Unequal Representation and Morality Issues: The Effect of Education on Opinion-Policy Congruence

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Abstract

A government must be responsive to all its' citizens for a democracy to thrive, meaning that all individuals must be politically equal. This entails that their preferences are equally influential on the government's decisions, regardless of personal background. The thesis looks at (un)equal representation by analysing opinion-policy congruence for different educational groups on issues related to morality. Much research has been done on congruence between opinions and policy output, but in-depth analyses on morality policy are lacking. Research has demonstrated political inequality between groups with different levels of education, wherein government policy is more responsive to higher educated citizens. The combination of the higher educated citizens increasingly dominating the political arena and their preferences on morality issues being substantively different from those with lower levels of education make it likely for there to be unequal representation related to morality policy. Applying pooled OLS regression analyses with time-series cross-sectional data on European- and OECD countries, I find that the higher educated citizens are indeed better represented both generally and when their opinions differ from those of lower educated citizens.

It has long been argued by social scientists that public opinion shapes the government's policy output, but also that the influence varies according to the presence of certain political institutions and the characteristics of the relevant issues. Institutions and partisan actors influence may condition representation by creating differences in access to policymaking for subgroups of the population. This is investigated by applying a political veto points and players framework. It is argued that an increased number of veto points and players decrease unequal representation for citizens with different educational backgrounds as the higher number of veto points and players both allow for more avenues of influence and create a bias toward the status quo. Both benefits lower educated citizens whose preferences are generally more conservative. The result of the analyses of interaction effects shows that institutions do not affect whose preferences are reflected in policy. However, it indicates that the presence of more partisan veto players does.

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1. Introduction

Political equality is an essential democratic value and governments should be equally responsive to all citizens in order for a democracy to thrive (Dahl 1971, 2). This thesis aims to contribute to a deeper understanding of political inequality in terms of unequal representation by investigating the relationship between public opinion and policy. It does so by looking at a group of policies that tend to be overlooked in the study of political inequality, namely morality policies. Policy influenced by values and perceptions of morality are often sources of controversy and polarisation, as illustrated by the recent media coverage of, for example, Switzerland's adoption of same-sex marriage in 2021 (Koltrowitz 2021) and the discussions of restrictions on abortion rights in the United States in the spring of 2022 (Gerstein and Ward 2022). The importance of morality issues in politics remains relatively unexplored, especially in relation to unequal representation. Research on representational congruence has until recently almost exclusively focused on representation according to ideology on the left-right scale (Rosset and Stecker 2019, 147), which does not capture preferences and policies related to morality. The studies on morality issues that do exist focus mostly on singular issues or countries.

Research on political inequality has traditionally been concerned with differences between classes and income groups, possibly because of its foundational role in most Western party systems as the central cleavage between the left and the right. The role of citizens' education in forming political attitudes has been seen in connection to this class discourse, with there being an undeniable link between income and education. However, there are essential differences between the two, which are becoming apparent as higher educated citizens have become increasingly dominant in political participation, political offices, and civil society in large parts of Europe over the last decades (Bovens and Wille 2017).

In this thesis, I investigate unequal representation by focusing on how citizens' educational background affects their political representation on morality issues. Previous research has shown that education substantially impacts attitudes concerning immaterial and cultural issues, moral and religious issues, and authoritarian-libertarian values (Gilens 2009, 399; Werfhorst and Graaf 2004, 228; Stubager 2013). This makes it likely for there to be significant differences in preferences on morality issues for citizens with different levels of education. The combination of the higher educated citizens increasingly dominating the political arena and

their preferences on morality issues being substantively different from those with lower levels of education makes it probable for morality policy to be unproportionally congruent with the opinions of the former group.

The existing research on educational inequality in politics suggests that the higher educated citizens are generally better represented than lower educated citizens (Schakel and Van Der Pas 2021; Elsässer, Hense, and Schäfer 2020). If this is the case also concerning morality issues, it is interesting to investigate what might be the determinants of unequal representation. This is especially relevant to congruence on morality issues, which have been shown to be sensitive to context (Haider-Markel and Kaufman 2006, 178). To the best of my knowledge, there is no previous large-N research on the determinants of unequal representation for educational groups on overall morality policy. This thesis seeks to expand the literature.

1.1 Research Question and Scope

Until recently, research on representational congruence almost exclusively focused on representation according to ideology on the left-right scale (Rosset and Stecker 2019, 147). This, combined with the lack of focus on education in unequal representation, creates significant gaps in the literature. This thesis seeks to provide descriptive information concerning unequal representation for educational groups on morality issues and analyse assumed causal effects of the presence of institutions and political actors on unequal representation. This is summarised in the following two-folded research question:

How do education levels affect political representation regarding issues related to moral values? What are the institutional and partisan determinants of possible incongruences?

Firstly, I am interested in investigating how citizens' education affects their political representation concerning morality policies. I will explore this by looking at how the different educational groups' opinions are reflected in morality policy. Investing the opinion-policy congruence for different educational groups will indicate to what degree their substantive representation is equal. Furthermore, I will compare the opinion-policy congruence of different educational groups to the opinion-policy congruence of different income groups to investigate the relative importance of education versus income for citizens' political representation. Secondly, I am interested in what might determine which educational groups are represented in

morality policy. This interest is based on both 1) the increased importance of institutions and partisan actors for policy formation when issues are not adequately covered by the existing political cleavages people align with and 2) the potential importance of knowing what can diminish unequal representation for groups with different levels of education.

The analysis is restricted to include established democracies in Europe and established democracies with membership in the Organisation for Economic Cooperation and Development (OECD) from 1995 to 2014. This is based mainly on data availability, but it also fits well with the existing literature, which is primarily focused on Europe and the United States.

1.2 Contribution

The thesis is first and foremost located within the literature on political representation and political (in)equality. It belongs to the growing amount of literature addressing these subjects by focusing on the relationship between public opinion and public policy (Wlezien 2017). To expand the literature on representation in morality policy, I utilise an original dataset combining aggregated international survey data with country-level data collected from numerous sources. I link opinions on morality issues with corresponding policies. This allows me to investigate whether opinion-policy congruence varies for groups with different levels of education and thus whether the higher educated citizens' preferences are more congruent with policy output than the lower educated citizens' preferences. Furthermore, I include country-level data on the presence of various institutional and partisan veto points and players to show how this affects the representation of the different groups.

The thesis contributes to the literature on unequal political representation in the following ways:

1. It utilises an original dataset pooling several different morality issues to investigate the opinion-policy congruence for citizens with different levels of education.
2. It emphasises the multidimensionality of representation by investigating how educational background constitutes an essential political cleavage to morality policy. To the best of my knowledge, it is the first study emphasising the relationship between unequal representation for educational groups and morality policies.
3. It is the first study investigating the institutional and partisan determinants of unequal representation for educational groups on overall morality policy.

1.3 Main Findings

The analysis shows robust results for morality policies generally reflecting public opinion in established democracies. However, the results also show that the higher and lower educated citizens are differently represented. The higher educated citizens' preferences are consistently more congruent with policy than the lower educated citizens' preferences, supporting the hypothesis that *morality policy is more congruent with the preferences of higher educated citizens than lower educated citizens* (H1). This is shown to be the case when their general levels of congruence are compared and when they disagree on the issues. Furthermore, the analysis indicates the opposite is the case regarding different income groups, as results indicate that poorer citizens' opinions are more congruent with policy than the opinions of more affluent citizens. This suggests that the hypothesis stating that *morality policy is more congruent with the preferences of high-income groups than low-income groups* should be rejected. However, these results are less robust, indicating that citizens' economic background has less impact on their representation on morality issues than their educational background. This supports the hypothesis that *there is a more significant gap in opinion-policy congruence for the preferences of low and highly educated groups than for the low and high-income groups* (H3).

I find that the presence of more institutional veto points and players present does not have any effect on the educational groups' representation. I see indications of partisan actors affecting which citizens' preferences are reflected in policy, although the robustness of the results varies. Robust results show that the presence of religious partisan veto players make policy more congruent with both lower and higher educated citizens' opinions. Still, when the two groups disagree, their presence increases the unequal representation favouring the latter. There are indications of the presence of more parties making representation more equal by making the higher educated citizens' opinions less reflected in policy. The overall assumption of more veto points and players creating more avenues for influence and thus more proportional representation in a political arena dominated by highly educated politicians, officials, and citizens thus seems to have some holding regarding partisan determinants, but none for the institutional.

