it can not

only explain why some groups have higher turnout than others, but also go some way to forming a basis for solutions to remedy this.

In the broader context, turnout is decreasing in most industrialised countries despite increasing income and education, although education is the socio-economic characteristic most closely linked to turnout at the individual level (Lijphart 1997: 6, Franklin, van der Eijk and Oppenhuis 1996: 307). This shows that increasing education alone is not sufficient to ensure high turnout, and instead the motivations for turning out and how and why they differ between education groups must be investigated to understand the causes of and find solutions to the enduring turnout disparity.

The remainder of this thesis is organised into five parts. First there will be an in-depth discussion of current literature and theories relating to motivations for turning out and the role played by education. Chapter 3 focuses on the specific political context which the 2016 Brexit referendum took place in, and the specific issues involved in the referendum. How these issues form the motivation for voting is explained. The selection of data and methodology is described in Chapter 4. The results of the analysis are described in Chapter 5 along with a discussion of these results and their implications. Finally, Chapter 6 contains some concluding remarks.

Chapter 2: Theories of Turnout

This chapter examines theories of how and why motivation for turning out varies between education groups. The link between higher levels of education and higher voter turnout in elections has been extensively documented and is enduring across time and other demographic variables (Sondheimer and Green 2010: 174, Brody 1978: 295). However, many theories of turnout have focussed on turnout in national general elections and investigations into whether this connection is present in European referendums are lacking, as turnout has traditionally been high in European referendums (Szczerbiak and Taggart 2004: 565). Furthermore, the focus has often been at the individual level, with the implicit assumption that all factors affect individuals in the same way. This thesis therefore seeks to answer the question of whether the factors that form the motivation for turning out are affected by education in referendums. Many traditional motivations for voting in elections are absent or weakened in referendums, such as habitual voting and party cues. There are two dominant approaches to explain voting behaviour in European referendums; firstly that voters decide based on the issues involved with the proposal, and secondly that they use these "second order" elections to signal satisfaction or dissatisfaction with the government (Szczerbiak and Taggart 2004: 564, Hobolt 2016: 1264). These theories of vote choice can be expanded to analyse voting propensity. The remainder of the chapter uses the theories of European referendums to suggest different motivations for turning out. Rational and reasoning voter choice are included in the first section to offer explanations for why these motivations have a different effect on different education groups.

Rational Choice

The following sections use the rational choice and reasoning voter theories to put forward an explanation as to why there are different motivations for turning out among different education groups. The main focus is on how strong preferences are formed by different education groups. Downs' (1957) theory of rational choice posed the question of "Why does anyone bother to vote, given that voting is presumably costly and that the probability that one's vote will affect the outcome is presumably small?" (Palfrey and Rosenthal 1985: 62). Downs (1957) introduced the rational choice model of voting,

wherein all voters are rational utility maximisers. This cost-benefit analysis leads to a rational explanation for political ignorance: The expected utility gain from voting "correctly" over "incorrectly" (i.e. for the party which would bring most personal benefit to an individual compared to the alternative party options) is negligible when there are a large number of voters, even if the difference in outcome for the individual voter between the "right" and "wrong" party is great. When this utility difference is small, there is no substantial incentive for any citizen to become well informed about which party would benefit them, as gaining information is costly (Downs 1957: 139, 146). Assuming that voters take the behaviour of other voters as given, the rational choice is to not acquire political information beyond the "free" data, which the acquisition of costs them nothing (Downs 1957: 147). This leads to a paradox, where the benefits of voting are negligible and the costs exceed the benefits, and therefore political ignorance, apathy and non-participation are the rational choices (Downs 1957), and yet there continues to be a majority of individuals who make the "irrational" choice of turning out to vote.

Although the logic of this theory is compelling, in fact so compelling that college students exposed to it become less likely to vote in subsequent elections (Rolfe 2012: 62), the rational choice model of voting has been widely criticised and labelled a 'nonexplanatory theory' for failing to explain the observed behaviour beyond labelling it 'irrational' (Riker and Ordeshook 1968: 25). This has then led to many adaptations of the model, with added variables such as the inclusion of 'non-political' costs and benefits, allowing for the possibility to explain why voting is rational for some people and not voting is rational for others. There are a number of theories to explain what the non-political benefit of voting is, such as complying with the ethic of voting and affirming allegiance in the political system (Riker and Ordeshook 1968), a sense of duty or the variation in individual attributes such as capacities or socialised political values (Brody 1978: 294-295). Another suggestion is that there is a combination of benefits, such as Bowler and Donovan's (2013: 267) argument that being socialised to develop an interest in politics or a sense of personal political efficacy leads to positive feelings about voting and increases the sense of duty felt. After the addition of a variable for the benefit of voting, the equation to determine the rationality of voting becomes (from Riker and Ordeshook 1968: 28):

where the expected benefits of voting (R) is equal to the probability of casting a decisive vote (P) multiplied by the net benefit of the preferred outcome (B), minus the fixed costs of voting (C), plus the fixed benefits of voting (D). The main expectation of this theory is that turnout differs because the costs are lower or the benefits are higher. However, an important argument taken from this theory is that there is a cost to forming a strong preference. Explaining the benefit of voting and how it differs between individuals or between different groups is crucial to understanding why turnout differs.

This theory is founded on the assumption that individuals are rational utility maximisers. Therefore, the explanation deduced from this theory to explain why education is the strongest predictor of turnout is that having more education lowers costs and enhances benefits (Rolfe 2012: 2). One main theory is that higher levels of education reduce the costs of acquiring information (Rolfe 2012: 10), which increases voting propensity independently of political interest (Lassen 2005: 104, 112). However, the connection between education and turnout can be very hard to disentangle, because education is often connected to a more affluent and educated family background, higher cognitive ability, more discussion of politics in the home and more information about politics (Sondheimer and Green 2010: 174-175). Further explanations for the observed turnout disparity between education groups are that higher education is associated with higher social status, which increases the sense of civic duty (and therefore propensity to vote) because they have prospered under the current civic arrangements (Bowler and Donovan 2013: 270). An alternative to this is the argument that civic duty itself is taught in the education system (Wolfinger and Rosenstone 1980: 18), or that education acts by "imbuing people with a participatory value system" (Franklin, van der Eijk and Oppenhuis 1996: 326). Different types of socialisation have also been used to explain why the benefits and costs of voting differ for different education groups; higher education reduces alienation or increases compliance with social norms through socialisation (Lassen 2005: 104) and different education groups have different social networks which affects turnout through conditional cooperation (Rolfe 2012). Sondheimer and Green (2010: 186) also suggest that education increases political interest.

While rational choice has traditionally been used to explain either turnout or voter choice in elections, recently scholars have also been applying it to vote behaviour in referendums. Following from the rational choice theory assumption that information is costly, Laycock (2013: 237) argues that "voters lack the time, interest, and cognitive capacity to access information about the referendum issue and struggle to evaluate the

likely consequences of accepting or rejecting the proposal", and therefore the expectation would be a very poor turnout due to the high information cost. This was not what was observed in the 2016 Brexit referendum, and in fact across Europe turnout in European referendums was high prior to 2003 (Hobolt 2006: 156). Therefore, additional theories must also be investigated in order to assess why motivations for turning out differ, beyond the cost-benefit analysis created by Downs. A dimension that has not been accounted for by the rational choice model is whether the same information has a different effect on individuals with different level of education, which then leads to different motivations for turning out among different education groups.

Reasoning Voter Theory

A contemporary political theory argues that voters deal with the problem of incomplete information and costly information acquisition, and aim to make a rational decision within the bounds of limited information, by using short-cuts based on inexpensive information such as elite endorsements (Qvortrup 2013: 135-136). Popkin (1994: 7) uses the term 'low-information rationality' to describe the decision-making process of most voters about political issues. This involves "combining, in an economical way, learning and information from past experiences, daily life, the media, and political campaigns", and using shortcuts such as the opinions of trusted friends and acquaintances and opinions of political figures, which can significantly lessen the cost of acquiring information assumed in Downs' model.

Sniderman, Brody and Tetlock (1991: 18-19) describe citizens as having a "double constraint", whereby they are limited both in the amount of political information they have, and also in their ability to manipulate this information to form opinions. This leads to the conclusion that the ability of citizens to "put [their] ideological likes and dislikes together consistently depends on the number of years of formal schooling [they have] had" (Sniderman, Brody and Tetlock 1991: 8-9), as their education level affects both the cost of acquiring information and the ability to manipulate this information to form preferences. However, this burden of information acquisition and processing can be reduced by the use of "judgemental heuristics", which require little information and give reliable results. The specific heuristics used can vary depending on a voter's level of political information, interest, education or awareness, but lead to a great deal of internal consistency (Bowler and Donovan 1998: 30). This theory gives an explanation

for how the same information is processed differently by different individuals, and therefore why education not only affects how costly information is to acquire, but also how an individual then processes that information to form consistent preferences. This can then explain why different education groups have more or less strong preferences and opinions than other education groups.

The conventional method for analysing reasoning has assumed that political reasoning happens for all people in the same way, which has also dominated studies and theories of voting (Sniderman, Brody and Tetlock 1991: 19, 164). Reasoning voter theory argues that there is a profound difference in the reasoning process of less politically sophisticated citizens and more politically sophisticated citizens, or more and less educated individuals (Bowler and Donovan 1998: 30): "the more politically sophisticated citizens are, the more weight they are likely to attach to abstract cognitive considerations in making up their minds about political choices" (Sniderman, Brody and Tetlock 1991: 25)².

Sniderman, Brody and Tetlock argue that contrary to the prior academic consensus of voters as poorly informed and inconsistent, even less educated and ill-informed citizens can form political opinions:

"The political ideas of the less well educated and the less well informed, we concede, tend to be more loosely, and sometimes even haphazardly, tied together. But it is important all the same to explore the possibility that the less well informed and less well educated, rather than simply failing to organize their thinking about politics, organize it in different ways" (1991: 3).

However, they go on to argue that when deciding on a particular policy, the less educated will only focus on the most obvious relevant considerations, whereas the more educated will have both more differentiated and more integrated processes of policy reasoning, meaning they take a wider range of considerations into account and they better understand the connections between these factors (Sniderman, Brody and Tetlock 1991: 26, 60-61). This difference in the decision-making processes of individuals with different education levels leads to an expectation that how a person decides whether or not to turn out will also differ with education level, with the more

² Sniderman, Brody and Tetlock (1991: 21) use education as a proxy of political sophistication because it is so well measured and coincides with high levels of political information and awareness, which means that their conclusions related to political sophistication are in fact more accurately about education level.

educated using more and more complex considerations, while the less educated will use a simpler decision-making process.

One form of political reasoning is described as "affect-driven", by which they mean based on a person's "likes and dislikes toward politically relevant groups" (Sniderman, Brody and Tetlock 1991: 21-22). For example, a person can make a decision about whether or not they support policies aimed at a certain group without knowing any details of that policy, if they have strong feelings towards the target group. This type of decision making is relatively easy, because feelings are easily accessible and immediate inferences can be made from them. This type of decision is most likely when a person is "lacking either a connective tissue of relevant opinions or the supportive cognitive and ideological skills to knit opinions together", which means it would be expected to be used disproportionately by the less educated (Sniderman, Brody and Tetlock 1991: 22). Therefore, preferences based on this kind of decision making would be expected to be stronger among the less educated than the more educated. This is because it is expected that the less educated use a simple process requiring less information, leading to a single strong opinion, whereas the more educated take a wider variety of considerations and diverse information into account, which can lead to contradictory feelings and therefore a more conflicted and weaker opinion.

This theory can also be applied to referendum voting. Direct democracy is evaluated positively by both highly educated and less educated voters, suggesting the information demands are manageable although different cues and shortcuts are used by different voters (Bowler and Donovan 1998: 47). Many of the cues used in elections, such as party labels or candidates, are missing in referendums, suggesting voters must rely on other types of shortcut (Bowler and Donovan 1998: 31). They find that highly educated voters use factual sources from outside the campaign, such as newspapers, which require active engagement, whereas less educated voters use "easy" sources such as conversations with friends (Bowler and Donovan 1998: 56). They also find that the more highly educated are more likely to be influenced by elite endorsements of propositions, which they argue is because the more educated are more likely to be aware of the cue due to recognising the position of the elites (Bowler and Donovan 1998: 62).

However, Bowler and Donovan (1998: 19) argue that their theories on voting in referendums are specific to the low information context of American local referendums,

and the context of European integration referendums is very different because referendums are rare and usually the only issue on the ballot, there are national debates and campaigns and political elites usually make their positions on the issue clear. Despite this, the finding that individuals with different levels of education use different shortcuts to participate in direct democracy is also important in the context of European referendums, as it can be used to explain why there are different motivations for turning out between different education groups. The main expectations are that the less educated will form stronger preferences and opinions on simpler issues with a lower information demand and easier cognitive processes. For complex issues with fewer shortcuts possible and higher information demands, it is expected that the more educated form stronger preferences or opinions.

As elite endorsements are an important shortcut that can be used in referendum voting (Qvortrup 2013: 135-136), it is also important to examine how potential voters form opinions on parties and politicians and whether his differs between education groups. There is evidence that the opinion of politicians and parties would be likely to skew towards the negative. There has been a long-term trend of declining trust in government and political institutions across all advanced industrial democracies (Dalton 2005: 133). Dalton (2005: 138) argues that this means the factors affecting trust in government must go beyond specific political scandals and shocks, although political scandals will lead to a more negative opinion. The question of whether those with higher education have a significantly stronger or weaker opinion on the government and opposition is somewhat complex. There is an expectation that higher levels of education will lead to a more positive opinion of the government, because the more educated have more knowledge and a better understanding of public services (Christensen and Lægreid 2005: 494, 502). Another argument for why the better educated have a more positive opinion is that the well-educated usually enjoy a higher social status, and therefore are more likely to support the current system which they have prospered under (Dalton 2005: 139).

There is, however, the competing argument that the values and style of traditional political institutions have been increasingly challenged, with movements such as environmentalism and the women's movement and new forms of political action which challenge the political elites, and the better educated are at the forefront of these new movements because of their skills, resources and cognitive mobilisation (Dalton 2005: 139-140). This could lead to a more negative opinion of parties and politicians among the more educated than the less educated.

In his cross-country analysis, Dalton (2005: 140) found that the better-educated had had higher levels of trust in the government until the 1960s, but since this time trust among this group has decreased more steeply, and the less-educated have become relatively more trusting throughout the second half of the 20th century, suggesting the strengths of opinions on the government may also be becoming closer between different education groups. In his study of 10 countries, Norway was the only one in which the correlation between education and trust increased over time, in all others it weakened (Dalton 2005: 142).

Figure 1: Factors influencing opinions of parties and politicians

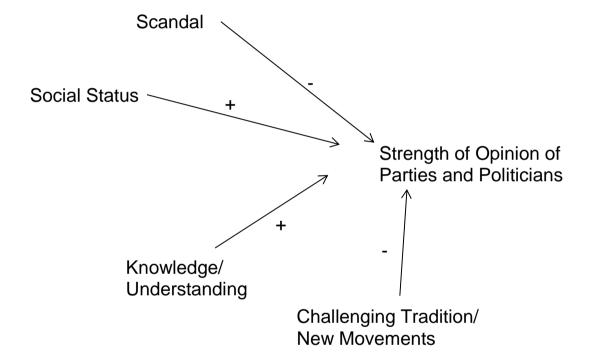


Figure 1 shows how various factors can affect the opinion of parties and politicians. Basing an opinion on politicians due to scandals requires very little information, as does forming an opinion based on one's own social status. Understanding the workings of the government has a much higher information cost, as does supporting new political movements or challenging traditions. More of these factors are likely to be stronger among the better educated, both because of their lower cost in acquiring information and, according to the reasoning voter theory, they can better connect these factors in forming an opinion (Sniderman, Brody and Tetlock 1991: 26, 60-61), which would lead to the expectation of a stronger opinion of the government and opposition among the more educated. However, it is likely that these factors cancel each other

out, leading to a more neutral opinion among the more educated and a stronger opinion among the less educated. This is important as elite endorsement can be used as a shortcut to overcome the burden of information acquisition. However, it would be expected that the stronger the opinion of the party or politician, the more important their endorsement would be as a motivation for turning out.

European Referendums

Academic literature on the issue of voter turnout has traditionally been based on declining turnout in elections rather than referendums, with research into turnout in referendums limited, mainly because referendum turnout was high in European referendums until 2003 (Schneider and Weitsman 1996: 588, Szczerbiak and Taggart 2004: 565, Hobolt 2006: 156). In general, the body of literature regarding European integration is poorly developed, with a lack of comparative studies, and little connection between theoretical and empirical work (Hug 2002: 4-5).

Referendums are a particular case; due to the nature of voting on a single issue or proposal, it can be argued that there is a greater burden on voters to acquire information, particularly if the issue is not widely debated and do not feature heavily in the news (Laycock 2013: 238). "Insufficient information" is often a leading complaint among citizens in the aftermath of a referendum (LeDuc 2015: 144), and due to their infrequency, voters lack "pragmatic knowledge" of voting in referendums, which they can gain in general elections through experience (Laycock 2013: 238). This would suggest that referendum voting would follow the pattern of election voting, in the sense that there would be a large turnout disparity between education groups because information demands are high and acquisition is less costly for those with more education (Rolfe 2012: 10).

Bowler and Donovan (1998: 48) use rational choice to argue that turnout in referendums is directly affected by the cost of acquiring information on the specific proposition. European referendums represent a particular information context for voters. The process of European integration has evolved from the "negative" activities of removing trade barriers and tariffs to the "positive" creation of joint policies, making European issues more visible and in more areas (Franklin, Marsh and McLaren 1994: 460). This means that it would be expected that information could be acquired more cheaply. Hobolt (2005: 86) argues that "intensive referendum campaigns provide a

favourable informational environment that encourages citizens to absorb and process more information and consequently rely on more sophisticated decision criteria". This suggests that in the context of European referendums there is a significant amount of information available, with increasing amounts of information available from personal experience of the 'positive' integration of the EU and therefore it is possible for citizens to take more complex considerations into account instead of needing to rely on shortcuts. However, LeDuc's (2015: 144) finding that citizens perceived themselves to be uninformed cannot be ignored, and while there may be information widely available, it may not be sufficiently acquired or processed by all people.

Hobolt (2005: 85-86) also argues that the existing literature on European referendums suffers from the flaw that understanding the differences in voters' motivations has been limited to interests and preferences, while the difference in effect of other types of political information, such as elite cues, has been ignored. This idea is at the core of this thesis, which seeks to determine if the same elite cues and available political information can have a different effect on different individuals dependant on their education level, because of the different costs in acquiring information and the different methods for processing it. The second part of this research is focussed on whether the differences in preferences resulting from this leads to different rates of turnout.

At first sight, turnout in European issue referendums is easy to explain as "put crudely, whether or not citizens feel strongly about an issue will have a critical effect in explaining whether or not they turn out to vote" (Szczerbiak and Taggart 2004: 575). However, how the referendum question is perceived by citizens, and therefore whether they have a strong opinion on it, is not always as clear as simply a question of European integration, and therefore a deeper analysis into the literature on what is important to citizens in European referendums is necessary. In the analysis of voting behaviour in European integration referendums there are two main approaches which have dominated the literature; the European issue approach and the second order approach, where the referendum is used to signal satisfaction or dissatisfaction with the government (Szczerbiak and Taggart 2004: 564, Hobolt 2006: 85, 2016: 1264), suggesting that the 'issue' citizens must care about can either be the EU or European integration, or it can be the domestic government. The 'issue-voting model' makes the argument that voting behaviour is mainly influenced by attitudes towards the EU or towards the issue of the referendum (Garry, Marsh and Sinnott 2005: 205). The 'second-order' approach assumes that when elections are perceived as less important by political actors, including voters, voting behaviour is "heavily influenced by first-order considerations", such as signalling support or dissatisfaction with national parties or governments by voting in line with or against their wishes (Garry, Marsh and Sinnott 2005: 204). These ideas are discussed in the following sections.

European Issues

According to a number of theories on voting behaviour, including rational choice, "judgements of a government's record should be irrelevant in a referendum; the issue at stake is not the overall performance of the government" (Laycock 2013: 238), and therefore only the issue directly at stake is important. Qvortrup (2013: 1) argues that in the modern society where consumers have more and more choices to buy or consume exactly what they want rather than having to buy package deals, this mentality has also spread to democracy, where citizens are now more interested in single issues and voters have "increasing interest in 'issue politics'" (Qvortrup 2013: 13). In particular, the nature of referendums being focussed on issues rather than candidates and parties "would suggest that parties and their candidates are of secondary importance, that evaluations of, or emotional attachments with, them, as encompassed by the concept of party identification, are likely to be less influential on vote" (Laycock 2013: 237). This means that the issue of the referendum would be the only factor in deciding not only how to vote, but also whether or not to vote, even more so than in general elections where a personal opinion of the candidate may have a big influence.

Siune, Svensson and Tonsgaard (1994) argue that voters in European referendums base their vote choice on the European issue, although their understanding of this is affected by how it is framed in the media. One important aspect that they identified was that whether or not the European issue is understood in terms of national sovereignty affects vote choice (Siune, Svensson and Tonsgaard 1994: 107). This supports the importance of information acquisition in voter behaviour, and particularly the role played by the media in distributing and framing information. Issues of European integration can be framed in a number of ways, such as either issues of national identity or sovereignty, or economic issues, which also changes the way individuals process that information and the cues which they use to interpret it. As the more educated were found to be able to better connect different considerations together, whereas the less educated used only the readily accessible cues, the particular frames used would be expected to have a larger effect on the less educated because it will have a greater influence on which cognitive connections are available to them.

Furthermore, Qvortrup (2013: 4) argues that people support proposals for more direct democracy because they have become more interested in particular issues rather than trusting in political parties to make decisions on a wide range of policy areas. The implication of this is that people will decide whether or not to turn out based on the strength of their preferences on the content of the referendum. However, how the referendum issue is framed will have a large effect on with issues preferences are connected to the referendum issue. For example, if the referendum issue is framed in terms of national sovereignty, then the strength of national identity is likely to be a strong motivation of turnout. Conversely, if the referendum issue is framed in terms of economic effects, then the strength of economic preferences is likely to be a strong motivation of turnout, supported by Sniderman, Brody and Tetlock's (1991) finding that issue framing has a large effect on which cues are accessible to individuals. The expectation is that not only will the strength of different issues differ by education group, but also that the extent to which different issue strengths form the motivation for turning out will differ by education group.

Szczerbiak and Taggart (2004: 567) expand the issue approach to create a model of turnout in European elections based on the intensity of European preferences, general levels of electoral participation, degree of contestation among the elite and the public, degree of civic engagement in European issues and overall level of campaign resources. LeDuc (2015: 145) also argues that turnout in referendums fluctuates widely compared to national elections, and this is often because of the substance of the referendum; "when [turnout] rises, it is generally because the issue itself is perceived as an important one for most voters, sometimes generating new sources of participation or a higher degree of engagement", reinforcing the idea that a person will only vote if they have a strong preference on the issue. However Szczerbiak and Taggart (2004: 577-578) exclude education from their model on the grounds that education could increase turnout because of the easier acquisition of information, or reduce participation because the more educated would exert influence through more direct channels. Taking the strong empirical evidence finding of the correlation between election turnout and education into account, it is unconvincing to argue that the directionality of the effect of education is unclear. In general, it would be expected that strong preferences on European issues is a greater motivation for turning out for the more educated than it is for the less educated.

However, also missing from Szczerbiak and Taggart's (2004) model is a discussion of how the specific framing of an issue affects the heuristics available, and how this is

different for different education groups. This is extremely important, considering the argument made in relation to the reasoning voter theory, discussed previously in this chapter, that the less educated will have stronger preferences on issues which can be affect-driven, such as immigration, than the more educated. In contrast, the more educated will have stronger preferences on issues requiring complex cognitive connections, such as the economy. This is further discussed in the next section.

Different Types of Issue Voting

Within the context of European referendums, it is important to consider the different dimensions of European issues. Issue dimensions are an important part of the study of party competition and voting behaviour. Schattschneider (1960) argued that the core of politics is the competition over which issues become dominant. Citizens do not have the capacity or interest to understand every possible political issue, and therefore political actors, particularly parties, are necessary to simplify the choices (Rovny and Whitefield 2019: 5). Most issues are only of interest to those affected by them, however sometimes new issues come to the forefront of mass political debate (Carmines and Stimson 1986: 901). Parties have an incentive to promote new issue dimensions when they have lost electoral standing on the current dominant issue dimension, thereby altering the foundation on which voters make political decisions (De Vries and Hobolt 2012: 247). Changing policy conflicts begin with elite cues from political actors, which citizens may or may not respond to amidst the many policy cues they are exposed to (Carmines and Stimson 1986: 903, 915).

Kriesi et al (2006: 924) argue that the new issues brought about by European integration will be embedded into the existing two-dimensional political space, with a socio-economic and a cultural dimension. The 'Great Recession' and Euro crisis following the 2008 global economic downturn and the 2015 'migration crisis' also contributed to the emergence of new issues in European politics. No longer are the main issue dimensions based on economic right and left, instead international integration and migration has become an increasingly salient and divisive issue dimension (Rovny and Whitefield 2019: 9). European integration and immigration are new issues embedded on the cultural dimension (Kriesi et al 2006: 924).

The process of European integration has resulted in new 'winners' and 'losers', who have the potential to be politically mobilised along new issue dimensions which are not aligned to traditional political cleavages (Kriesi et al 2006: 922). The 'losers' are

expected to support protectionist policies and strong national boundaries, whereas the 'winners' are expected to support integration and open boundaries (Kriesi et al 2006: 922). Furthermore, the cultural dimension and the fear of losing national identity has been shown to be a more important factor in the mobilisation of "losers" than economic interests (Kriesi et al 2006: 929). This would also suggest that for the 'losers' of integration, cultural issues would be a more important motivation for turning out.

An additional dimension to the issue voting hypothesis can be taken from the idea put forward by Carmines and Stimson (1980) that there are "easy" and "hard" issues that voters will respond to differently. 'Hard-issue' voting "involves conscious calculation of policy benefits for alternative electoral choices", and would be expected to be seen among "those who have the conceptual skills to do it well" (Carmines and Stimson 1980: 78), which from the reasoning voter theory, would be assumed to be the better educated due to their abilities to connect cognitive considerations. In contrast 'easy issues' are long ingrained issues that evoke "gut responses" and therefore require no "conceptual sophistication", which would be expected to be equally important throughout the population (Carmines and Stimson 1980: 78).

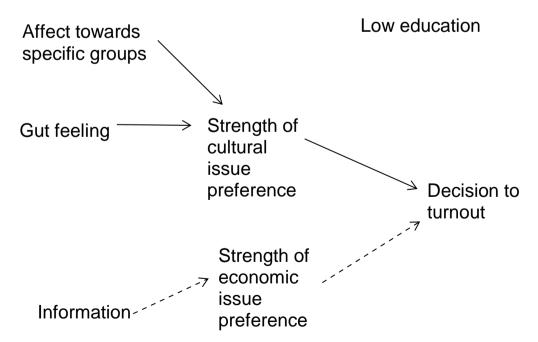
Carmines and Stimson (1980: 80) describe three main features of 'easy' issues: they are symbolic rather than technical, deal with policy ends rather than means and have been long on the policy agenda. Racial desegregation was a "prototypically easy issue" for American voters in the 1960s (Carmines and Stimson 1980: 80). Easy issues are not always offered to voters, whereas hard issues are (Carmines and Stimson 1980: 80). In the current European context, this "easy" issue dimension is similar to the cultural dimension, and the issue of immigration in particular. The "hard" issue dimension can also be seen so be similar to the economic dimension of European politics due to the complexity and information demands associated with it.

On the issue of policies of racial desegregation, Sniderman, Brody and Tetlock (1991) found that not only did the less educated have stronger, affect driven feelings on African Americans, but these feelings were also more important in the formation of their preferences on policies related to the protection of African Americans, when compared with the more educated, who relied less on their affect driven feelings and instead used a more complex set of considerations. This suggests that Carmines and Stimson's (1980: 78) expectation of easy issue preferences being distributed equally throughout the population may not be true, as the more educated may connect even 'easy' issues to other considerations. Moreover, it showed that the effect that easy

issues have differs by education, with the more educated relying less on this preference to make a decision.