1.4 Structure

I will firstly conceptualise important terms like representative democracy and congruence before reviewing relevant literature related to political representation and political (in)equality. The research question's relevance will be highlighted. Secondly, I will present the theoretical framework and hypotheses about the effect of education levels on political representation and the impact of institutions and partisan actors on potential differences in representation for the groups. This will be done by applying a framework of veto points and players. Thirdly, I will explain the construction of a multidimensional dataset and present the data sources before all variables are operationalised and described. The methodological framework is defined, emphasising the assumptions that must be fulfilled to run the chosen regression estimates. Descriptive statistics are presented to make the reader familiar with the included variables and demonstrate that there are indeed substantial differences in preferences for the different educational groups.

The analysis is two-folded. I firstly investigate the opinion-policy congruence for different educational groups to examine how the level of education affects political representation. I will do so by analysing various pooled ordinary least square regression models. This analysis is then repeated with the preferences of income groups for comparison. Afterwards, I investigate the institutional and partisan determinants of possible incongruences by examining how the presence of different veto points and players affect different educational groups' representation. The results are discussed in relation to the hypotheses presented in the theoretical framework before some conclusions are drawn, and possible implications are deliberated.

2. Conceptualisation and Background

In this background chapter, I aim to demonstrate the importance of political equality and equal representation needed in order for a democracy to thrive. I will explain the benefits of measuring substantive representation in terms of congruence and highlight how investigating issue-congruence is essential to provide new insights into the unequal representation of different educational groups. This includes broadly reviewing relevant literature on representation and morality policies before I put the scope on education into the next chapter which presents the theoretical framework.

The chapter is structured in the following way: Democracy will be conceptualised and narrowed down to representative democracy. The concept of representation is discussed, emphasising the connection between descriptive- and substantive representation. The concept of *congruence* is defined and separated from the similar concept of *responsiveness*. The importance of separating between different types of policies when investigating political relationships will be explained before it is clarified why morality policy is interesting concerning governments' response to specifically groups with varying levels of education. The focus is finally put on previously demonstrated inequalities in political representation.

2.1 Democracy and Representation

Representation is researched because of its' importance for democracy. To clarify the importance and relevance of analysing opinion-policy congruence, it is thus essential to conceptualise democracy. Both democracy and representation are broad terms, and conceptualisation is vital to ensure accurate measurement (Gerring 2012b, 111-112). Applying a maximalist measure, democracy is a state where there are fair elections with universal suffrage, political liberties, and alternative sources of information (Dahl 1971). Moving somewhat down the ladder of abstraction, this thesis will analyse representative democracy, with the main focus being on democracy in light of representation (Sartori 1970, 63-64). Representative democracy can be classified as a diminished subtype of democracy, meaning that it can be analytically differentiated from the more abstract term of democracy (Collier and Levitsky 1997, 436-7).

Representation itself can be conceptualised and measured in numerous ways. Political representation entails citizens electing representatives to assure that their opinions, perspectives, and values influence policymaking. Through the election of representatives, citizens participate in the creation of government. Representation is advisable on the grounds of democracy and good governance, as democratic legitimacy is a prerequisite for state coercion (Mansbridge 2014, 10-11). When a government is responsive to its citizens, it saves up goodwill, making non-responsive decisions more likely to be accepted by the public (Linde and Peters 2020, 301), and citizens become increasingly satisfied with democracy (Reher 2015, 172). A responsive government is thus likely to strengthen both governance and democratic sentiments in the population.

Research on political representation has focused on different kinds of representation. Descriptive representation evolves around the relationship between the represented and the representatives in terms of descriptive characteristics, such as gender, ethnicity, and socioeconomic position (Pitkin 1967, 60; Dalton 2017, 611-12). Advocates of descriptive representation believe that citizens' interests will be better represented by a person sharing the same characteristics as the citizens who are represented, as common experiences and contexts improve the substantive quality of deliberations (Mansbridge 1999). Research on differences in representation according to social classes, ethnicity, and gender indicates that this is the case (Carnes 2012; Wängnerud 2009; Mansbridge 2015). However, others argue that it is not necessarily the case that people with the same characteristics have the same preferences, and that descriptive representation might lead to voters blindly supporting legislators looking like them despite their policy standings (Jones 2014; Box-Steffensmeier et al. 2003). This means that descriptive representation does not necessarily equal substantive representation of citizens' interests.

Substantive representation concern that representatives should act in the interest of and be responsive to the opinions of the citizens whom they represent (Pitkin 1967, 209). Related to this, congruence is often conceptualised as an agreement between the represented and the representatives, with or without them sharing the same characteristics. It says something about the degree of democratic empowerment to the citizens (Lefkofridi 2020, 357). This can mean agreement regarding party positions, single issues, or ideology. Opinion-policy congruence is an essential aspect of substantive representation and can signify a healthy democracy. For there to be differences in substantive representation for subgroups of the population, the subgroups

must have different preferences to begin with. I will later argue for as to why this is the case regarding educational groups, therefore justifying analysing their (un)equal representation by investigating opinion-policy congruence.

2.1.2 The Opinion-Policy Link and Issue Congruence

A discussion of the critical terms *congruence* and *responsiveness* is necessary, as they are often used relatively interchangeably in the literature. Lupu and Warner define congruence or opinion representation as "the process of generating a body of representatives that reflects the preferences of the electorate" (2022b, 2), reflecting the definition of Miller and Stokes (1963, 49). They define responsiveness as "the process by which these representatives generate policies that reflect citizens' preferences" (Lupu and Warner 2022b, 2). This is similar to Aachen's (1978, 477) definition of responsiveness as "a normative property of the relationship between a legislator's opinions and those of his constituency as a whole". All the above authors apply the terms to measuring policy issues or dimensions instead of overall policy.

A critical difference between congruence and responsiveness is whether they refer to dynamics and how causal they are in nature. Responsiveness is often used to refer to dynamic or anticipatory representation (Peters 2019, 2; Erikson, MacKuen, and Stimson 2002, 36), in that policies respond and adapt to people's preferences. The representatives' preferences and actions are then often at the centre. Reher argues for the use of congruence because policy representation may result from not only policymakers responding to citizens but also from both representatives' and citizens' reactions to contextual developments and developments and public opinion adjusting to policy (2018, 622). This thesis follows her approach by assuming that unequal representation on morality issues for groups with different educational levels does not only result from representatives' unequal responsiveness to the different groups but also from cultural and institutional contexts. Thus, I view congruence as a measure of the degree to which the generated policy reflects citizens' preferences. The focus is on *the level of congruence* instead of the *degree of dynamic responsiveness*.

The relationship between public opinion and policies is logically shaped by the expectations of both parties, and these expectations most often differ for various kinds of policies (Lowi 1964, 688). The dependency of the relations between opinion and policy on expectations makes it useful to distinguish between political issues. Previous research on political congruence has

tended to do this by focusing on the proximity between the citizens and the representatives measured as position on the general socio-economic left-right axis. The gap between traditional parties and the voters has often been at the centre, with studies showing that the parties shift positions according to public opinion, despite it not always being apparent to the public itself (Adams 2012). The focus has shifted to responsiveness on different policy issues and the dynamics leading to political change (Hacker and Pierson 2014, 643). Representational congruence is increasingly regarded as multi-dimensional as citizens' preferences on different issues can be both ideologically contradictory and diverse. It has, for example, been demonstrated that partisan groups' preferences often vary significantly on gender and immigration issues, despite the citizens having similar preferences on socioeconomic issues (Dalton 2017). The issue-congruence will thus be measured as preferences regarding different singular issues instead of preferences on the traditional left-right axis (Rosset and Stecker 2019, 145-146; Lefkofridi 2020, 362).