Easy and hard issue voting is closely connected to education. Carmines and Stimson (1980: 85-86) find that easy-issue voters have the least education, even less than nonissue voters, whereas hard-issue voters have the highest education. From this, it would be expected that the less educated decide to whether to turn out based on the strength of their preferences on 'easy' or cultural issues, where their preferences can be formed by 'qut-feeling', or 'affect' ("feelings toward specific groups" Sniderman, Brody and Tetlock 1991: 68). The well-educated are expected to still hold opinions based on affect or gut feeling, but they can also form strong opinions on 'hard' or economic issues that require high levels of information and high cognitive capacity. As previously discussed, the strength of preference on an issue is expected to contribute to likelihood of turning out, and therefore it is expected that the likelihood of turning out for low education voters will be based on their strength of preferences of European cultural issues. The likelihood of turning out for the more educated will be based on their strength of preference on both cultural and economic European issues, as they will form opinions both based on gut feeling and based on complex cognitive considerations, as shown in Figures 2 and 3.

Figure 2: Factors influencing the decision to vote for the less educated



Affect towards specific groups

Gut feeling -----> Strength of cultural issue preference

Decision to turnout

Strength of economic issue preference

Figure 3: Factors influencing the decision to vote for the more educated

Second Order Approach

Information

In contrast to the argument that voters make their choices based on the referendum issue is the argument that voters use referendums as a chance to signal their dissatisfaction with the government. Reif and Schmitt (1980: 3) put forward the argument that "European elections are additional national second-order elections" so long as important decisions are made by national political systems. This line of reasoning was extended to European referendums by Franklin, Marsh and McLaren (1994: 462), in the sense that they should be viewed "not so much in terms of the European content that is the overt subject of the referendum, but in terms of the domestic standing of the government that is asking for support". Laycock (2013: 238) goes further to argue that not only are referendums second order elections, they can be seen as the least important of second order elections, as there are no seats in any level of government at stake (rather a policy choice). Second order elections are regarded as "less important" (although not unimportant), therefore a rational choice calculation would suggest that fewer people would vote in these elections compared to first order elections, but the actual magnitude remains extremely high (Lijphart 1997: 6).

Analysis of referendums as second order elections is particularly relevant to the field of European integration because decisions in this field have traditionally been made by national leaders and governments without input from the public, reducing the information available. Franklin, Marsh and McLaren (1994: 460) describe the domain of European unification as having "always been the fief of national political leaders carving out deals with each other behind closed doors and then asking for the support of their followers in ratifying the resulting steps towards unification", which results in voters using their opinions on the government to determine their vote choice as they lack relevant information on the content of the referendum. This means that "referendum outcomes become tied to the popularity of the government in power, even if the ostensible subject of the referendum has little to do with the reasons for government popularity (or lack of popularity)" (Franklin, Van der Eijk and Marsh 1995: 101). Voters may also use a referendum to express a protest vote towards general government policy (Franklin, Marsh and McLaren 1994: 462). This research has focussed on vote choice rather than turnout, but it also suggests that a strong opinion on parties may be a motivation for turning out. Voters may decide to use their vote to signal their support or dissatisfaction, but in order to do this they must first have a strong opinion on the parties or politicians. Therefore, assuming that this type of signalling is the motivation for voting, the strength of opinion of parties and politicians will affect the likelihood of turning out.

This is connected to the idea that voters use whether politicians and parties support an idea as a proxy for whether they should also support it, corroborated by Bowler and Donovan's (1998) finding of elite endorsement as a shortcut used in low information settings. This argument states that citizens can use their opinion on parties and politicians as a shortcut to avoid the costly process of acquiring information about the issue itself, and therefore would also imply that those with a strong opinion of parties and politicians have a lower cost to acquiring information if they use this shortcut, which would therefore raise their likelihood of turning out.

This is especially important in the context of European referendums, as Schneider and Weitsman argue that European referendum issues fall into the field of foreign policy, where voters lack the capacity and information to make choices and must therefore base their decisions on their opinions of the government and opposition (Schneider and Weitsman 1996: 583-584). This argument is supported by empirical evidence showing that voters' knowledge of issues is low. In line with the reasoning voter theory, Qvortrup (2013: 120) argues that "referendums are often won because voters use

short-cuts [such as 'who's behind it'] to acquire information rather than studying the finer points of the issues", which extends to contexts where there is information available, but more costly than relying on shortcuts. This would be expected to affect the less educated more than the more educated, because it is possible to use pre-existing opinions of parties and politicians, which is 'free', rather than taking on the costs of acquiring and processing information to form an opinion on the issue. Information acquisition and processing is less costly for the more educated, and therefore they are expected to rely less on shortcuts than the less educated. Therefore, the opinions of parties and politicians is expected to be a greater motivation for turnout for the less educated than it is for the more educated.

There is strong evidence that voters use this cue to decide how to vote. It has been found that "EC-related attitudes, preferences and orientations play no significant role in the explanation of electoral participation in European elections" (Franklin, van der Eijk and Oppenhuis 1996: 322). Taking the strong finding that how people vote is connected to their opinion of the government into account, it is also expected that those with stronger opinions on the government or opposition will be more likely to turn out as this gives them a cost-efficient way to form a strong preference on an issue they may otherwise not have acquired sufficient information for.

In addition to opinions on parties, individual politicians can play an important role. LeDuc (2015: 141) argues that a referendum is more likely to become about the popularity or unpopularity of the government or leader if the government initiated the referendum, as the governing party or leader becomes automatically linked with the referendum issue. Laycock (2013: 238) argues that feelings about party leaders may be especially important because of "increasing presidentialization of the office of Prime Minister", the extensive media coverage given to party leaders and the fact that it is easier to relate to a personality than an abstract political ideology, and because this is a familiar clue in an otherwise unfamiliar voting situation, especially when parties are divided.

However, the effects of party leaders have also not been widely developed in theories of referendum voting, although some notable examples have been discussed (Laycock 2013: 239). This would suggest that individuals would be more likely to vote if they had a strong opinion on a party or politician because they could use their endorsement as a shortcut to reduce the information costs of discovering the details of the issue at hand, or because they are looking to punish or support that party or politician. Similarly to the

opinions on parties, this is expected to be a greater motivation for turning out for the less educated than the more educated. This is because the need for a shortcut comes from the cost of acquiring information and using it to form an opinion, which is lower for the more educated than the less educated.

However, parties may also choose the extent to which they mobilise their supporters. Government parties are likely to mobilise their supporters when they have called a referendum themselves "for [their] own strategic purposes" (LeDuc 2015: 140). However, "Opposition parties may be less than wholehearted about mobilizing votes in support of government policy when an adverse vote could produce considerable political embarrassment for their political opponents" (Franklin, Marsh and McLaren 1994: 462), suggesting that strong support for the opposition may reduce turnout. Strong negative evaluations of politicians may also reduce turnout as low regard for politicians lowers the sense of duty to vote, as if politicians are not perceived to hold up their side of the 'social contract' then citizens may perceive their obligation to hold up their side and vote as lower (Bowler and Donovan 2013: 269). This suggests that strong opinions of politicians and parties, particularly opposition parties, could lower likelihood of turning out. This is important because strong opinions on parties and politicians is expected to be a greater motivation for turning out for the less educated than the more educated. However, this means that the argument that strong preferences can reduce as well as increase turnout would also be likely to affect the less educated than the more educated.

Mixed Approach

The issue approach and second order approach do not necessarily contradict one another, and there are a number of studies suggesting these factors can influence voting behaviour differently, either between elections or between sections of the electorate (see Hobolt 2006: 155 for a discussion). There are also theories explaining that individual voters must decide between their views on the issue, evaluation of the government, and how their preferred party advocates voting, or that each of these play a role (Hug and Sciarini 2000: 7, Schneider and Weitsman 1996: 583, De Vreese and Boomgaarden 2005: 59). These suggest that either a strong opinion on the issue or a strong opinion on the parties and politicians would motivate voting. Garry, Marsh and Sinnott (2005: 204) find that the more important the referendum is perceived as, the more important the substance of the proposal becomes in relation to domestic factors,

which suggests that a strong opinion on the issue is more important than a strong opinion on parties and politicians, although either can be a motivation for turning out.

Hobolt (2005: 85) argues that political awareness of a voter affects their acquisition of information, and therefore whether they vote based on their attitudes towards an issue or whether they rely on elite cues. A logical expansion of this idea is that people must also decide whether or not to turn out due to either the strength of their issue preferences or the strength of their opinion of the government, but they require at least one strong preference or opinion in order to overcome the costs of voting. This leads to the central question of whether the ability to form strong preferences differs for people with different levels of education, and also whether the role that these strong preferences in motivating turnout differs.

Voters never have complete information about how beneficial a treaty will be, and therefore opinion of the government and opposition becomes crucial, although domestic considerations are never the only factor ("there are no pure popularity contests in a world of uncertainty") (Schneider and Weitsman 1996: 604). Although all voters must form preferences and make decision in a context of incomplete information, voters with higher education can acquire information more easily and at a lower cost, and therefore it can be expected that they will have more complete information than voters with lower education, and consequently will be more likely to form stronger opinions on the issues compared to their opinions on parties and politicians, relative to those with lower education. This is supported by the finding that voters with higher levels of political awareness, strongly connected to higher education, rely more on their European attitudes when forming a vote choice in European referendums (Hobolt 2005: 96). De Vreese and Semetko (2002) found the voting propensity of those with lower education was disproportionately diminished by negative campaigning, suggesting that opinion of the government and opposition is more important to those with less education as it allows them to overcome the information burden required to form preferences on the issues. This suggests that the issue voting theory would better explain turnout for the more educated, while the theory of second order elections would better explain turnout for the less educated.

This leads to the hypotheses on how motivations for turning out differ between education groups:

H1: Strength of cultural issue preference is a greater motivation for turning out for the less educated than the more educated

H2: Strength of economic issue preference is a greater motivation for turning out for the more educated than the less educated

H3: Strength of opinion on parties and politicians is a more important motivation for turning out for the less educated than the more educated

Chapter 3: The Brexit Referendum

The 2016 Brexit referendum represents an ideal case study because of the relatively high turnout, meaning there were strong motivations for turning out which can be examined. Turnout was higher than in the preceding General Elections, meaning that a number of people who had previously not voted decided to vote in this referendum. It is also a good case to study motivations because it took place in a national context where there were very few previous referendums, lowering the likelihood that turning out is a response to habitual voting. Additionally, clear party cues were lacking due to the divisions within parties (Curtice 2017: 25-26), which suggests that the motivations for turning out may be different from other elections. Furthermore, there is a significant amount of data collected and available about this referendum.

The major downside of only examining one referendum is that generalisations cannot be drawn from the results (Hobolt 2006: 154). However, a comprehensive analysis of all European referendums is beyond the scope of this project. This referendum is also unusual in the content, in the sense that the majority of European referendums have been concerned with entry in the EU/EC or treaty ratification rather than exit from the EU. This chapter will first examine the political context of the UK in more detail, before discussing the specific issues that were involved in this referendum.

Political Context of the UK

The Brexit referendum of 2016 took place in a political context of declining trust in politics and politicians, "widespread disenchantment with politics", lower membership of and weaker identification with political parties, as well as declining turnout (Bogdanor 2009: 72, Qvortrup 2013: 3). Therefore, particularly strong opinions on parties and politicians would be expected. In particular, the 2009 MPs' expense scandal highlighted "the extent to which Westminster has come to be disconnected from the people" (Bogdanor 2009: 73), which increased the popularity of proposals for direct democracy (Qvortrup 2013: 3), implying that there is a strong connection between stronger feelings towards politicians and parties and the desire for referendums. Alternative forms of engagement have also remained important; interest in politics and feelings of civic obligations, as well as volunteerism and membership in

charitable organisations have stayed high despite growing disenchantment (Bogdanor 2009: 73). This suggests a populace that is disconnected from traditional political channels but willing to engage in other ways.

The UK has had relatively few referendums, with only two UK-wide referendums prior to the 2016 Brexit referendum, mainly due to the uncodified constitution and strong parliamentarianism, which made "Great Britain largely immune to referendums" (Hug 2002: 36). The possibility for gaining experience in referendum voting is therefore low. These referendums were held in order to settle serious conflicts within the parties that threatened to disrupt the government, and were used as a "a convenient way of papering over deep divisions that otherwise threatened the ability of the government to cohere" (Curtice 2013: 219). First a referendum was held in 1975 to solve disagreements from within the governing Labour party over continued membership in the EC (Hug 2002: 36). In response to the outcome of the 2010 General Election, a referendum was promised as a bargaining chip to entice the Liberal Democrats into a coalition with the Conservatives and to not disrupt the new coalition over the issue of electoral reform (Qvortrup 2013: 114-115). The 2011 AV referendum additionally "reflected an emergent de facto convention that significant constitutional change should only be introduced after it has secured popular endorsement" (Curtice 2013: 215, emphasis in original). The Brexit referendum reflected both the opportunity for significant constitutional change and an issue over which the Conservative party was divided, leading to David Cameron calling the referendum in order to help keep the Conservative party together on the contested issue of the EU, and to reduce support for UKIP (Curtice 2017: 24-25).

The issue of the UK's possible exit from the EU was not clearly divided along traditional party lines. This was a divisive issue for the Conservative party, which was split with 55% backing Remain and 45%, including high profile MPs such as Boris Johnson and Michael Gove, backing Leave. Although 96% of Labour MPs backed Remain, a number of key figures, such as Gisela Stuart, backed Leave and the Labour leader Jeremy Corbyn remained ambivalent. The party's stance was not well communicated to the electorate, with only 52% aware that Labour MPs mostly backed Remain. UKIP was united as pro-Leave, and the Liberal Democrats and SNP were publicly united as pro-Remain (Curtice 2017: 25-26). This means that citizens were not able to use the normal party shortcuts that they may rely on in general elections, although as previously discussed in chapter 2, this does not mean that opinions on parties and politicians are irrelevant to turnout. As the referendum was called by the

Conservative party, opinions of the party and David Cameron become linked to the referendum (LeDuc 2015: 141). The media coverage of the main politicians involved also allowed for the opinions on these politicians to become important, when other familiar clues were lacking (Laycock 2013: 238).

Historical positions of the main parties regarding the EU have also not been consistent. Until the 1989 European elections, the Conservatives had traditionally been more in favour of European integration than Labour, negotiating entry into the EC in 1972, although both parties had significant divisions within themselves (Franklin and Curtice 1996: 83). Enthusiasm for European integration has also been lower in the UK than the rest of Europe with a lack of support for political integration or the creation of a European identity: "While attitudes towards the EU have gradually become more favorable and most Britons do now [1996] approve of EU membership, the majority probably regard it as no more than a necessary evil, to be limited as far as possible to technical matters that do not affect the British way of life" (Franklin and Curtice 1996: 78). In Britain there was a "fear of losing national identity and culture", which was not seen in other European countries and likely contributed to the high levels of Euroskepticism, especially among the Conservative party (Kriesi et al 2006: 927).