Congruence between public opinions and policy output will enable a closer look at the dynamics related to policy changes on morality issues, and the quality of democracy. It has the potential to explain why citizens in some countries are increasingly choosing new and unconventional parties instead of traditional ones. This will enable a better understanding of the issues facing modern democracies today, such as the development of illiberal and populist parties based on unconventional political agendas (Mounk 2018). Morality issues are particularly relevant here, as polarisation between elites and voters is frequently centred around questions concerning, for example, gender and LGBT rights (Campbell and Heath 2021).

2.2 Morality Policy

The thesis seeks to examine representation in morality policies, which entails a range of quite varied policy issues which have in common that opinions about the policies are heavily influenced by values and first principles (Mooney 1999, 676; Knill 2013, 309-10). These principles depart from principles affecting other policy areas by being based on fundamental values, making the issues technically simpler to understand. Research has also found that the reliance on these values makes morality politics less amenable to compromise (Mooney and Schuldt 2008, 212). For example, questions of euthanasia and abortion often come down to different understandings of the inviolability of life, and perceptions of what is right or wrong.

Morality and ethics have an instrumental place in politics, as arguments are seldom made without a reference to the greater good or moral principles (Albæk 2003, 246). The technical simplicity of the arguments not only makes it so that many people have opinions on the issues, but it also awakens the attention of citizens who otherwise do not show much interest in politics (Mooney 1999). Citizens who have little to no interest in foreign or environmental policy may have strong opinions on whether having an abortion should be regarded as legal or juxtaposed with murder. Investigating political representation on morality issues thus has the potential to capture dimensions of unequal representation that do not appear in broader analyses.

Studies of morality policies often look at issues concerning life and death, such as abortion, capital punishment, euthanasia, and assisted reproduction technology, sex and sexuality, such as prostitution and homosexual rights, addictive behaviour like gambling, and the relationship between individual- and collective freedoms (Studlar, Cagossi, and Duval 2013, 354; Knill 2013). Although the current analysis will not include all these issues, it will attempt to control for differences between the issues that are to be included. There will likely be some differences in the explanations for variance in congruence concerning prostitution versus same-sex marriage, despite opinions on both being based on values.

It would be fallacious to analyse morality policy without briefly discussing its' connection to religion. Religion has long been an overlooked element in political science because of the prevalence of secularisation theory, which declares religion decreasingly relevant or a background factor (Fink 2008, 79). Religious beliefs influence both voters' and policymakers' attitudes, have the potential to give people and states legitimacy, and may even create large scale disputes (Fox 2001, 59). Individuals' religious background in terms of both belief and traditions may be fundamental for their first principal values, which often determine their preferences on morality policies.

The connection between morality policy and religion is often highlighted by applying the 'two worlds' theoretical framework, emphasising the division of countries into two quite different contexts for the formation of morality politics (Engeli, Green-Pedersen, and Larsen 2012, 2). The argument is that the religious world is defined by a divide between religious and secular political parties, leading to issues based on religious values becoming more politicised than in the secular world, which does not have this clear divide. Education has been shown to have a connection with citizens' religious and immaterial values (Gilens 2009, 399; Werfhorst and

Graaf 2004, 228), resulting in a crossing of important social cleavages, e.g., religion and education. It has also been found that higher educated citizens are less conservative in their moral attitudes than lower educated citizens (Scheepers, Te Grotenhuis, and Van Der Slik 2002, 171). This makes the relationship highly relevant to this analysis and politics, as education and religious values are likely to shape the relationship between opinions and policy. The different preferences on morality issues created by educational experiences makes it a possibility for the educational groups substantive representation to be different. This connection with education is further explored in the next chapter.

Polarised political systems such as the United States have seen an increase in the salience of moral issues such as abortion, where it can be argued that such cases have a become central part of the public debate. Polarisation on the issue spread from the U.S. elites to the mass public via media attention (Carmines, Gerrity, and Wagner 2010, 1151-2), making abortion policy a central part of the political landscape. There is much research to be done on the impact of these morality issues on a macro level, not only on party politics but also on general polarisation. A first step is to figure out to whom policy infused with morality caters and whether it is generally responsive to the mass public. This is the research gap which I attempt to contribute to filling by analysing the representation of different educational groups in morality policy.

2.3 Unequal Representation

A government should be responsive to all its citizens in order for a democracy to thrive, meaning that all individuals must be politically equal (Dahl 1971, 2). This is accomplished in several ways. In connection to substantive representation, it entails that the elected representatives hold the same preferences as the citizens or that their preferences are equally influential on the government's decisions. As explained above, this might be caused by descriptive representation or a responsive government. The representation of interests and preferences should nonetheless be equal regardless of the citizens' backgrounds.

2.3.1 Unequal Descriptive- and Substantive Representation

Research has shown unequal representation in terms of the elected representatives' characteristics and personal preferences not mirroring the public and their policy preferences not matching public opinion. Political representation in policymaking reflects the preferences of some subgroups of people more than other (Lupu and Warner 2022a; Rosset and Kurella

2021; Rosset and Stecker 2019; Gilens 2012). It has been demonstrated that regardless of policy type or government composition, political decisions generally cater toward upper occupational and educational groups (Elsässer, Hense, and Schäfer 2020, 13; Lupu and Warner 2022a). There are also significant differences between genders, as men's preferences are more likely to be represented when men and women disagree on issues (Reher 2018, 630).

Substantive representation in terms of congruence has been shown to be influenced by descriptive representation, as personal characteristics like gender, ethnicity and level of income have a significant impact on representatives' attitudes when acting in legislatures (Chattopadhyay and Duflo 2004, 1440; Carnes and Lupu 2015, 14; Mansbridge 1999). While there has been progress in the descriptive representation of women and ethnic minorities, the descriptive representation of other social groups has generally declined. For example, the number of representatives in the United States Congress with a background as a worker has declined in the last decades (Carnes 2012, 7), and European democracies have seen a decrease in representatives with a background in the primary sector or blue-collar jobs, mirrored by an increase in representatives with higher education (Best 2007, 96-103; Bovens and Wille 2017, 114). If as previously mentioned, descriptive representation does lead to better substantive representation, this descriptive incongruence in itself is a reason for further investigation of the relationship between citizens' educational levels and their opinion-policy congruence.

2.3.2 Unequal Representation on Different Issues

There is evidence that substantive representation in terms of congruence varies between different issues (Lupu and Warner 2022a). Research has demonstrated high congruence between citizens and policymakers in the EU when looking at left-right positions and socioeconomic issues (Dalton 2017, 612; Adams 2012, 405-6; Lupu and Warner 2022a). This may be a natural reflection of high congruence on the socio-economic left-right axis, as it is the basis of the European party systems. However, it has also been demonstrated that when the rich and the poor have different opinions on economic issues, the policy is more congruent with the preferences of the former (Lupu and Warner 2022a). The level of congruence on issues based on other divides than the traditional left-right axis has proved to be less predictable. For example, Dalton has shown that contrary to the relative overall congruence on the left-right axis, European parties are less representative of their supporters on issues like immigration, authority and gender (2017). Furthermore, there has been limited research on differences in

opinion-policy congruence between different educational groups, meaning that we do not know if or how unequal representation is concerning education.

When investigated, public policy issues may be divided into quite distinct sub-categories, such as welfare and economic policy, foreign policy, immigration, environment, internal affairs, and religious or moral issues, or broader dimensions like economic versus cultural issues. I refer to issues in the former and more specific sense, emphasising only morality issues. It was explained in section 2.2 how preferences on morality policy are often produced on different underlying factors than those underlying the traditional left-right axis. The emphasis on congruence related to socioeconomic issues thus creates a gap in the research field. It is not necessarily a matter of economic interests connected to the traditional societal divide between the lower, middle, and upper class, but of values and perceptions of right and wrong. This means that the people's preferences on moral and religious values often cannot be assumed to be in line with their otherwise preferred party's standings, making the mechanisms creating congruence potentially different compared with other traditionally salient policies.

2.3.3 Unequal Representation and Morality Policies

It has been argued that opinion-policy congruence varies according to which issues are more prominent in the mass media and the public political arena, with policy representation only occurring when issues are salient, easily comprehensible to the public, and there is a clear majority preference for action in the overall public opinion (Kyselá 2018, 13). The uncompromising nature of morality policy combined with the mass media attention often gives them high salience. It has been theorised that this should indicate greater congruence in representation on these issues than others (Haider-Markel and Kaufman 2006, 166). The nature of morality policies makes it so that the related preferences are considered controversial and at times polarising. In contrast to the claim that there must be a clear majority preference for public opinion to affect policy, it has been demonstrated that policy on homosexual relations in American states where the public is divided is more responsive to the influence of public opinion than in states where there is consensus and low salience (Haider-Markel and Kaufman 2006, 178). The literature is thus somewhat split on whether the polarisation makes policy more or less congruent with public opinion.

Although large-N research on representation on morality issues is scarce, public opinions on- and the responsiveness of morality politics have frequently been explored in research on the American states, and most often on singular issues such as the legality of abortions and gay and lesbian policies (Mooney and Lee 1995; Haider-Markel and Kaufman 2006; Lax and Phillips 2009). Lax and Phillips have demonstrated that state governments' political responsiveness to public preferences on issues concerned with gay rights is relatively high, but also that congruence is highly related to context, with a bias towards conservative policy when present (2009, 383). Haider-Markel and Kaufman also highlight the importance of context by suggesting that decreased congruence comes with more consensus, making it so that other factors in the policy process have a larger effect on morality policy outcomes (2006, 178). This implies the increased importance of considering the role of political institutions and actors when looking at political representation on morality issues.

3. Theoretical Framework

The theoretical framework is separated into two parts to mirror the two-folded research question. The goal is to contribute to a deeper understanding of the overall relationship between public opinion and policy output, and how this is affected by education. Firstly, I review the literature on the role of education in politics. I argue that while political inequalities traditionally have been, and in many cases still are, based on affluence, there are policy issues for which education may be a more significant indicator of unequal representation. I will then investigate how the level of education affects political representation by explaining the connections between educational background and unequal political representation on morality issues. I present arguments for why the higher educated group's preferences are better reflected in policy than the lower educated group's preferences. The connection will be compared to possible links to unequal representation between income groups.

The second part of the research question asks about the possible institutional and partisan determinants of unequal representation. I will demonstrate how applying a framework of veto points and players as potential determinants of unequal representation will give insight into how institutions and actors impact (un)equal representation for different educational groups. I argue that a higher number of veto points and players present will contribute to equal representation for the lower educated citizens. Individual explanations will be provided for the impact of institutional veto points and players, partisan veto players, and religious partisan veto players on differences in opinion-policy congruence.

3.1 A New Political Divide? The Role of Education in Politics

Being politically equal citizens in a democracy is dependent on numerous factors. Historically, unequal heritage, status and affluence have been the main determinants of cultural and economic power. Socioeconomic differences have been at the centre of most debates about inequality, to the degree that it makes up much of the basis of European party systems. Rokkan and Lipset famously pointed to unequal economic development and class, as well as religion, as being important causes of societal and political cleavages (1967), but scholars have increasingly pointed to education as being a more relevant determinant of political cleavages in modern states (Bovens and Wille 2017, 40-61; Schakel and Van Der Pas 2021). The position of class as the primary source of differences in society is reflected in the earlier mentioned trend

of research on political inequalities being centred on differences between classes, namely income- and wealth groups.

Thomas Piketty has famously written about how capitalism automatically generates inequality in wealth and income (2018). He concludes that inequality in wealth is likely to increase substantially (2018, 474), while the development of income inequality will vary more according to different policies and institutions (Piketty and Saez 2014, 842-3). These differences in affluence have influenced equality in the political arena, both in the United States (Bartels 2009; Gilens 2012) and in Europe (Elsässer, Hense, and Schäfer 2020). The role of political institutions and policy in determining the presence of inequality, combined with the earlier mentioned importance of political equality for democracy, makes it integral for political science research to investigate both descriptively the level of substantive representation *and* the degree of influence from different institutions and policies in creating equal representation.

There are obvious connections between economic class, especially income, and education. Education has the potential to secure citizens an income through them achieving accreditations to gain a career. This makes education the main pathway for social and class mobility in many contexts. Institutions for primary, secondary, and tertiary education were increasingly opened up to the public in Western Europe and industrial societies from the 1950s (Bovens and Wille 2017, 16-17), thus paving the way for renewed participation of the mass public in all levels of society. This led to new opportunities for large parts of the public, causing decreasing levels of inequality in both education and income. It created new opportunities for a broader proportion of the public, thus creating more equal grounds for political participation.

There is much evidence that education substantially impacts both preferences and political behaviour. Research has shown that education increases individuals' political participation (Dinesen et al. 2016), which is connected to the evidence that it causes increased voter turnout (Mayer 2011; Sondheimer and Green 2010). These are both reasons to assume that the higher educated citizens have a greater impact on policy than citizens with lower levels of education. Furthermore, studies show that a person's level of education undeniably influences their attitudes, including opinions on politics and policy changes (Easterbrook, Kuppens, and Manstead 2015, 1293; Bovens and Wille 2017, 50-51). The political preferences of citizens with lower education do generally not match the opinions of the higher educated representatives (Hakhverdian 2015, 244). This link will now be further explored.

3.2 The Representation of Different Educational Groups

Research has found evidence of connections between education and politics in that a person's political interest, preferences and voting behaviour are affected by their education (Easterbrook, Kuppens, and Manstead 2015; Bovens and Wille 2017, 50-51), but there is less work on how this connection translates to the specific relationship between education and *political representation*. Gilens finds that there are significant differences in the preferences of both lower versus higher educated American citizens and lower versus higher income groups on policy related to religious values (2009, 399). He finds that the difference between low versus high educational groups' preferences is significantly bigger than between low versus high-income groups' preferences. This creates a foundation for there to be differences in how the preferences of citizens with different educational levels are represented. I will now present theoretical explanations for there being unequal representation in favour of higher educated citizens, and present evidence from earlier research.

Previous research done on different educational groups' political influence is mostly done on singular countries. It shows overall differences in political congruence according to the level of education (Schakel and Van Der Pas 2021). For example, Schakel and van der Pas found that highly educated citizens' support for policy change has a greater connection with actual change in The Netherlands than the support of lower educated citizens (2021). The low and middle educated have no independent influence on policy. In their study of the effects of education in the UK, Easterbrook, Kuppens and Manstead also find that education has a significant impact on political outcomes (2015, 1293). This effect is expected to be present in the current analysis, with there being significantly higher levels of incongruence between the preferences of citizens with lower levels of education and policy output, than between the opinions of higher educated citizens and policy.

There are several theoretical explanations for the expected unequal representation. Though contested, much research shows that citizens with higher levels of education tend to be more interested and active in politics (Easterbrook, Kuppens, and Manstead 2015; Mayer 2011; Persson 2013). This has been demonstrated in relation to, for example, voting behaviour and participation in political parties. This likely influences who gets elected for political offices and thus public policy, as policies have been shown to reflect better voters' preferences than non-voters' preferences (Griffin and Newman 2005). The political representatives elected for both

the legislature and the executive have also increasingly had higher levels of education than the electorate, with most having an academic degree. Important causes for this development are the increased opportunities for access to higher education, many seeing merit as the new defining qualification for running for office, and the increasingly professionalised, full-time politicians (Bovens and Wille 2017, 111-135). The amount of research demonstrating that descriptive representation has an effect on citizens' substantive representation (Carnes 2012; Wängnerud 2009; Mansbridge 2015), combined with empirical evidence and theoretical explanations of education forming citizens' opinions on morality issues (Gilens 2009, 399; Werfhorst and Graaf 2004, 228; Stubager 2013), makes it likely that the preferences may unproportionally reflect those of citizens with higher levels of education. I will now deliberate on why this is assumed to be the case.

3.2.1 Are the Higher Educated Better Represented in Morality Policies?

Most forms of higher education fundamentally encourage critical and structural thinking. The increased cognitive qualities of students broaden their horizons and allow for new perspectives, leading to the development of new preferences and increased socialisation (Nunn, Crockett, and Williams 1978; Hyman and Wright 1979). Arguments formed on this basis might have a foundation based on first principal values. Higher educated citizens are believed to become more culturally tolerant, with education having a more significant effect on immaterial and cultural values than, for example, income level (Werfhorst and Graaf 2004, 228). It also makes them more progressive in their moral attitudes (Scheepers, Te Grotenhuis, and Van Der Slik 2002, 171).