Franklin and Curtice (1996: 79) describe the 1979 and 1984 European elections in Britain as "prototypically second-order elections", with low turnout and results closely tied to opinions on domestic parties. However, the 1989 European election had higher turnout, which could be argued was due to more salient European issues in the wake of highly publicised conflicts within the Conservative party about European integration, although European attitudes did not have a direct effect on turnout (Franklin and Curtice 1996: 80, 88). While this explains the success of the Labour party, it does not explain the poor performance of the pro-European Liberal Democrats or the extremely large gains made by the Greens, who at the time were "notably suspicious of Europe". The Greens' success in this election was "very much a typical second-order election effect" (Franklin and Curtice 1996: 81, 88). This sets a precedent for a very strong link between domestic party considerations and vote choice in European elections, with European attitudes playing little effect on vote choice or turnout. However, both the 1975 and 2016 referendums on EU/EC membership came about in part because of strong intra-party divisions, meaning a lack of normal party cues for voters to follow. In this context signalling disapproval is somewhat more difficult, as there is no clear government position to support or reject.

Main Issues of the Referendum

Studies into the outcome of the Brexit referendum have found that the vote choice was dependent more on the issues than on a desire to punish the government, which Hobolt (2016: 1264) states is expected due to the high salience, high turnout nature of the referendum. Furthermore, Curtice (2017: 33) argues that "the fact that voters who backed opposition parties were more likely than government supporters to back the government's position indicates that this was not a referendum where the outcome was the product of protest against the performance of the incumbent government". Despite Curtice's assertion, it cannot be determined with certainty from this finding that the government or opposition supporters did not vote contrary to their own parties in order to signal protest. Furthermore, as Curtice's (2017) work was primarily concerned with vote choice, this would only suggest that the decision to turn out would also not be closely tied to opinions on the government and opposition if it was assumed that individuals use the same process to decide how to vote as they do to decide whether to vote. While this assumption does not seem unlikely, it can also not be accepted as true without further research, which is at the core of this thesis.

In contrast to the weak findings for any connection between support for the government and voter behaviour, there is a strong connection between the issues involved with the referendum and vote choice. There were a number of issues that were highlighted in research into either the campaigns or into the voters and their perceptions. First the issues brought forward by the campaigns are discussed, then the most important issues for the voters. The Brexit campaign was "long and divisive" and each side sought to broadly frame the issue as either one of the economy (Remain) or immigration (Leave) (Hobolt and Wratil 2016: 1). The Remain side focussed on the damage that would be done to Britain's economy and the job losses that would result from leaving the EU, whereas the Leave side focussed on the UK's contributions to the EU and how they could be used to fund the NHS, as well as the lack of control over immigration from the EU and the fact that the UK was obligated to enact directives they had argued against in the Council of Ministers and accept judgements from the European Court of Justice (Curtice 2017: 26-27).

This pattern was largely mirrored by the voters themselves; Leave voters raised issues of immigration and a lack of trust and Remain voters focussed on economic stability (Hobolt 2016: 1263). The variable most strongly related to how people voted was their

perception of the economic risks of leaving the EU, although immigration was a significant motivation for vote choice for Leave voters (Hobolt 2016: 1265, Curtice 2017: 31). Perception of the EU undermining the UK's distinctive identity and European identity were also related to voting choice (Curtice 2017: 31). There was a sharp divide in the perception of economic and immigration issues between Leave and Remain voters, with Leave voters predicting less immigration and no worsening of the economy after Brexit, and Remain voters predicting no change in immigration and a worsening of the economy (Hobolt 2016: 1263).

These issues can be characterised along the cultural and economic dimensions, as discussed in chapter 2. Immigration preference and national identity are cultural issues, and are therefore expected to be both stronger and have a stronger effect on likelihood to turn out among the less educated, and the economic issue is expected to elicit a stronger preference from and influence likelihood of turning out more among those with higher education.

Respondents who said they would not vote found both immigration-based and economic arguments to be somewhat persuasive, although not to the extent that either Remain or Leave voters did (Hobolt and Wratil 2016: 3). This suggests that there is a strong connection between issue preference and likelihood of voting, and a potential voter requires at least one strong preference on any of the issues in order commit to voting. Hobolt and Wratil's (2016) study did not go look at whether the effect of these arguments differed between education groups, and therefore did not explain whether the motivation for turning out differed by education.

People who intended not to vote gave lack of trust in all sides as a main reason, along with a lack of trustworthy information (Hobolt and Wratil 2016: 3). This suggests that opinions of parties and politicians does have an important effect on turnout, especially as it can affect the persuasiveness of information offered by the campaigns. However, a lack of trust was also cited by Leave voters as a motivation for their vote choice (Hobolt 2016: 1263), suggesting that lack of trust in politicians can be a motivation for turning out as well a reason for not voting. Following from the discussion of second-order motivations for voting, this work examines the broader variable of strength of opinions of parties and politicians, meaning how much someone likes or dislikes them, as a motivation for turning out.

Immigration has become an important issue on the cultural dimension of European integration (Kriei et al 2006: 924). According to the reasoning voter theory, the less educated are more likely to form their opinion on immigration based on their gut feeling towards immigrants, which leads to a single strong opinion. Conversely, the more educated are more likely to take a wider range of considerations, such as the economic impact of immigration, the social desirability bias of promoting tolerance and multiculturalism and national security considerations into account. These competing considerations may cancel each other out, leading to a less strong preference.

Therefore, the more educated would be more likely to have less strong preferences, whereas the less educated would be more likely to form very strong preferences, either negative or positive, because they are based on a more straightforward consideration. This is important because this research assumes that having a strong preference or opinion is necessary to overcome the cost of voting, and can therefore influence turnout.

National identity is "complex and highly abstract", and often associated with territory, shared history and myths, common culture, and common laws and institutions (Smith 1992: 60). The fear of losing one's national identity has been shown to be an important motivation for political mobilisation in the context of European context (Kriesi et al 2006: 929). National identity is also part of the cultural dimension, meaning there is the same expectation as with immigration, that the less educated are more likely to have stronger preferences on national identity, based on straightforward considerations, whereas the more educated are more likely to have weaker preferences, based on more complex and sometimes contradictory considerations.

As theorised by Carmines and Stimson (1980: 78), the more educated are more likely to have the conceptual skills to acquire the necessary information and process it to form a strong preference on a hard issue, such as the economy. This leads to the expectation that the more educated are more likely to form strong preferences on the economy. Furthermore, this suggests that strong economic preferences are more likely to be a motivation for turning out for the more educated than the less educated, because the less educated are unlikely to have strong preferences on the economy.

Moreover, it is expected that while the strength of preference on immigration and national identity will have a stronger effect on likelihood of turning out for the less educated than the more educated, strength of preference on the economy will have a stronger effect on likelihood of turning out for the more educated than the less

educated. This is not only due to the expected variance in the strength of preferences, but also the different reasoning taking place, wherein the more educated have a broader range of more complex considerations at their disposal, as suggested by (Sniderman, Tetlock and Brody 1991: 60-61).

As discussed in chapter 2, it is expected that there will be a difference in the strength of opinion on parties and politicians. It is also possible that in the British context, that the MPs' expenses scandal had a particularly large effect that still has ongoing consequences. One possibility is that this has led to a higher likelihood of stronger opinions among the less educated, because the more educated have had the negative effects of this scandal mediated by the positive effects of their higher social status and higher knowledge of the workings of the government. Based on the assumption that a person will only decide to vote if they have at least one strong preference, opinions of parties and politicians can be used in place of a reasoned policy preference as a motivation for turnout. This would suggest that those without strong policy preferences are more likely to base their decision on whether or not to vote on their opinion of parties and politicians. As forming an opinion on politicians and parties requires less information than forming policy preferences, and less complex reasoning methods, it is expected that the strength of opinions on parties and politicians will be a greater motivation for turning out for the less educated than the more educated.

Chapter 4: Data and Methods

Data Selection

All data comes from the British Election Study wave 8 data, which was administered before the Brexit referendum. The BES data set is sufficiently large for there to be statistically significant, but also weak relationships between variables (Curtice 2017: 30-31). However, as only one specific referendum has been analysed here, in one national context, it would be hard to draw generalisations from the results (Hobolt 206: 154).

Szczerbiak and Taggart (2004: 575) warn that the intensity of European preferences can be extremely hard to operationalise and can tend towards becoming tautological. However, in this thesis a number of items have been used and recoded by the strength of the response, rather than the direction of the preference. As not only typically "European" issues, such as questions about opinions on the EU or European integration, are included, but the strength of specific policy preference on immigration, national identity, the effect on the economy that leaving the EU would have and strength of feeling towards the main politicians and political parties, the risk of tautology has been avoided.

Data was taken from the 13545 respondents with complete data for each of the items used in the analyses. Listwise deletion was chosen over imputation to avoid the possibility of imputing biased answers in the case that the missing responses are systematic rather than random (Bhattacherjee 2012: 120). Furthermore, the sample size remained large enough for statistically significant relationships to be found, including a large number of respondents in each different group.

Only items referring to the United Kingdom or Great Britain as a whole, and only the parties competing in the national general elections across the whole of the UK were included, meaning that questions and parties specific to Scotland or Wales were omitted. This includes questions such as those on Scottish or Welsh identity or feelings towards the Scottish National Party or Nicola Sturgeon. Northern Ireland was not included in the survey, which may have skewed the results to some extent as Northern Ireland has a comparatively low turnout at 62.7% (Electoral Commission 2018b).

However, the electorate of Northern Ireland makes up less than 2% of the UK's total electorate, meaning their exclusion is unlikely to have a large effect on the results.

Most of the items included were measured on a Likert-type scale with roughly equal intervals. As this study is only interested in the strength of preferences, and not the direction, the original scales for many of the variables were folded. For many of the variables respondents were asked to place themselves on a 7 (or 5 or 11) point scale from one extreme to another, which needed to be recoded as both 1 (strongly disagree) and 7 (strongly agree) represent strong preferences, while 4 (neither agree nor disagree) would be a neutral preference. Additionally, those answering 'don't know' can be seen to have no preference on the issue, even less than those who answered in the middle of the scale (neither agree nor disagree), as they had an opinion, although it was neutral. Therefore 'don't know' became the least strong preference and therefore 0 on the new scales, with the strongest positive and negative opinions becoming the highest point on the new scales. Throughout this thesis strong opinion is therefore used to refer to a response that was at the extremes on the original scales, and at the highest point of the new scales.

As discussed in Chapter 2, there are two parts to this analysis. In order to answer the question of why the motivation for turnout varies by education group, how the strength of preferences varies with education must first be examined. The strength of preferences is the dependent variable for this part of the analysis, where education is the independent variable. The second part is concerned with how the motivation for turnout is affected by education. For this part turnout is the dependent variable.

The following sections describe the different analyses undertaken and the variables included in them. The first analysis uses descriptive analyses, correlation and tests on the means to determine if there is a difference in the strengths of preferences and opinions by education group. This is important to determine whether the reason for a difference in motivations for turning out is due to a difference in the strength of preferences. The second analysis uses a regression model to determine the role the strengths of opinion has on turnout for different education groups.

Method 1: Differences in strength of preferences by education group

This part of the analysis attempts to answer the question of why there is a difference in the motivation for voting between education groups, by examining whether there is a difference in the strength of preferences. In order to do this, descriptive analysis, correlation and a t-test of means were used to determine whether there was a difference in the strength of opinions and preferences by education. Finding differences in the strengths of opinions and preferences could be an explanation for why there are differences in turnout.

Dependent Variable: Strength of Preferences and Opinions

Strength of Opinion on Parties and Politicians

There were 14 items from the BES asking about the opinions on politicians and parties (after those specific to Scotland and Wales were removed). The exact questions asked were:

How much do you like or dislike each of the following party leaders³? (0 strongly dislike-10 strongly like)

How much do you like or dislike each of the following political figures⁴? (0 strongly dislike-10 strongly like)

How much do you like or dislike each of the following parties⁵? (0 strongly dislike-10 strongly like)

Respondents were asked to place themselves on an 11-point scale from 0 (strongly dislike) to 10 (strongly like), with a category for respondents saying they didn't know. This scale was folded and these responses were recoded by strength, as shown in Table 1.

³ Party leaders included are: David Cameron (Conservative), Jeremy Corbyn (Labour), Tim Farron (Liberal Democrats), Nigel Farage (UKIP) and Natalie Bennet (Greens)

⁴ Political figures included are: Boris Johnson, Michael Gove, George Osborne and Alan Johnson

⁵ Political parties included are: Conservatives, Labour, Liberal Democrats, UKIP, and Greens

Table 1: New and old codes for an 11-point Likert type scale

New Code	Old Code
0 (weak opinion)	9999 (don't know)
1	5 (neither like nor dislike)
2	4, 6
3	3, 7
4	2, 8
5	1, 9
6 (strong opinion)	0, 10 (strongly like/dislike)

The like/dislike of David Cameron, the Conservatives, Jeremy Corbyn and Labour will be examined, as they represent the Prime Minister in the time before the referendum, and the person who called the referendum, the sole governing party, the leader of the opposition and the largest opposition party respectively. As both David Cameron and Jeremy Corbyn were supporting the Remain campaign, another analysis will look additionally at Boris Johnson, the leader of the Leave campaign from within the government, and Nigel Farage, leader of UKIP and one of the most prominent supporters of the Leave campaign. This will allow for a closer examination of whether the strength of opinions of parties and politicians is uniform across different parties and politicians.

Strength of Economic Preference

The item used for the strength of economic feeling was:

Do you think the following would be better, worse or about the same if the UK leaves the European Union?

The general economic situation in the UK 1 (much worse) - 5 (much better)

This item was chosen because it captures the strength of each respondents feeling on the extent to which leaving the EU would affect the UK's economy, which is policy preference requiring a significant amount of information and cognitive processing to form a strong preference on. Therefore, it is a good example of what Carmine and Stimson (1980) describe as a 'hard' issue, and is along the economic issue dimension. Therefore, it is an item where a difference in opinion strength between education groups would be expected. Furthermore, it is specifically related to the effects on Brexit on the UK's economy rather than a general opinion on the state of the economy. The preferences recorded in the BES were then recoded by strength, instead of direction, meaning those responding *much worse* or *much better* had the strongest opinions. Those answering in the middle of the scale or *don't know* had the weakest opinions.