Connected to the increasing importance of so-called *new politics*, which is often built on new authoritarian-libertarian values (Flanagan and Lee 2003), higher educated citizens also tend to be more on the libertarian side by valuing individual freedom and cultural tolerance (Stubager 2013; Bovens and Wille 2010). This is especially relevant to morality issues in the question of the role of authority, as the allowance of abortions, same-sex marriages and prostitution are all determined based on questions of how much the authorities should intervene in private matters. This confirms the importance of the educational cleavage for issues related to morality.

The connection between the level of education and opinion-policy congruence on morality issues remains relatively unexplored. However, some do demonstrate substantial differences in

the representation of different educational groups. Government policy is generally more congruent with higher educated citizens, but it is unclear how this differs according to different issues. For example, research done in the Netherlands has demonstrated gaps in preferences between low and highly educated citizens on both cultural issues like immigration, and economic issues, with little difference in inequality in the two dimensions (Schakel and Van Der Pas 2021, 431). Research done in Germany shows that the preferences of class- and educational groups regarding cultural issues are similar, while only the social classes' preferences have differential attitudes on political decisions on economic issues (Elsässer, Hense, and Schäfer 2020).

In addition to the indications from earlier research, I have presented numerous theoretical reasons indicating that the higher educated citizens are unproportionally represented in terms of congruence: Education fosters higher interest and participation in politics. The increasingly dominant role of citizens with higher levels of education in political offices and civil society is likely to give them more access to policymaking (Bovens and Wille 2017). Unequal descriptive representation may increasingly benefit the higher educated citizens' substantive representation in terms of the representatives sharing their educational background, as earlier research suggests that there is a connection between substantive and descriptive representation (Mansbridge 1999; Wängnerud 2009). Combined with significant differences in opinion between different educational groups on morality issues, which are often based upon values that make compromise less likely, make the display of unequal representation for educational groups probable. This is summarised in the following hypothesis:

H1: *Morality policy is more congruent with the preferences of higher educated citizens than lower educated citizens.*

3.2.2 The Representation of Different Income Groups in Morality Policies

The persisting role of the socioeconomic cleavage in society, combined with its natural connection to education, makes it relevant to investigate the opinion-policy congruence for different income groups on morality policy. Most related to the research question, it provides an opportunity for comparison, indicating the relative size of the unequal representation for educational groups compared to income groups. This is interesting, as research has focused mainly on the latter, at the risk of neglecting the independent role of education.

Research on unequal representation of groups with different levels of affluence has focused on the relationship between affluence and winning elections, the effect of income on electoral participation (Blais, Dassonneville, and Kostelka 2020, 399), and the influence of affluence on policymaking. The latter has the most relevance to opinion-policy congruence. Numerous studies have demonstrated more political responsiveness to the preferences of more affluent citizens and that policy generally is more congruent with their opinions (Elsässer, Hense, and Schäfer 2020; Lupu and Warner 2022a; Gilens 2012).

Much research on income inequality has focused on the United States. Maybe most famously, Gilens finds that policy is generally only responsive to high-income citizens when the two groups' opinions diverge, and with generally unequal representation biased towards them on economic, foreign, and moral/religious issues (2012, 235). He finds that although there are factors that reduce the unequal representation, it does not improve responsiveness toward the poor. Lupu and Warner (2022a) investigate the effect of affluence on the congruence between citizens and legislators in the United States on different issues. They also find that affluent citizens' preferences are generally more congruent with legislators' preferences than the preferences of poorer citizens. However, as opposed to Gilens' findings on morality policies, when explicitly investigating policy on same-sex marriage, they find that it is more congruent with the preferences of the poor than the affluent. Specifically related to another morality issue, Bartels found proof that United States senators are as unresponsive to the bottom third of the income distribution on abortion issues as to other clear ideological issues (2009, 267). This illustrates that despite an overall expectation of policy being more congruent with more affluent citizens, it is unclear how this is reflected in morality policies.

Unequal representation for different income groups has also been demonstrated in the European context. Elsässer, Hense, and Schäfer find that policy is generally more responsive to the opinions of the upper occupational and educational groups in Germany (2020), and Schakel finds that higher income citizens are also better represented than citizens with low and median levels of income (2021). Rosset and Stecker's analysis of congruence on various issues shows that the poor citizens are less represented on some issues than on other, emphasising the unequal representation of poor citizens on issues such as redistribution, with the lower educated citizens comparatively being less represented in relation to European integration (2019). They point to differences in representation being more apparent when investigating singular issues than

positions on the left-right axis. Peters and Ensink further support these findings by showing that low-income groups' preferences tend to be underrepresented, while high-income groups tend to be overrepresented in European countries' policies (2019). Furthermore, they find that responsiveness differs more when the preferences of the two groups diverge more.

There are several reasons to expect the more affluent citizens to be generally better represented than poorer citizens, in addition to the previous research suggesting this to be the case. There are also several common explanations as to why this is the case entrenched in the literature. I mention them only briefly, as differential representation according to affluence is not the primary concern of the thesis. For starters, there is unequal descriptive representation biased towards citizens with higher levels of income, which have been shown to also affect their substantive representation (Carnes 2012; Carnes and Lupu 2015). Some also argue that higher income citizens are more politically active, although findings are somewhat inconsistent (Flavin 2012). Lastly, affluent citizens have the ability to influence political actors and processes through financing and donations (Gilens 2012). This makes it likely that policy is generally more congruent with the preferences of high-income groups than the preferences of low-income groups. If one also is to assume that the more affluent citizens also have higher levels of education than poorer citizens, this makes it likely for there to also be some differences in opinion between the income groups on morality issues. It has been demonstrated that this is the case, although they diverge less than between educational groups (Gilens 2009). This results in the following hypothesis:

H2: *Morality policy is more congruent with the preferences of high-income groups than low-income groups.*

It is a common belief that while education greatly affects attitudes on immaterial and cultural issues, income has the greatest impact on issues related to material goods and the economy (Werfhorst and Graaf 2004, 229-30). This is reflected in the explanation in the previous section of the effect of education on attitudes and values and by previous research demonstrating greater differences between lower and higher educated citizens' opinions on morality issues, than between low and high-income citizens' opinions (Gilens 2009). It is thus likely that while both richer and higher educated citizens' opinions are better represented than poorer and less educated citizens' opinions, the characteristics of morality policy will make the unequal

representation greater for different educational groups. The following hypothesis will be tested to investigate this assumption:

H3: *There is a more significant gap in opinion-policy congruence for the preferences of low and highly educated groups than for the low and high-income groups.*

3.3 Institutions and Partisan Actors as Determinants of Unequal Representation

It has long been argued by social scientists that public opinion shapes the government's policy output (Page and Shapiro 1983), but also that the influence varies according to the presence of certain political institutions and the characteristics of the relevant issues (Wlezien 2017). An inquiry into (un)equal representation for different educational groups on policy related to morality will provide important descriptions of representation and the state of democracy, but it may also contribute to a deeper understanding of the overall relationship between public opinion and policy output. The analysis will attempt to explain assumed causal expectations by investigating how the presence of different institutions and partisan actors might influence opinion-policy congruence. So, while the first part of the analysis is mainly interested in whose preferences are reflected in policy, the second part will focus on what might contribute to determining whose preferences are best represented through congruence.

3.3.1 Public Opinion and Access to Influence

Substantive representation depends on the state's ability to be responsive to its' citizens' preferences, which relies on governments' flexibility and ability to implement and change policy. The thesis' focus on congruence, as opposed to responsiveness, is further legitimatised by the assumption that institutions and actors have important implications on which policy is produced. Research on opinion-policy congruence on morality issues in the American context has emphasised the potential importance of factors other than citizens' opinions when examining the determinants of policy output, as preferences seem to have little effect if there is not a clear divide in public opinion (Haider-Markel and Kaufman 2006, 178). I therefore suppose opinions indeed tend to have weak effects on which policy is produced. In that case, it is also likely that political institutions and actors affect which subgroups' opinions policy is the most congruent.