Strength of Immigration Preference

There were a number of questions related to immigration included in the BES. The strength of immigration preferences is taken from an item asking about preferences towards immigration policy, rather than a general feeling towards immigrants. This is because the strength of feeling on immigration policy closely fits the cultural issue dimension (Kriesi et al 2006: 924). The exact question asked was:

Some people think that the UK should allow *many more* immigrants to come to the UK to live and others think that the UK should allow *many fewer* immigrants. Where would you place yourself [and the parties] on this scale? 0 (many fewer) - 10 (many more)

The answer scale provided was from 0 (many fewer) - 10 (many more), and was folded and recoded according to strength of preferences, with 0 and 10 becoming strong preferences and *don't know* becoming the weakest preferences, followed by 5 from the original scale. This once again allowed for the separation of the strength of immigration policy preference from the direction.

Strength of National Identity

In Great Britain, national identity can be somewhat complicated by the situation of having devolved nations. The understanding of one's national identity may be somewhat confused between, for example, British and English identities (Kumar 2003: 2). The majority of people in Great Britain see themselves more strongly as English, Welsh or Scottish than they do British (Kumar 2003: 6). However, for this research only the strength of British identity was examined for two reasons. The first is that British

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identity is common to all respondents and can therefore be compared across them,

rather than comparing the strength of English identities to the strength of Scottish

identities, for example. The second reason is that British national identity and the

unique characteristics of Britain were used in the Brexit campaigns (Curtice 2017: 31),

linking British national identity in particular to the issue of the EU.

Respondents were asked to place themselves on a 1(min)-7(max) scale of Britishness

with the following question:

Where would you place yourself on these scales? 1(min)-7(max)

As with many of the other items included, these items were recoded to account for the

strength of preference rather than direction (meaning 1 and 7 on the scale became

equal as the strongest response, and don't know become the weakest response,

followed by 4 on the original scale).

National identity and immigration preference are often associated, however here the

correlation is .17, which is low although significant, but means that multicollinearity is

unlikely and both variables can be included in the regression model.

Independent Variable: Education

The question asked in relation to education was:

What is the highest educational or work-related qualification you have?

There were a number of responses possible due to the large range of possible

qualifications available. These responses are coded by the BES into six intervals so

that this broad range of qualifications can be compared. The intervals and the number

of respondents in each interval are shown in Table 2.

Table 2: Number of respondents in each education group

Code	Level	Frequency	Percentage	
0	No qualifications	968	7.1	
1	Below GCSE	549	4.1	
2	GCSE	2749	20.4	
3	A-Level	2764	20.4	
4	Undergraduate	5144 38.0		
5	Postgraduate	1371	10.1	

The total sample N of 13545 was split across 6 education groups as shown in Table 2. There are a sufficient number of cases in each education group, although it is skewed towards the more educated, with the modal group being those with an undergraduate education. This shows there is a slight overrepresentation of university graduates in the sample, compared to the Office for National Statistics finding that 42% of those aged 21-64 in the UK not currently enrolled in education had a university degree (undergraduate and postgraduate) (ONS 2017: 3). However, the BES data also includes those still in education and a wider age range.

For the descriptive statistics and correlation, the 6-point scale of education shown above is used. For the t-test on difference in means, the two groups of those with (6515 respondents) and without (7030 respondents) university degrees is used.

Methods

The relative strength of opinion on immigration, national identity, economy and the government and opposition can be tested in three ways. First, through examining the frequency of strong preferences for each dimension by education level. This descriptive analysis will be accomplished by creating bar charts. This allows for the determination of how the strength in preferences varies by education group.

In addition to looking at the frequency of the occurrence of strong preferences in each education group, a Pearson correlation test between education level and each variable is run to determine for which variables the strength of preferences are correlated to

education level. Finally, a t-test will be performed to determine if the means of the opinions on these dimensions are statistically different between the education groups with and without university education.

Method 2: Differences in motivations for turnout by education group

This part of the analysis seeks to determine how the motivations for turning out differ by education group. In order to do this, regression analysis is used to examine the role that strong preferences play as a motivation for turnout for those with and without university degrees.

Dependent Variable: Turnout

Turnout is often very hard to accurately measure due to a higher proportion of respondents saying that they had voted than the recorded turnout for the election (Zeglovits and Kritzinger 2014: 224). There were two possible items that could be used as a measure of turnout. Wave 9 (post referendum) of the BES included an item asking respondents how they voted, from which a dichotomous variable on whether or not the respondent voted could be created. However, 94.1% of respondents answered this question as if they had voted. This is problematic for analysis because the reported turnout is so high that there is very little variation that can be explained by a model, and it is substantially higher than the actual turnout of 72.2% across the whole UK. This disparity between actual turnout and reported turnout could be caused by sampling bias, measurement errors, unintentional misreporting or respondents intentionally misreporting that they had voted when they had not due to the social desirability bias (Zeglovits and Kritzinger 2014: 225). Instead, the item from wave 8 (pre-referendum) asking respondents their likelihood of voting is preferred, as 87.9% of respondents said they were very likely to vote, which is closer to the actual turnout, and this item was measured on a Likert type scale with 5 intervals allowing for greater variation than a dichotomous variable.

The exact question asked for this item was:

Many people don't vote in elections these days. How likely is it that you will vote in the referendum on Britain's membership of the European Union on June 23rd? 1 (very unlikely that I would vote) - 5 (very likely that I would vote)

Independent Variables: Strength of Preferences and Opinions, Education

Education

Education was also entered as a dummy variable, with 0 for those without a university education and 1 for those who graduated from university. These subgroups are approximately equally sized.

Information acquisition was an important basis of much of the theory discussed in Chapter 2. However, information acquisition is extremely hard to operationalise, whereas education is very well measured and easy to compare across respondents. As education coincides with high levels of political information and awareness (Sniderman, Brody and Tetlock 1991: 21), education can be seen to be a proxy for information acquisition.

Strength of Preferences and Opinions

The strength of preferences and opinions on national identity, immigration, economy and parties and politicians used are the same as those described in Method 1.

Strength of Opinions on Parties and Politicians

The data on opinions of parties and politicians was taken from the same 14 questions as described in Method 1, and the scales folded and recoded in the same way. In order to have an overall score for each respondent's number of strong opinions on parties and politicians, the total number of strong opinions held by each respondent across the 14 politicians and parties was determined. This was achieved by once again recoding the responses. Responses of 0 or 10 on the original scale (strongly like/dislike), or 6 (strong opinion) on the new scale were recoded as 1, and all other responses were recoded as 0. The new values (1 for a strong opinion, 0 for all others) across all 14 parties and politicians were added for each respondent. This final scale therefore ran 0-14, with a score for 0 for respondents who lacked any strong opinion, and 14 for respondents who had a strong opinion on every party or politician.

This item could be affected by acquiescence bias: "Some respondents will agree with an explanation - indeed, with virtually any and all explanations, however they might contradict or conflict with each other - in order to avoid the appearance of ignorance" (Sniderman, Brody and Tetlock 1991: 76). Although many of the politicians and parties are well known, some are much less well known, and so there is the problem that respondents may offer an opinion on certain politicians or parties even if they do not have actually have an opinion on that party of politician. Using both positively and negatively worded items can reduce the acquiescence bias (DeVellis 1991: 59). However, this was not possible as the same question was asked for all parties and politicians. Instead, as done by Sniderman, Brody and Tetlock (1991:76), the responses of those who answered strongly to all of the 14 questions were deleted, as a way to counter the measurement error occurring from the acquiescence problem, leading to a final scale of 0-13.

Control Variables

A number of other variables often shown to have an effect on the likelihood of voting are also included in the regression models. This is so that the effect of education and the interaction effects of education and strong preferences can be examined independently of the effects of these other variables. Education is often closely related to income and age, which are also associated with likelihood of voting (Wolfinger and Rosenstone 1980: 10-11), and therefore they are included as control variables. The responses for gross household income were recoded into intervals of equal size. Age in years is included. Gender is included as a dummy variable (0 = male, 1 = female). In this referendum, being older and having a higher income were associated with higher turnout (Becker, Fetzer and Novy 2017: 637, Goodwin and Heath 2016: 326).

Interest in EU referendum is also included as a control variable, as it would be expected to be strongly associated with turnout, but does not reveal more information about how specific interests, for example between immigration and the economy. The specific question for this item is:

How interested are you in the EU referendum that will be held on June 23rd? 1 (not at all interested) - 4 (very interested)

Method

Ordinary least squares (OLS) regression is chosen here, using SPSS. Regression analysis requires a continuous dependent variable (von Eye and Schuster 1998: 1), which means that it can only be used with the likelihood of voting data as a dependent variable, and not the reported turnout, which is a dichotomous variable. Linear regression is also robust to violations of the normality assumption (Schmidt and Finan 2018), which is important as much of the data involved is non-normal.

One disadvantage of OLS regression is that the effect is assumed to be the same for all types of people (Wolfinger and Rosenstone 1980: 11). In this research, respondents are split into two categories, one for those with a university and one for those without. There are a number of ways of comparing effects between groups. One possibility is to estimate the effects for each group separately and then compare the significance of the estimates for the two groups, however this can lead to the conclusion that there is no significant effect because of difference in group sizes rather than differences in effect (Lunt 2015: 1143). Instead it is preferable to add a variable for the multiplication of the dummy variable for education group and the predictor variable and test them in the same regression model. This will therefore measure the difference in effect between the two groups and can be tested for significance (Lunt 2015: 1143).

The addition of this additional term allows for the assumption that the regression of the criterion on the predictor variables depends on the education group (von Eye and Schuster 1998: 156). In this case it is testing the assumption that the effect that the strength of opinions and preferences has on turnout depends on education. Therefore, the inclusion of the multiplicative term for the dummy variable for education and the strength of preferences allows for the estimation of the effect that strength of opinion has on turnout for different education groups, rather than assuming the effect is the same for all groups. Importantly, this can then be used to determine whether there is a significant difference in the role that the strength of opinions and preferences plays as a determinant of turnout for different education groups.

The first regression model includes education category (dummy variable with 0 for no university education and 1 for university education) alone as an independent variable to determine if education level has a direct effect on turnout. In this model no predictor variables are multiplied by the dummy variable. The regression formula for this model is:

$$LV = \beta 0 + \beta 1(IP) + \beta 2(EP) + \beta 3(NIP) + \beta 4(OPP) + \beta 5(Edu) + \beta 6(C) + \epsilon$$

Where LV is the likelihood of voting, IP is the strength of preference on immigration, EP is the strength of preference on change in the economy, NIP is the strength of national identity, OPP is the combined number of strong opinions on parties and politicians, Edu is the dummy variable for a university degree, and C is the control variables.

Before the inclusion of multiplicative terms including the dummy variable, the four predictor variables of strength of national identity, strength of immigration preference, strength of economic opinion and strength of opinions on parties and politicians, were mean-centred, i.e. the mean score for the whole sample was subtracted from each individual score. Mean-centring reduces multicollinearity, does not affect the unstandardised coefficient of the term including the multiplication with the dummy variable and does not affect the model fit statistic (lacobucci et al 2016: 403-404). While mean-centring does not affect the unstandardised coefficient of a multiplicative term, it does affect the standardised coefficient (Allison 1977: 147). Therefore, the unstandardised coefficients will be reported here.

This first regression analysis will enable the determination of the role that each of these variables plays as a motivation for turning out across the whole sample, but assumes the effect is the same across the sample. However, the main area of interest is in whether there is a difference in the role these variables play in motivating turnout between different education groups. In order to determine this, an additional regression analysis will be run for each of these variables with the inclusion of a term that is the predictor variable multiplied by the dummy variable for education group, therefore separating the effect the predictor variable has for each group. The main outcome of interest is whether there is a significant coefficient for this multiplicative term, as this will signal whether there is a significant difference in the role that each of the variables plays in motivating turnout between the education groups.

There are a number of methods for determining whether there is a difference in the effect of a variable in different groups. It is expected that there is a significant difference in how these variables affect turnout by education group, and this would be shown by the multiplicative term encompassing education group and the predictor variable. Allison (1977: 149) argues testing whether coefficients differ from zero should be avoided as their value is based on where the zero point of an interval scale has been set. Instead, the change in R² with the inclusion of the new terms, compared to the model without these terms, should be used to determine the significance of the difference between groups. However, Aguinis and Gottfredson (2010: 778-779) argue that both the t-statistic to test the null hypothesis that the coefficient of the new, multiplicative term is zero and using the F-statistic to test whether the change in R² is zero can be used to determine whether a significant effect is present. Ai and Norton (2003: 124) and von Eye and Schuster (1998: 157) also suggest using the t-test of the coefficient to determine statistical significance of the effect. Both the t-test on the coefficient of the term for each of the predictor variables multiplied by the dummy variable and the F-test on the change in model fit will be performed to determine the significance of the difference in the effect of the predictor variable by education group.

Aguinis and Gottfredson (2010: 779) warn that using multiplication in multiple regression typically has low statistical power, and "the probability that population effects will be detected in the sample is low". This problem is mediated when the variance of predictor values is not negatively biased and even mild selection biases can greatly reduce the power of moderated multiple regression (Aguinis and Gottfredson 2010: 779-780). Unfortunately, the difference between the reported likelihood of voting and the actual turnout suggested that there may be a significant selection bias, with those more likely to vote also more likely to consent to taking part in a study, although this could also be partially explained by a social desirability bias in answering the question on turnout. This means that it would be possible for there to be population effects which are not evident in the sample.

Two characteristics that can improve statistical power are increasing total sample size, which in this case is very large, and using sub-groups of approximately equal size (Aguinis and Gottfredson 2010: 780). This was one reason why education level was split into two categories (those with and without university education) which are of approximately equal size; including a third category for those who did not successfully complete secondary school would have meant having a much smaller category and

therefore sacrificing statistical power. Statistical power is further reduced when the smaller subgroup is paired with the larger correlation (Aguinis and Gottfredson 2010: 781).

Chapter 5: Results and Discussion

This chapter looks at the results of the descriptive and regression analyses and discusses whether they can support the hypotheses laid out in Chapter 2. The four variables analysed as possible motivations for turnout were strength of opinion on immigration and national identity as cultural issues, strength of opinion on the effects on the economy as an issue on the economic dimension, and strength of opinions of parties and politicians. First, the descriptive analysis, correlations and t-test on the means will be discussed, in order to explain whether there are significant differences in the strength of preferences between different education groups. There is the expectation that the less educated are more likely than the more educated to form strong preferences on immigration and national identity, whereas the more educated are more likely than the less educated to form strong preferences on the economy and to hold stronger opinions on parties and politicians. This part of the analysis aims to explain why there are different motivations for turning out, and whether this can be explained by a different pattern of strong preferences between education groups.