The impact of different political institutions and partisan actors on unequal opinion-policy congruence for different educational groups will be investigated by looking at what may impact policymaking and access to it. Access to the process of policy formation will be looked at through a political veto points and players framework (Immergut 1990; Tsebelis 1995). Veto points impact the degree of openness for political change in a political system and can be important determinants for governments' capability for responsiveness to the preferences of its' citizens. Veto players refer to the opening for and potential impact from individual or collective actors whose agreement is necessary for changes in the status quo. The potential for policy change is the opposite of policy stability, and regimes lacking policy instability are at the risk of regime or government instability (Tsebelis 1995, 293). A lack of veto points and players who can create openings for change to be initiated will make the state unable to be politically responsive to the citizens' preferences. This is relevant for representation because openings might create avenues of influence for some parts of the population more than others. The presence of too many points and players might also halt policy change, as policy must be processed through more institutions and approved by more actors, creating a bias towards the status quo, much like the effect of checks and balances in the American political system (Gilens 2012; Hamilton, Madison, and Jay 2009).

3.3.2 Veto Points and Players

I will now provide an overview of the different kinds of veto points and players, which is also presented in Table 1, before going more into detail on the different types. *Institutional veto points* like the regime, the legislature, the electoral system, and the courts are all instrumental avenues for creating change in states. They are static because they are set institutions, determining the room for political action. If there is no room for change, it does not matter how determined policymakers are to respond to the public. In this sense, the political institutions are necessary enablers for any opinion-policy congruence. *Institutional veto players* refer to the actors that are institutionally required for policy proposals to be approved, for example, the existence of a majority in favour of enactment and the impact of the presence of a minority versus an oversize government (Tsebelis 1995, 302).

Partisan veto players are neither necessary nor sufficient for political change, but they do have a significant impact on the flexibility of the governments in enacting change. Partisan veto players concern the number of- and presence of different partisan actors in multi-party systems.

A higher number of partisan veto players will create more avenues for influence and more actors that may disagree and interrupt policy change attempts. The presence of specific partisan players like religious parties versus new left-liberal parties will also, for example, undoubtedly influence the making of morality policy.

Table 1. *Overview of Veto Points and Players*

Institutional Veto Points	**Institutional Veto Players**	**Partisan Veto Players**
Political system	Presence of a minority- or oversize government	Number of parties
Bicameralism		Presence of Religious Parties
Referendums		
Electoral Systems		
Courts		

Notes: Overview of Veto Points and Players based on Immergut (1990) and Tsebelis (1995) frameworks.

Tsebelis' theory of the importance of veto players in the policymaking process has been criticised for not sufficiently taking *societal* players into account (Fink 2008, 78), for example, religious organisations, and thus not considering relevant aspects from the theory of the two worlds. However, research on churches has found that their weak-rootedness in European societies limits their societal influence (Zuba 2021), weakening the argument of religious organisations having roles as societal veto players. The lack of country-level data on religious organisations in European- and OECD countries and the lack of empirical support for the theory of churches as societal veto players result in the theory being omitted from the analysis. Instead, I will take the religious influences into account by considering the effect of religious partisan players on unequal representation.

Institutional Veto Points and Players

Dramatic changes will be hard to implement in a political system with many veto points. More veto points will effectively mean that political influence is more distributed and thus more open for influence (Immergut 1990; Tsebelis 1995). On the one hand, the increased number of veto points will allow for better representation of different preferences because there is room for a more comprehensive set of preferences to be incorporated. Seen in connection to the actual

policymaking process, it may, however, also make changes in morality policy less flexible and responsive, as it will make enacting policy change more challenging because of the potentially higher number of constraints (Thürk, Hellström, and Döring 2020). More available veto points for access thus make the status quo more likely to remain, making the degree of congruence dependent on whether citizens support the status quo or prefer change.

The political executive has a fundamental role in enacting policy changes in every state. Still, the origin of the office varies in terms of whether the executive is independently elected, emanates from the legislature, or combines the two. A presidential system allows for the election of a single executive who is head of state and government but not politically accountable to the legislature. In contrast, the executive in a parliamentary system is most often elected by the legislature or alternatively appointed by the head of state (Müller 2011, 133). Both options result in one point of access to the policymaking process for the public, whether it be the president or the government emanating from the legislature. This is not the case with semi-presidential and hybrid systems, including a directly or quasi-directly elected executive that appoints the cabinet, which is accountable to parliament (Müller 2011, 133). The effective power is thus shared between the two organs (Duverger 1980), resulting in semi-presidential- and hybrid systems allowing for more access points to political influence for the public while also making it possible for more actors to halt policy change.

The shape of legislatures themselves varies and allows for different degrees of influence from the public. A unitary legislature only has one chamber where a policy proposal must get the requested majority of support; bicameral legislatures have two chambers where policy must be approved for enactment (Immergut 1990, 395; Tsebelis 1995, 290). While two chambers are likely to preserve the status quo and make change less likely by slowing down the legislative process and making sudden changes difficult, it also allows for more points of influence for the public (Riker 1992). Given that lower educated citizens previously have been shown to be more conservative (Scheepers, Te Grotenhuis, and Van Der Slik 2002, 171), the effect of bicameralism in preserving the status quo might contribute to evening out the differential representation of lower and higher educated groups. The increase in points of influence should also generally contribute to equal representation for a broader part of the public.

Different electoral systems allow for various degrees of influence for a plurality of opinions versus the majority or median voters' preferences. One might argue that electoral systems with

proportional representation represent the preferences of the entire electorate more accurately than majoritarian systems, as it aims to represent the whole population proportionally (Lijphart 2012, 130). This indicates that its presence is likely to make policy more congruent with the lower educated citizens' opinions, as more avenues of influence are created. Single-member or simple plurality systems allow for fewer access points to the policymaking process by only giving the majority a point of access, affecting policy congruence by rewarding parties converging to the median voter if there are no abstentions (Cox 1987). This might make policy more moderate if representatives seek to gain the votes of the median voters (Downs 1957).

Concerning unequal opinion-policy congruence for different educational groups, single-member systems have two potential effects. It may be benefitable for lower educated citizens because it moderates policy, making it less likely to cater to only the higher educated. However, the arguments as to why citizens with lower levels of education's opinions are better reflected in policy remain, as the unequal descriptive representation and higher political participation stay the same. This, combined with the overall expectations of more veto points creating a bias towards the status quo and more points of influence, makes it likely that proportional representation might foster more equal representation.

Modern democracies may have institutional provisions in their constitutions which allow for essential policy questions to be decided by referendums. There are differences in how binding referendums are, but even with a minimal degree of influence, they offer an opportunity for power from the citizens. Referendums resulting from popular initiatives present additional veto points that may allow for better representation of the median citizens' preferences (Hug and Tsebelis 2002, 493). The point of access should improve representation by making the policy more congruent with the median citizen as opposed to those with higher levels of education.

Morality policy is often regulated by general criminal law, meaning that changes in morality policy are often implemented by law enforcement authorities and caused by decriminalisation (Knill 2013, 315). This gives a prominent role to the judicial branch of government in changing and enacting morality policies. The courts have increasingly played an active role in policy-making, as the number of public interest suits and judicial discretion has heightened (Cichowski and Sweet 2006, 216-7). This is connected to the emergence of higher law norms that may limit legislative institutions' independence to protect human rights, and that might or might not be

ideologically charged (Sweet 2000, 196-198). There are several countries where the legality of moral and religious issues including abortion, same-sex marriage and euthanasia are decided by the courts. I argue that this makes the courts a potentially important veto point concerning morality policies. The courts, especially constitutional courts, are fundamentally counter-majoritarian institutions because they protect the states' laws and constitutions (Brouard and Hönnige 2017, 529). This may include protecting minority rights against the preferences of the majority. While this may hinder political change, systems of judicial review and openings for public interest suits may also create veto points of access, allowing for people to influence policy output.