Finally, whether H1: Strength of cultural issue preference is a greater motivation for turning out for the less educated than the more educated, H2: Strength of economic issue preference is a greater motivation for turning out for the more educated than the less educated and H3: Strength of opinion on parties and politicians is a more important motivation for turning out for the less educated than the more educated can be supported is discussed with regards to the results of the regression analysis. It is expected that the strength of cultural issue preference will be a more important determinant of turnout for the less educated, and strength of economic issue preference will be a more important determinant of turnout for the more educated.

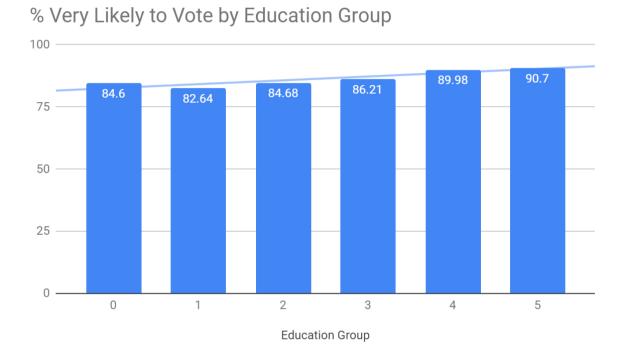
Analysis 1: Descriptive Statistics

This section examines whether there is a difference in the strength of preferences between education groups, therefore attempting to explain why motivations for turning out are different by looking at how strong preferences are distributed.

Turnout

Turnout is examined by education group to determine the extent to which there is a difference in turnout among people of different education levels. Explaining why turnout differs by education group is at the core of this thesis, and therefore it is important to know the extent to which turnout also differs.

Figure 4: Percentage of respondents that reported they were very likely to vote by education group



There is a trend towards higher likelihood of voting as education level increases, as would be expected from the results of previous elections and referendums and the enormous body of literature citing education as the strongest predictor of turnout. This suggests that there are differences in the motivations of different education groups to turnout.

Opinions of parties and politicians

The following figures show how opinions on parties and politicians vary by education level. Strong opinions are used here to mean both positive and negative opinions, but only the most extreme responses from the original scale. This section examines the strength of opinions on specific parties and politicians as well as a combination of

strong opinions. The aim of this is to determine whether there is a difference in the ability and willingness to form strong opinions on parties and politicians by education level, in which case a similar disparity would be expected across all parties and politicians. Alternatively, it is possible that the formation of strong opinions varies significantly depending on the individual parties and politicians.

First, the strength of opinion of the leaders of the government and opposition, as well as their parties, is examined. This is followed by the differences in the strength of opinions for individual politicians at the head of both the Leave and Remain campaigns. Finally, the proportion of people in each education group with at least one strong preference is calculated in order to determine whether there is a difference in the ability to form any strong preference between education groups.

Figure 5: Percentage of respondents with strong opinions on the Conservative and Labour Parties by education group

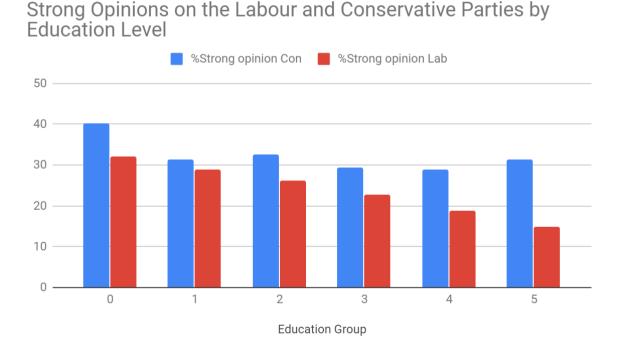


Figure 5 shows a general decline in number of respondents with strong opinions on the two largest parties as level of education increases, although there is a slight increase in strong opinions on the Conservative Party among the most educated.

Figure 6: Percentage of respondents with strong opinions on David Cameron, Jeremy Corbyn, Nigel Farage and Boris Johnson

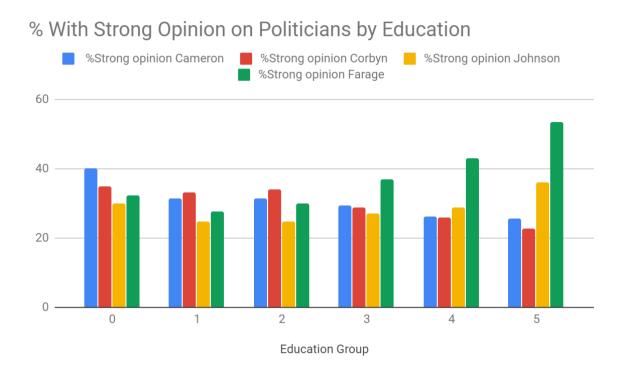


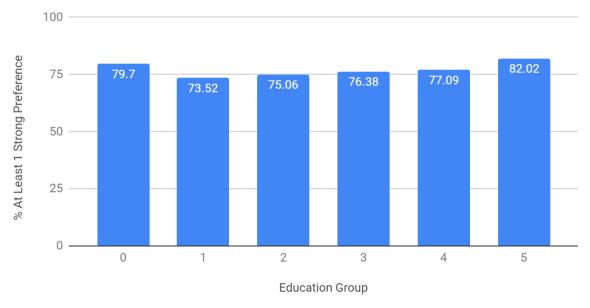
Figure 6 shows that unlike with David Cameron and Jeremy Corbyn, the leaders of the two largest parties, there are peaks in percentages of people with strong preferences for Boris Johnson and Nigel Farage at the higher end of the education spectrum. In the case of Nigel Farage, there is a clear increase in the percentage of people with strong opinions of him, positive or negative, in the groups with the highest levels of education. Both Boris Johnson and Nigel Farage, in addition to being closely linked to the Brexit referendum, were also politicians perceived as anti-establishment or outside of the traditional mainstream political sphere. This means that it is possible that the process for forming opinions on these politicians differed from the opinion formation on the mainstream parties and their leaders. While not within the scope of this research, an interesting line of enquiry for future research would be to determine how the opinions towards specific politicians affected turnout.

The percentage of people with at least one strong opinion in each education group was also examined, to determine whether across all 14 parties and politicians there was a difference in the number of people who lacked any strong opinion. A strong opinion here means that they responded that they strongly liked/disliked at least one party or politician when asked in the BES. This was important to investigate as the theories and hypotheses put forward in Chapter 2 suggest that having a strong opinion is necessary

for deciding to vote. Therefore, determining whether there is a significant difference in the number of people with no strong opinions between education groups is necessary to determine how this strong opinion can be used as a motivation for turning out among different education groups.

Figure 7: Percentage of respondents with at least one strong opinion on parties or politicians by education group





Once again Figure 7 shows a trend towards an increasing percentage of people in each group who have at least one strong preference across all 14 politicians and parties, apart from the group with least education, which does not fit this pattern and has the second largest number of respondents who have at least one strong preference.

The conclusion that can be drawn from this analysis is that there is a different pattern of the strength of opinions, where the less educated are more likely to have stronger opinions on the main parties and their leaders, and the more educated are more likely to have stronger opinions on the politicians most closely associated with the Brexit referendum, but there is only a small difference in the number of people who have formed at least one strong preference. One explanation for this is that the more educated use a more integrated and differentiated decision making process, as described by Sniderman, Brody and Tetlock (1991: 60-61), meaning they take more

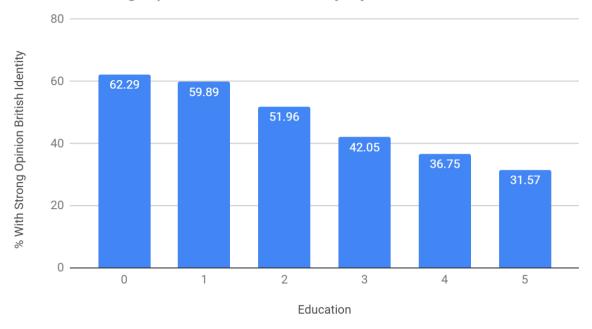
factors into account. Therefore, it is possible, with regards to the Conservative and Labour parties and their leaders, that the positive and negative factors taken into account cancel each other out and lead to a more neutral opinion among the more educated. In contrast the less educated use a simpler process more reliant on gut feeling, using fewer abstract cognitive considerations (Sniderman, Brody and Tetlock 1991: 25), which may also be disproportionately influenced by scandals, such as the MPs' expenses scandal, leading to a stronger opinion. Assuming that this is the case, it would follow that the less educated use the same processes for forming opinions on all politicians and parties, but the more educated include different factors in their consideration depending on how much information they have. They may have a significant amount of information about a broad range of policies in many areas, both proposed and historical, from the main parties and politicians. In contrast, there is a significant amount of information available cheaply on Nigel Farage and Boris Johnson's opinions and proposed policies towards the EU, but gaining information on their proposed policies towards other areas unrelated to the EU, such as education, social services or taxation, would be extremely costly as the information is not widely distributed and there is no historical experience to evaluate. This means that the more educated are more likely to have a more moderate or weaker opinion on mainstream parties and politicians because their opinions on different policies and factors may mediate each other, while they are more likely to have stronger opinions on politicians well known for a single issue or policy because their overall opinion is formed by considerations based on one proposed policy.

These results lend some level of support for the argument that there are differences in the distribution of strong preferences on parties and politicians, in the sense that there are clear differences in the strength of opinion of individual parties and politicians. However, a structural difference in the ability or willingness to form strong preferences on parties or politicians is not evident here, and therefore the results of the correlation and t-test are necessary in order to be able to examine this further.

National Identity

Figure 8: Percentage of respondents with a strong opinion on British identity by education group

% With Strong Opinion British Identity by Education



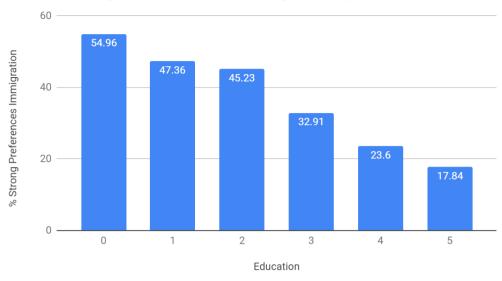
There is a clear decline in the proportion of people with a strong feeling on national identity as level of education increases. This supports the argument that the less educated are more likely to form strong preferences on cultural issues. This is further discussed in relation to the results of the correlation and t-test.

Immigration

As with national identity, Figure 9 shows a steep decline in the proportion of people with strong preferences on allowing immigrants into Britain as education increases, which lends further support to the argument that the less educated are more likely to form strong opinions on cultural issues.

Figure 9: Percentage of respondents with strong preferences on immigration by education group

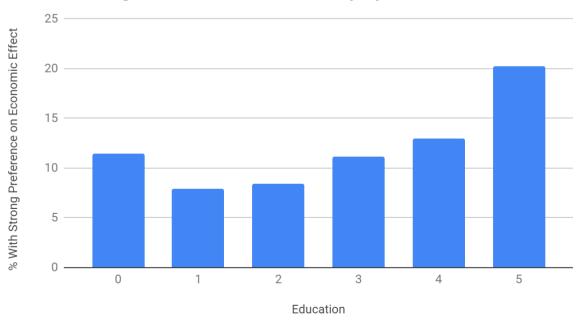
% With Strong Preferences on Immigration by Education



Economy

Figure 10: Percentage of respondents with strong preferences on the economy by education group

% With Strong Preferences on Economy by Education



There is a general trend towards a higher percentage of people with strong preferences on whether leaving the EU will have an effect on the general economic situation in the UK as education increases. However, the lowest education group does not fit this pattern, with a higher percentage of respondents having a strong opinion. This supports the argument that the more educated form stronger opinions on the economic issue dimension.

This section has shown that there is evidence that the less educated form stronger preferences on cultural issues, while the more educated form stronger preferences on economic issues. Whether there is a difference in the strength of opinions on parties and politicians remains unclear. The following section examines these hypotheses further using Pearson's correlation and a t-test on the difference in means.

Correlation and t-test

Table 3: Correlation of variables with education

Pearson Correlation with	
Education Level	
Variable	Correlation
Likelihood to vote	0.07***
Britishness	-0.15***
Cameron	-0.05***
Corbyn	-0.06***
Farage	0.13***
Boris Johnson	0.05***
Conservatives	-0.03***
Labour	-0.08***
Agg Strong Preferences	-0.02**
Immigration	-0.22***
Welfare	-0.09***
Economy	-0.07***
Culture	-0.06***
Effect on Econ	0.12***
EU made UK rich	0.05***

^{***}p<0.01

^{**}p<0.05

Table 4: Results of t-test on the difference in means from those with a university degree to those without

Variable	Difference in means
Likelihood to turnout	-0.109***
Immigration	0.786***
Economy	-0.211***
National Identity	0.252***
Parties and Politicians	-0.02

^{***}p<0.01

A t-test on the difference in means between those with a university education and those without a university education shows that the difference in means is significant between the two groups at the 0.01 level for all areas except opinion on parties and politicians. Table 3 shows that the strongest correlations are between national identity and immigration with education. Both of these correlations are negative, suggesting that the less educated have stronger preferences, and the more educated have weaker preferences in these areas. The t-test also showed a statistically significantly higher mean of strength of preferences for those without a university degree than for those with a university degree, further supporting the argument that those with lower education hold stronger opinions on immigration and national identity.

The strength of preference on immigration had the strongest correlation with education and largest difference in means between those with and without university degrees. The findings in terms of national identity, that there is a significant correlation with education and a significant difference in means, also support the argument that the less educated are more likely to form strong opinions on cultural issues than the more educated. This is contrary to Carmine and Stimson's (1980: 78) argument that easy issues will be equally important throughout the population, but seems to lend support to the argument that the less educated are more likely to form preferences based on affect towards a certain group, thereby having stronger opinions on cultural issues, while the more educated are more likely to take a larger number of considerations into account (Sniderman, Brody and Tetlock 1991: 26).

The perception of the effect that leaving the EU would have on Britain's economy has a weaker correlation at 0.12, but this significant and positive, suggesting that the more educated do have stronger opinions of the role the EU plays in Britain's economy. The t-test also showed that those with a university degree had a higher mean strength of preference than those without. This supports both Carmines and Stimson's (1980) and Sniderman, Brody and Tetlock's (1991) arguments for the need for a high level of information and processing skills to be able to form an opinion on hard issues without incurring an enormous cost of acquiring information, which results in the more educated being more likely to form stronger preferences on issues on the economic dimension than the less educated.

A core assumption of this research, also put forward by Szczerbiak and Taggart (2004: 575), is that citizens must care about an the issue of the referendum in order to turn out, therefore finding that there is a difference in which issues are important to different education groups does suggest an explanation for how the conception of which issues are involved in a referendum is connected to turnout among different education groups. The proportion of more educated people with strong opinions on the economy is much smaller than the proportion of less educated people who have strong opinions on national identity or immigration. The fact that immigration and national identity are the areas where the strongest preferences are found emphasises the importance of including them in an analysis of motivating factors for turnout, rather than only traditionally European issues such as whether a person favours more or less integration or their opinion of the EU.

In terms of opinions of politicians and parties, the correlation is strongest between opinions of Nigel Farage and education, at 0.13. The scale of aggregate number of strong preferences has a weak, negative (although significant at the 0.05 level) correlation with education, suggesting the overall level of strong preferences is slightly higher among the less educated than the more educated. The t-test showed no significant difference in the mean strength of preference between those with and without a university degree.

No education group had stronger preferences across all parties and politicians, although there were differences for individual parties or politicians. This suggests that education does not have a large effect on the overall ability to form strong opinions on parties and politicians, although there were significant differences for individual politicians, notably Nigel Farage. The fact that people with any education level have

sufficient information and the cognitive capacity to form an opinion on parties and politicians is important for the argument that citizens may use their preferences on parties and politicians to decide whether or not to turn out when they do not have a strong preference on any issue involved with the referendum, or as suggested by Schneider and Weitsman (1996: 583-584), when they lack the information or capacity to form a preference. This shows that, if this argument proves to be true, this 'backup' option is equally distributed throughout the population, and not only available to the more educated. The more educated are also more likely to have advantages in acquiring and processing information, making the more educated more likely to be able to form opinions on complex, economic issues, and therefore more likely to have a strong opinion on the referendum issue when there are no cultural issue options offered.

These results have shown a significant difference in the strength of preferences among different education groups, with the less educated having stronger preferences than the more educated on the cultural issues of immigration and the economy while the more educated have stronger preferences than the less educated on the economic issue dimension. This follows the expectations of the theories, and leads to the conclusion that there is a difference in how education groups form strong preferences on different issues. This is important because it suggests that how the referendum issue is framed, in terms of economic or cultural issue dimensions, will have a different effect on different education groups.

Analysis 2: Regression

This section looks at how the strength of preference affects turnout, and whether this varies by education level. First, evidence relating to *H1: Strength of cultural issue* preference is a greater motivation for turning out for the less educated than the more educated and *H2: Strength of economic issue* preference is a greater motivation for turning out for the more educated than the less educated will be discussed, followed by the results relating to *H3: Strength of opinion on parties and politicians is a more important motivation for turning out for the less educated than the more educated.*

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Table 5: Coefficients of dependent variables predicting likelihood of voting in the regression for Model 1

	Unstandardised Coefficient (standard error)
Independent Variables	
Immigration (0-6)	.006 (.003)
Economy (0-3)	.078*** (.008)
National Identity (0-4)	.007 (.006)
Parties and Politicians (0-13)	.013*** (.002)
University Degree (0/1)	.036*** (.005)
Control Variables	
Age	.005*** (.000)
Gender	.014 (.012)
Income	.004*** (.001)
Interest in EU Referendum	.411*** (.009)

^{*} p<0.1

Scale used for each independent variable is shown in brackets after the variable.

Model 1, which includes the dummy variable for education as an independent variable, has an R² value of .196, suggesting the fit of the model is poor. This is partly due to the narrow region of the discrete scale used by respondents to quantify their likelihood of voting, but also suggesting that there are a number of other important factors affecting turnout which are missing from the model. However, due to the large sample, it is possible to find statistically significant relationships even if the effect is small, and therefore the hypotheses concerning the relative strength of factors in motivating citizens to turnout can be tested. The relative importance of European issues on the cultural and economic dimensions and opinions on parties and politicians in determining turnout between education groups can be tested, and a conclusion as to whether or not these are significant factors in influencing turnout can be drawn, but poor fit of the model shows that these are not the only important factors which influence turnout. Additionally, the change in the model fit when terms including the multiplication with a dummy variable for education are added is of an extremely small magnitude in each case, suggesting that the effect is small. However, as cautioned by Aguinis and Gottfredson (2010: 779), the statistical power of using multiplicative variables is low and it is possible for there to be no effect detected in the sample when there is an effect in the population. This leads to the possibility of rejecting a hypothesis that there is an effect although such effect is present in the population.

^{**}p<0.05

^{***}p<0.01

Therefore, even weakly significant effects and small improvements in the model fit will be discussed here.

Of the key independent variables being investigated, only the variables for strength of opinion on parties and politicians and strength of economic preference are significant. Neither strength of immigration preference nor strength of national identity had a significant relationship with turnout. This suggests that for the whole population, strength of cultural issue preference was not a determinant of turnout, while strength of economic issue preference was. However, all coefficients are positive, suggesting that those with stronger preferences are more likely to vote. It is important to note that stronger preferences on parties and politicians are a motivation for turning out in referendums, contrary to arguments that referendums are only about the issues.

In this model education category has been included as an independent variable. The direct effect of education is statistically significant at the 0.01 level, with an unstandardised coefficient of 0.036, meaning that moving from the group without a university education to the group with a university education leads to a 0.036 unit increase on the 5-point scale of likelihood to vote. While these changes seem very small, the differences to be explained in responses of likelihood to vote were also very small as most respondents reported that they were very likely to vote. Therefore, this regression is explaining very small changes in the reported likelihood of voting between education groups.

Table 6 shows the change in model fit and coefficient of variable for the multiplication of the dummy variable and the predictor variable in models 2-5. This shows whether there is a statistically significant difference in the regression for each of these predictor variables between the groups with and without a university degree.

Table 6: Effects of introducing interaction terms between having a university degree and other dependent variables in Model 1

	Predictor	Change in	Coefficient of	Coefficient of	Coefficient of
	Variable	R ²	predictor	target	target
			variable	variable for	variable for
			multiplied by	those	those with
			education	without	university
			category	university	
Model 2	Immigration	.000**	015**	.009**	006**
Model 3	Economy	.001***	077***	.103***	.026***
Model 4	National identity	.000**	028**	.018**	010**
Model 5	Opinion on parties and politicians	.000*	007*	.015***	.008*

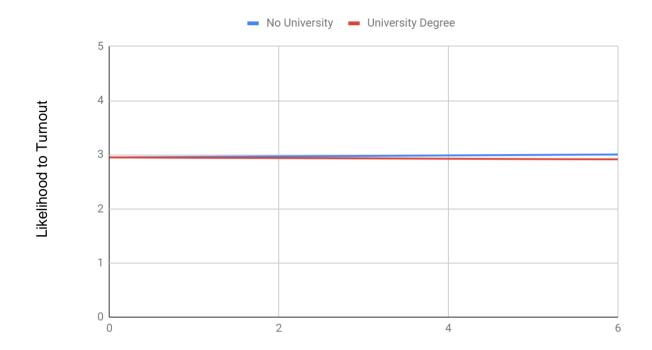
^{*} p< 0.1

The following graphs also demonstrate this information graphically, showing separate lines for those with and without a university education. The graphs show how each variable affects the likelihood of turning out when all other variables are held equal.

^{**} p< 0.05

^{***} p< 0.01

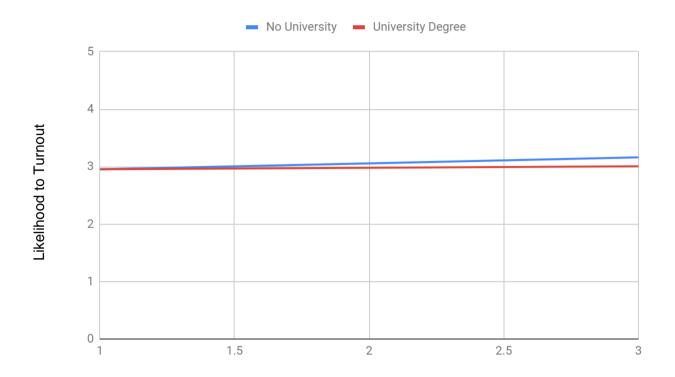
Figure 11: Effect of Strength of Immigration Preference on Likelihood to Turnout for Those With and Without University Education



Strength of Immigration Preference

Here is can be seen that there is a statistically significant divergence in the likelihood of turning out for those with and without a university degree. While though without a university degree become more likely to turnout the stronger their preferences on immigration become, those with a university degree become less likely to turnout if they have stronger preferences on immigration.

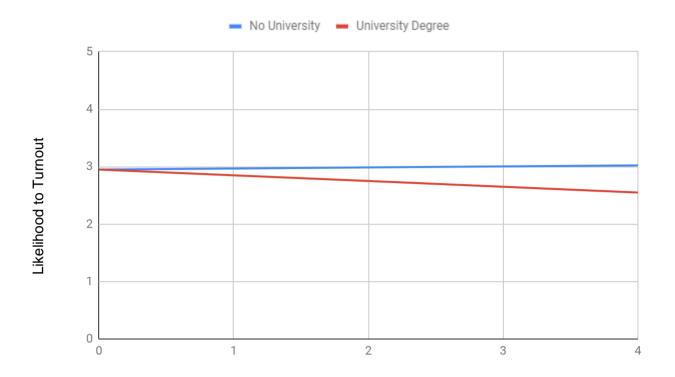
Figure 12: Effect of Strength of Economic Preference on Likelihood to Turnout for Those With and Without University Education



Strength of Economic Preference

Figure 12 shows that for both those with and without a university education, the likelihood of turning out increases as preferences on the economy become stronger. However, there is once again a statistically significant divergence. At the highest strength of preferences, those with less education become significantly more likely to turnout when compared to those with more education. This is contrary to the expectation that strong economic preferences are a stronger motivation for turning out for the more educated.

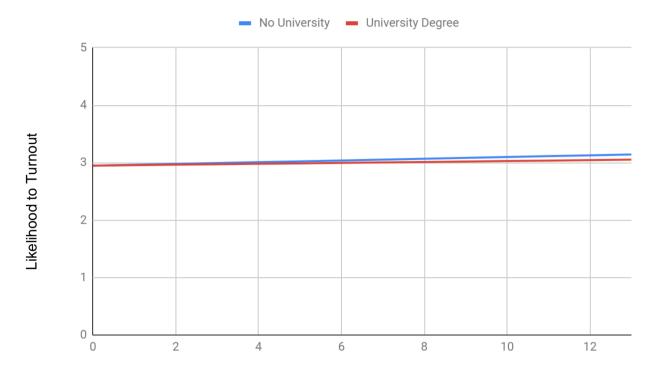
Figure 13: Effect of Strength of National Identity on Likelihood to Turnout for Those With and Without University Education



Strength of National Identity

As with the strength of immigration preference, there is a clear divergence in how the strength of national identity affects the likelihood of turning out for the different education groups. While those with less education become more likely to turn out the stronger their national identity is, those with more education become less likely to turn out if they have stronger national identity.

Figure 14: Effect of Strength of Opinion on Parties and Politicians on Likelihood to Turnout for Those With and Without University Education



Strength of Opinion of Parties and Politicians

The difference in the effect of the strength of opinion of parties and politicians on turnout between the education groups was less than for other variables. However, there is still a significant (at the 0.1 level) difference, with the effect on the less educated greater than for the more educated. However, as with strength of economic preference, stronger opinions increase the likelihood of voting for all groups.

The predictor variable most affected by education is strength of economic preference. Strength of economic preference was a significantly more important determinant of turnout for those without a university degree than for those with a university degree. Having a university education reduces the effect that the strength of preferences towards immigration, the economy, strength of national identity and strength of opinion on the government and opposition have on turnout. Strength of national identity and immigration have a negative effect on turnout for those with a university degree, but a positive effect for those without, suggesting that those without a university degree are more likely to vote if they have stronger preferences on these issues, whereas those with a university degree are less likely to vote if they have stronger preferences.

Immigration and national identity also became significant predictors of turnout when an interaction with education was added, which also led to an improvement of model fit. This suggests that the importance of these factors as motivations for voting differs by education group. Both of these coefficients were negative, showing that strong opinions on these cultural issues have a weaker effect on turnout for the more educated than for the less educated. The effect on the lower education group is therefore in line with the expectations that they will only decide to vote if they have a strong preference on the issue. However, finding that the more educated become less likely to vote when they have stronger preferences on the cultural issues suggests that the assumption that stronger preferences lead to higher likelihood of voting does not hold true for all people on all issues. Instead, a strong cultural issue preference is an important determinant for the less educated in deciding to vote, whereas it is not for the more educated. Therefore, the null hypothesis, strength of easy issue preference has the same effect on turnout for all education groups can be rejected and H1: Strength of cultural issue preference is a greater motivation for turning out for the less educated than the more educated can be accepted.

While the difference in the effect that strength of economic preference has was the largest and most significant result, the direction was contrary to expectations. The results show that the strength of economic preferences is a more important determinant of turnout for the less educated than the more educated. Those with stronger preferences are more likely to turnout in both education groups. This means that while the null hypothesis, that strength of hard issue preference has the same effect on turnout for all education groups, can be rejected, *H2: Strength of economic issue preference is a greater motivation for turning out for the more educated than the less educated* cannot be accepted as the effect is in fact greater for the less educated. The implication of these findings is that having strong preferences on issues related to the referendum, on both cultural and economic issues, is a more important determinant of turning out for the less educated than the more educated. The following section examines whether there is also a difference in the strength of preferences between education groups which can explain why the play different roles as determinants of turnout.

Table 6 shows that adding an interaction term for the strength of opinion of parties and politicians and education also significantly improved the fit of the model, and the coefficient of the interaction term was also significant, although only at the 0.1 level.