It has been debated why the different institutional veto points are likely to make representation more proportional and, in some cases, directly benefit the lower educated citizens. Overall, it is expected that a higher number of institutional veto points will allow for more points of access for the public to influence the policymaking process (Tsebelis 1995, 293), and I argue that this will result in better representation for the whole electorate. However, an increased number of access points also strengthens the status quo by creating more opportunities to stop policy changes. Considering the tendency for changes in morality policy over the last decades, one might argue that the political responsiveness could be expected to be worse in matters concerning morality issues. However, arguments have been presented for the preferences of higher educated citizens to be more congruent with policy than those of the lower educated citizens. It has been argued that higher educated citizens tend to be more progressive. This means that the increased preservation of the status quo might actually benefit the substantive representation of the lower educated citizens' preferences, whose preferences are generally more conservative. This is summarised in the following hypothesis:

H4: *A higher number of institutional veto points will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences.*

The flexibility of institutional veto players is necessary for enacting changes (Tsebelis 1995, 302), and thus for the elected representatives to act according to the voters' preferences. Generally, whether the government has the majority's support in the legislature versus only the support of a minority will significantly impact whether they can enact the policy that their voters

prefer. Tsebelis argues that the presence of either a minority or an oversize government will both act as open veto points for policy change (1995, 303-4). The former because minority governments frequently also are single-party governments and close to the centre in party systems. The latter is because oversize governments may pass legislation even without the agreement of all coalition partners. It is especially relevant as it has been demonstrated that the formation of oversize governments depends entirely on the number of other institutional veto points (Thürk, Hellström, and Döring 2020), with more veto points making minority and minimal-winning cabinets less likely. The presence of a minority or oversized government will enable responsiveness by enabling policy change but will not necessarily lead to more equal representation by creating avenues for influence for those with lower education. It might however contribute to the status quo bias, which would potentially benefit the lower educated citizens, which tend to be more conservative on morality policy. This leads to the following hypothesis:

H5: *A higher number of institutional veto players will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences.*

Partisan Veto Players

Connected to the existence of different institutional veto points and players, the number of political parties is also likely to affect the public's access to influence policy. Each party can be regarded as different veto players (Tsebelis 1995) in the sense that more political parties in the legislature will allow for a broader range of opinions to be represented while also meaning that more actors' consent are necessary to implement policy. Increasing the number of veto players thus potentially give the opportunity for more different educational groups to have a say. This might especially be the case in terms of morality issues, as legislators may often feel bound to promote restrictive or liberal policies to uphold 'good morals' (Meier 1999). The presence of more political parties is likely to create space for opinions that fray more from the norm.

An argument that might go against the hypothesis is that the presence of fewer parties as a result of electoral systems where the winner takes it all tends to make the representatives more moderate in the chase for the median voter (Downs 1957). Assuming that the highest educated citizens' preferences do not equal those of the median voter, this might make representation

more equal. However, it is also likely that the presence of two big, established parties will make power more concentrated with elite politicians, which are typically a benefit for the higher educated citizens who increasingly dominate politics (Bovens and Wille 2010). This suggests that also partisan veto players will make policy more congruent with the opinions of the lower educated citizens, which is likely to make representation more equal.

H6: *A higher number of partisan veto players will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences.*

Religious Partisan Veto Players

The connection between morality issues and first principal values is frequently linked to religion. This is highlighted by the increasingly frequent tendency to look at morality policy in light of the 'two worlds' theory, emphasising that contrary to the secular world, the religious world's party system is defined by the presence of a divide between religious and secular political parties (Engeli, Green-Pedersen, and Larsen 2012, 2). Morality policy will likely be deliberated and processed differently according to whether the legislature includes a religious party making up a partisan veto player.

The ideological makeup of the legislature and government directly influences policy output, as it constitutes some part of the background for parties, legislators, and executives alike when making decisions. However, there are differences between issues on how much partisan members are influenced by partisan guidelines when voting or enacting policy. While party members may stay quite loyal to their party's positions on, for example, broad topics like taxes, there are reasons why party discipline and affiliation are typically not regarded as having a strong influence on policy output concerning morals (Adam, Knill, and Budde 2019, 1016). Individual legislators might have the opportunity to do so by being explicitly freed from following party guidelines when voting on the specific (Albæk 2003).

The role of religion as a traditional societal cleavage has made it so that the role of religion in state and society has been a frequent topic in political debates. Despite being placed under the same 'religious' party family, religiously-based parties may otherwise have different standings.

Moral issues are based on fundamental values that are often an essential part of religious beliefs. These parties are often fundamentally centred on religious values, as seen with the Christian Democratic Union (Christlich Demokratische Union) in Germany and the Christian Democratic Party (*Kristelig Folkeparti*) in Norway. The presence of religious parties in governments is expected to put morality policy on the agenda, as they are central parts of their programs. Seen in connection to morality policy, a religious party can thus act as an essential partisan veto player in being an important initiator for making morality issues more salient and thus more congruent with public opinion.

It has been demonstrated that individuals with higher levels of education are generally less religious than people with lower levels of education. They are also less conservative in their moral attitudes (Scheepers, Te Grotenhuis, and Van Der Slik 2002, 171). The influence of both education and religion on preferences on morality policy thus makes it very likely for there to be a relationship between the two and opinion-policy congruence. Suppose one assumes that higher educated citizens are less conservative and base their preferences on morality issues less on religious beliefs than lower educated citizens. In that case, it is likely that the presence of religious parties may ensure better substantive representation of the latter group. Their assumed willingness to prioritise morality policy would make them an open veto player likely to benefit the representation of lower educated citizens. This leads to the following hypothesis:

H7: *A higher number of religious parties present as partisan veto players will lead to more opinion-policy congruence for lower-educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences.*

To summarize, it is likely that a higher number of veto points and players will benefit the lower educated citizens' representation, as it opens up more avenues for influence on policymaking and makes the status quo which is inherently more conservative more likely to persist. The bias of the status quo effect has been demonstrated by Gilens concerning the unequal representation of different income groups in the United States (2012, 72-74). The bias towards the status quo then has the opposite effect by preserving the policies of the wealthier citizens, which are more conservative. The expected effect of veto points and players to make representation more equal is thus conditioned on the assumption that the existing unequal representation is biased towards the higher educated citizens.

4. Data and Measurement

In this chapter, I will explain how the original dataset I use in the analysis was constructed. The next chapter will present the analytical strategy to use pooled data on morality issues in a pooled ordinary-least square (OLS) regression estimate to investigate the relationship between different educational groups' opinions and policy. Thus, the purpose is first to clarify the operationalisation of opinion-policy congruence used in the analysis and present the data and the operationalisation and measurement of variables. Some of the advantages and challenges of using a pooled country-year-issue dataset in studies of unequal representation are discussed. However, this is mainly covered when discussing the methodological approach in the next chapter.

4.1 Constructing the Dataset and Case Selection

Performing quantitative analyses of opinion-policy congruence and possible determinants demands a multidimensional dataset. Pooling data on several morality issues makes it possible to perform a comprehensive investigation of the general unequal representation on the whole issue domain. The aim is to investigate whether the effect of *individuals'* opinions on *country-level* policy is conditioned on education, but a lack of methods for micro-macro multilevel modelling made it necessary to aggregate the individual-level variables by country, year, and issue. This resulted in a final dataset consisting of data on 334 observations on five morality issues, collected from 34 democratic countries from 1995 to 2014.[1] The countries are all European or members of the OECD. To look at whether opinions are reflected in policy, it was necessary to collect and match data on citizens' preferences on morality issues and policies corresponding to the preferences within the citizens' country. The availability of information was thus integral for decisions on which issues exactly were to be included in the final dataset.

The dataset only includes representative democracies to ensure that a relationship between public opinion and policy can be expected in the first place. Ideally, the analysis would only include countries that are fully democratic, but this is both normatively and practically unrealistic. There is no perfect democracy, and so a bar had to be set on which countries should

[1] The analysis including veto points and players include three less observations than the general analysis of opinion-policy congruence because of missing data for Slovakia in 1995, and the analysis on income groups include one less morality issue and 33 countries in the same time period. See Appendix A for an overview of which countries and years are included in each dataset.

be regarded as democratic, as opposed to not being democratic enough to facilitate a clear relationship between public opinion and policy.