The coefficient of the interaction term was also very close to zero, at -0.007. While this suggests that the size of the effect of opinions of parties and politicians on likelihood to vote is somewhat greater for the less educated than the more educated, the low significance and small magnitude mean it is hard to draw a firm conclusion on whether education really does change the importance of this variable in determining turnout. Therefore, there is some evidence that the less educated are somewhat more motivated to vote by their opinions on parties and politicians than the more educated, although this is not as strong as the other predictor variables tested. Therefore the null hypothesis, that there is no difference in the effect that opinions of parties and politicians has on the likelihood of voting between education groups, can be rejected, and H3: Strength of opinion on parties and politicians is a more important motivation for turning out for the less educated than the more educated can be accepted, although the change is small when compared to difference in effect of other predictor variables.

The combination of the results described in this chapter show that the strength of issue preference on both cultural and economic issues is a more important motivation for voting for the less educated than the more educated, even though the more educated are more likely to form strong opinions on economic issues. The less educated are more likely to form strong opinions on cultural issues, and these are more likely to motivate them to turnout in a referendum, in line with expectations. However, finding that strong issue preference remains more important for the less educated even when they have weaker preferences suggests that being able to form a strong preference is an important factor in determining turnout for the less educated. The implications of this twofold. The first is that there are other factors which determine the turnout of the more educated. Interest in the referendum was shown in Table 5 to be closely tied to turnout, so this is one possible explanation. While the connection between political interest and education has not been examined here, higher education has been found to increase political interest (Sondheimer and Green 2010: 186). However, the connection between interest in the Brexit referendum and turnout in the same referendum moves towards tautology, as cautioned by Szczerbiak and Taggart (2004: 575).

Other factors described in the literature as motivating turnout are numerous, and many of them are affected by education. Civic duty is often cited as a motivation for turning out, which can be increased by education because education improves a person's social status and therefore sense of civic duty (Bowler and Donovan 2013: 270), or

because civic duty or a "participatory value system" are taught in the education system (Wolfinger and Rosenstone 1980: 18, Franklin, van der Eijk and Oppenhuis 1996: 326). Similarly, it has been argued that higher levels of education socialises citizens to accept social norms, and reduces the likelihood of alienation (Lassen 2005: 104). These would explain a strong motivation for the more educated to turnout, which is reduced among the less educated, explaining why strength of issue preference is more important to them.

An additional explanation could be that the threshold for how strong a preference must be for it to motivate someone to turnout differs by education group. It is possible that even moderately strong preferences will motivate a more educated person to vote, while a less educated person will only be motivated to turnout when they have a very strong preference. In this sense the strength of preference would be a more important motivation for voting for the less educated. However, as Table 6 shows that the more educated become slightly less likely to vote the stronger their opinions on immigration and national identity are, it is unlikely that stronger cultural issue preferences play an important role in motivating the more educated to turnout.

The finding that strong issue preference of economic issues is a more important determinant of turnout for the less educated than the more educated, coupled with less strong preferences among the less educated on these issues could explain why turnout is consistently lower for the less educated. This leads to the second implication of these findings; that disseminating information to allow the less educated to form strong preferences on economic issues will reduce the turnout disparity. The less educated are more likely to vote if they have strong opinions on an issue, even when they are less likely to form strong preferences on that issue. Therefore, encouraging the access to information that will allow the less educated to from strong preferences on economic issues would be expected to disproportionately improve turnout among the less educated. This is especially important as easy issues (such as national identity) are not always offered to voters, whereas hard issues (such as the economy) are (Carmines and Stimson 1980: 80). This means that there are occasions where it is expected that the less educated would be less able to form strong opinions on economic issues, even though having a strong opinion would be a more important motivation for turnout for them compared to the more educated. This suggests an explanation for the turnout disparity and a remedy to reduce it.

In the context of generally low and declining turnout, and an entrenched turnout disparity between the more and less educated, the finding that motivation for voting does vary by education group is important. Moreover, finding that the issues are in fact more important for the less educated than they are for the more educated in determining turnout suggests promoting information in a way that allows for the formation of strong preferences among the less educated will disproportionately raise turnout among this group, compared with the more educated.

Chapter 6: Conclusion

This thesis aimed to answer the question of how and why the motivation for voting varied by education. Using the main theories on European referendum vote choice, preferences on European issues and opinions on parties and politicians were expected to be the most important issues of the referendum (Hobolt 2006: 155, Hug and Sciarini 2000: 7, Schneider and Weitsman 1996: 583, De Vreese and Boomgaarden 2005: 59). This was assumed to also form the basis for the decision on whether or not to vote, coupled with the assumption that citizens needed at least one preference in order to decide to vote. Using the literature on turnout in general elections, the argument that the strength of preferences on these issues would vary by education was developed. In particular, based on the work on reasoning voter theory by Sniderman, Brody and Tetlock (1991), it was expected that the more educated will be more likely to use a more differentiated and integrated decision-making process to form preferences, using a wider range of complex considerations, and therefore that they will be more likely to form stronger preferences on economic issues. In contrast, it was expected that the less educated will be more likely to use a simpler process, based on gut feeling or affect towards certain groups in order to form preferences. This difference in preferences and the difference in weight given to each preference by different groups was hypothesised to explain the turnout disparity, with the more educated deciding to vote based on their hard issue preferences, while the less educated deciding to vote on their easy issue preference.

The results did not fully support this argument. There was a clear difference in European issue preferences, with the less educated having much stronger preferences on the cultural issues, here being immigration (mean 0.786 points higher on a 7 point scale) and national identity (mean 0.252 points higher on a 5 point scale), and the more educated having stronger preferences on the economic issue (mean 0.211 points higher on a 4 point scale), here being the effect that leaving the EU would have on the economy. However, there was no clear divide in the overall strength of opinions on parties and politicians. The less educated did have stronger opinions on the Labour and Conservative parties and their leaders, while the more educated had stronger opinions on Boris Johnson and Nigel Farage, suggesting there may be a difference on how opinions are formed when mainstream parties and politicians are compared to opinions on figures closely connected to the referendum who do not have strong associations with a wide range of other political issues. Although this is an interesting

issue for further research, the main conclusion that can be drawn at this time from the results is that people of all education levels are equally capable of forming strong opinions on parties and politicians.

The findings on different strengths of preferences must also be examined with the results of how these preferences affected turnout. Here, contrary to the expectations that cultural issues and opinions on parties and politicians would be more important to the less educated and economic issues would be more important to the more educated, it was found that both strong cultural and economic issue preferences were stronger motivations for voting for the less educated than the more educated. This is despite the fact that the less educated had less strong preferences on economic issues. Therefore, the answer to how motivations for voting vary is that issue preferences are a stronger determinant of turnout for the less educated than the more educated, suggesting the less educated are more likely to vote when they care about the issue, while the more educated are more likely to vote regardless of their strength of issue preference.

The question of why motivation for voting differs by education is, of course, more complex. One plausible explanation is that the more educated form preferences more easily across all issues due to their advantages in information acquisition and processing and their ability to combine diverse cognitive considerations, as suggested by Carmines and Stimson's (1980) findings on hard and easy issues, meaning they are always likely to form some level of preference and therefore there is not a large difference between different opportunities to vote as they will always have a preference. The less educated are not always able to form a preference without taking on a significant cost, suggesting strength of preference is a more important motivation for voting for them because there is difference between when they have formed a preference and not.

The finding that strength of issue preferences matter more to the less educated in deciding whether to vote, even when they have generally weaker preferences than the more educated, could also be an indication that there is a different motivation for the more educated to vote that is independent of the issues of the referendum. There are many theories and studies suggesting different motivations for voting, such as socialisation (Lassen 2005: 104, Rolfe 2012), civic duty (Bowler and Donovan 2013: 270, Wolfinger and Rosenstone 1980: 18) or political interest (Sondheimer and Green 2010: 186), each of which is also expected to be stronger among the more educated.

Referendums also represent a context where many normal shortcuts, such as party affiliation, are missing or obscured by divisions within parties, meaning a significant amount of information may be required to understand who supports which position and therefore this 'shortcut' may not reduce the information burden. Therefore, these traditional shortcuts cannot be relied upon in forming a decision on whether or not to turn out. This suggests that the amount that strength of issue preference acts as a motivation for voting varies between the education groups because there are other factors motivating the more educated to vote which are absent or less strong among the less educated, and therefore play a weaker role in motivating the less educated to vote. Therefore, the less educated are more likely to base their decision on whether or not to turn out more heavily on their strength of preferences related to the issues.

The finding that issue preferences are a more important determinant of turnout for the less educated, a group which has lower turnout across many diverse electoral contexts (Sondheimer and Green 2010: 174, Brody 1978: 295), also suggests that measures involving promoting an easier acquisition of information to enable the formation of preferences on both cultural and economic issues will disproportionately raise the turnout for the less educated. This is significant in the current context of low and declining turnout, and where those voting are not representative of the entire population (Lijphart 1998: 1). Finding strategies to improve turnout and equal representation among voters is a normative goal and vital to the maintenance of a healthy democracy (Lijphart 1998: 2).

Abstract

The aim of this thesis was to answer the question of how and why the motivation for voting differs between education groups, an observation which has persisted across electoral contexts and other demographic variables, using the 2016 Brexit referendum as a case study. Theories on vote choice in European referendums have been centred on whether European issues or opinions on domestic parties and politicians were most important. These two theories were combined with the reasoning voter theory, which states that there is a difference in not only the information acquisition but also the way information is processed to form opinions and preferences, leading to the expectations that there is a difference not only in how different education groups form preferences, but also how important these preferences are as motivations for turning out. Specifically, it was expected that the more educated are more likely than the less educated to form strong preferences on economic issues such as the future of the economy as well as being more likely to have stronger opinions on parties and politicians, and the strength of these preferences will be a more important motivation for voting for the more educated than the less educated. In contrast it was expected that the less educated are more likely to form strong preferences than the more educated on cultural issues such as immigration and national identity, and the strength of preference on these issues influence their motivation for voting more than that of the more educated. The results did not fully corroborate these expectations. While it was found that the more educated have stronger preferences on the economy and the less educated have stronger preferences on cultural issues, there was no overall difference in the strength of opinions on parties and politicians between education groups. Strong preferences on both cultural and economic issues as well as strong opinions on parties and politicians were a stronger motivation for voting for the less educated than the more educated.

Abstrakt

Das Ziel diese Arbeit war die Frage, wie und warum die Motivation zu wählen zwischen Bildungsgruppen variiert. Um diese Frage zu beantworten wurde das 2016 Brexit-Referendum als Fallstudie verwendet. Die Disparität in der Wahlbeteiligung zwischen Bildungsgruppen wurde in verschieden Wahlkontexten und über andere demographische Variablen beobachtet. Zentral in den Theorien der Auswahl in europäischen Referenda ist die Frage, ob europäische Themen oder die Meinung über heimischen Parteien und PolitikerInnen wichtiger sind. Diese Theorien wurden mit Reasoning Voter Theory, die Theorie, dass es einen Unterschied nicht nur in der Informationserfassung gibt, sondern auch in der Weise in der Information verarbeitet wird um Meinungen und Präferenzen zu bilden, kombiniert. Laut den Theorien sind die Erwartungen, dass es nicht nur Unterschiede in der Weise in der verschiedene Bildungsgruppen Präferenzen bilden, sondern auch in wie wichtig die Präferenzen als Motivation zu wählen sind. Besonders wurde es erwartet, dass höher Gebildete wahrscheinlicher als niedrige Gebildete sind starke Präferenzen für ökonomische beziehungsweise komplexere Angelegenheiten wie die Wirtschaft, sowie auch starke Meinungen zu Parteien und PolitikerInnen, zu bilden. Weiter wurde es erwartet, dass diese Meinungen und Präferenzen wichtiger als die Motivation zu wählen für die höher Gebildeten im Vergleich zu den niedriger Gebildeten sind. Im Gegensatz dazu wurde es erwartet, dass die niedriger Gebildeten wahrscheinlicher als die höheren Gebildete sind, starke Präferenzen zu kulturelle Angelegenheiten wie Immigration und nationaler Identität zu bilden, und dass die Stärke dieser Präferenzen einen größeren Einfluss auf ihre Motivation zu wählen hätte im Vergleich zu den höher Gebildeten. Die Ergebnisse unterstützten nicht alle der Hypothesen. Es wurde gefunden, dass höher Gebildete stärkere Präferenzen zur der Wirtschaft und niedriger Gebildete stärkere Präferenzen zu Immigration und nationaler Identität haben, aber kein insgesamter Unterschied in der Stärke der Meinungen zu Parteien und PolitikerInnen beobachtet wurde. Starke Meinungen zu ökonomischen und kulturellen Angelegenheiten, sowie auch starke Meinungen zu Parteien und PolitikerInnen, sind wichtiger als die Motivation zu wählen für die niedriger Gebildeten als die höher Gebildeten.

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Appendix 1: List of Regression Formulae

Model Number	Regression Formula
1	$LV = \beta 0 + \beta 1 (IP) + \beta 2 (EP) + \beta 3 (NIP) + \beta 4 (OPP) + \beta 5 (Edu) + \beta 6 (A) + \beta 7 (G) + \beta 8 (HI) + \beta 9 (IR) + \epsilon$
2	$LV = \beta 0 + \beta 1(IP) + \beta 2(EP) + \beta 3(NIP) + \beta 4(OPP) + \beta 5(Edu) + \beta 6(A) + \beta 7(G) + \beta 8(HI) + \beta 9(IR) + \beta 10(Edu.IP) + \epsilon$
3	$LV = \beta 0 + \beta 1 (IP) + \beta 2 (EP) + \beta 3 (NIP) + \beta 4 (OPP) + \beta 5 (Edu) + \beta 6 (A) + \beta 7 (G) + \beta 8 (HI) + \beta 9 (IR) + \beta 10 (Edu.EP) + \epsilon$
4	$LV = \beta 0 + \beta 1(IP) + \beta 2(EP) + \beta 3(NIP) + \beta 4(OPP) + \beta 5(Edu) + \beta 6(A) + \beta 7(G) + \beta 8(HI) + \beta 9(IR) + \beta 10(Edu.NIP) + \epsilon$
5	$LV = \beta 0 + \beta 1 (IP) + \beta 2 (EP) + \beta 3 (NIP) + \beta 4 (OPP) + \beta 5 (Edu) + \beta 6 (A) + \beta 7 (G) + \beta 8 (HI) + \beta 9 (IR) + \beta 10 (Edu. OPP) + \epsilon$

LV is the likelihood of voting

IP is the strength of preference on immigration

EP is the strength of preference on change in the economy

NIP is the strength of national identity

OPP is the combined number of strong opinions on parties and politicians

Edu is the dummy variable for a university degree

A is age in years

G is a dummy variable for gender

HI is household income

IR is interest in the referendum

∈ represents the residual terms of the model