Representative democracy has been operationalised as liberal democracy to include some of Dahl's abovementioned indicators of a more maximal definition of democracy (1971). The Varieties of Democracy (V-Dem) project provides a liberal democracy index which aggregates indicators on dimensions such as suffrage rights, clean elections, equality before the law, constraints on the executive, and freedom of association and expression to provide a score for the strength of a state's democratic institutions (Coppedge et al. 2020). I use the 10th version of the data, and the variable is coded from 0 - *Weak* to 1 - *Strong*. The index was chosen based on the source's quality and the practical suitability of the index in terms of range and coverage. V-Dem's use of multiple disaggregated indicators, transparency, multiple expert coders, and methods for estimating latent country-date traits strengthens the data's validity and reliability compared to other sources' indices on democracy (Handlin 2017, 46-8; Teorell et al. 2019, 77), hence strengthening the quality of the measurement.

The bar on what should be regarded as democratic enough for there to be real representation had to be sufficiently high to ensure a significant relationship, but also sufficiently low to assure that the number of observations is not seriously impaired. I thus only included countries with a liberal democracy score of 0.6, which makes the least democratic countries included Slovakia in 1998 and Bulgaria in 1997. The decision is strengthened by both countries being regarded as having adequate political- and civil rights and liberties to be classified as free by Freedom House in the relevant years of policy implementation (Karatnycky 2001).

4.1.1 Measuring Congruence: Matching Opinions with Policy Output

Questions of measure validity are essential when analysing opinion-policy congruence. The data on the public's opinions must measure preferences on the same policies that are investigated. This is a challenge, as many surveys ask questions on general attitudes on different issues rather than explicit opinions on the implementation of policies (Wlezien 2017). There is also the issue of policy level. Surveys may ask whether the respondent supports increasing spending on welfare but fails to specify the policy's scope or the relevant amount of change in spending. In the question of abortion, this entails that a respondent stating that abortion is "Justifiable" while referring to it being justifiable when there are serious health dangers for the

mother, will be juxtaposed as having the same opinion as a citizen stating to abortion as being "Justifiable" but with the opinion that it is always justifiable until a particular week in the pregnancy. While this weakens the measure validity, the relative preferences still offer the opportunity to assess which group's relative opinions are more or less congruent with policies on the issues. It might also be argued that the broadly stated relative measure is indeed an advantage when doing a country-level analysis over time. It does make the preferences more relative to context.

The included morality policies were chosen out of a set of criteria, some of which are based on the method Gilens' used in his analysis of opinion-policy congruence in the United States (2012). Although his focus to a greater degree is on change in policy, a lot of the principles are essential to assuring measurement validity and relevance for looking at congruence. For starters, the proposed policies should be realistic in the sense that there has to be a real chance for the policy to be present, and support for the policy should be plausible for parts of the public (Gilens 2012, 51). The issues should be something citizens can utter support for or oppose, which means they cannot be too complex. The policies must also be specific enough for the policy changes to be validly measured, and it must be possible for them to be implemented at the country level to justify the level of analysis (Gilens 2012, 57-58). Problems related to issues being too technically challenging for citizens to understand- or an opinion on them is reduced by preferences on morality issues often being based on relatively simple values.

The temporal and causal structure of the relationship between public opinion and policy output is essential to consider. It is unlikely that policy will reflect to the public's preferences immediately as they change. Congruence is rather likely to be affected by preferences having initiated processes of change in the past, thus affecting future legislation. To take this causal order into account, the relationship between preferences and policy output is examined with an applied lag of two years on the dependent variable. This means that preferences will be linked to policy two years later, to investigate whether some groups' opinions are more congruent with policy than others. The control variables are thus also measured two years ahead of the policy output. One could argue that two years are too short for preferences to have an effect on policy. However, the common use of it in the literature justifies my use of it in this thesis (Gilens 2012, 60; Page and Shapiro 1983, 177).

4.1.2 Selecting the Morality Issues

After examining international survey data with the mentioned criteria in mind, I decided to examine opinion-policy congruence on the following morality issues: Abortion, homosexuality, same-sex marriage, euthanasia, and prostitution. Divorce was considered but was not included because of a lack of data on country-level divorce policy. Other issues related to family policy were also considered, for example, concerning paid maternity leave and child-care. However, these issues are less obvious morality issues than those mentioned above, as they do not necessarily refer to first principal values and have a higher degree of complexity. I argue that these are issues more concerned with welfare policy.

4.2 Measuring the Opinions of Different Groups

The information on citizens' preferences on morality issues was collected by merging data from international- and European opinion surveys. To create aggregate variables of subgroups' opinions at the country level, information about their educational and economic background was also collected. The question of data combability mainly depended on whether questions were asked on relevant morality topics, with a search resulting in the inclusion of variables from the World Values Survey (WVS) (1981-2017) (Haerpfer et al. 2021), the European Values Study (EVS) (1981-2009)) (2021), and one wave of the European Election Voter Study (EES) (2014) (Schmitt et al. 2016). The datasets are all widely used and acknowledged and thus quite reliable sources. Other sources were excluded because of a lack of comparable measures of education.

WVS and EVS are comparative social surveys covering people's beliefs and norms, with the former including citizens from countries all over the globe and the latter including only European countries. They both include data on preferences on homosexuality, prostitution, abortion, and euthanasia across several subsequent waves of surveys. The WVS data included range from the third wave collected from 1995 to 1998 to the sixth wave collected from 2010 to 2014, while the EVS data is collected from the second wave in 1990 to the fourth wave in 2008. This allows for examination of the opinions in different countries and over time. Additionally, they both include variables on levels of completed education and income.

The EES 2014 Voters Study is a dataset created by the European Election Study and the European Parliament to investigate electoral behaviour, general political attitudes and

behaviour, and background characteristics in the EU member states. It includes data on preferences on same-sex marriage and a variable measuring level of completed education. Unfortunately, it does not include an income variable comparable to the one included in WVS and EVS. Thus, preferences on same-sex marriage are not included in the analysis of unequal representation for different income groups.

4.2.1 Preferences on Morality Issues

The variables measuring the respondent's preferences on morality issues were standardised to a scale going from 0 to 1 to assure comparability. All variables collected from WVS and EVS were originally continuous and asked the respondents whether they found homosexuality, prostitution, abortion, and euthanasia justifiable on a scale from 1: *Never justifiable* to 10: *Always justifiable*. The same goes for the question on same-sex marriage in EES, which asked respondents to place themselves on a scale from 0: *You fully in favour of same-sex marriage* to 10: *You fully opposed of same-sex marriage*. The values on the latter variable had to be recoded so that the scale was reversed so that a higher value corresponded with a higher value on the matched policy output. Table 2 shows all the used variables on citizens' preferences.

Table 2. *Individual Level Variables: Overview of preferences on morality issues.*

Issue	Question in survey	Years included	Dataset
Abortion	Justifiable: abortion	1995, 1996, 1997, 1998, 1999, 2000, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013	WVS/EVS
Homosexuality	Justifiable: homosexuality		
Prostitution	Justifiable: prostitution		
Euthanasia	Justifiable: euthanasia	1995, 1996, 1997, 1998, 1999, 2000, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012	
Same-sex marriage	Same-sex marriage	2014	EES

Sources: World Values Survey (1981-2017), European Values Survey (1981-2009), and European Election Studies (2014).

4.2.2 Education and Income

WVS, EVS and EES all include a variable measuring the respondents' level of education. The two former have measures from 1 - *Inadequately completed elementary education* to 8 - *University with degree or Higher education - upper-level tertiary certificate*. The variable was

created by harmonising the country-specific educational programs according to the International Standard Classification of Education (ISCED), a standard developed by UNESCO to compare different countries' educational statistics easier. The ISCED classifications were then converted to eight categories, which resulted in the mentioned coding. An overview of all the categories is available in Appendix B. Income has been operationalised as household or family income. The WVS and EVS provide a harmonised income scale between 1: *Lower step* and 11: *Highest step*. It adapts country-specific income scales labelled by national currency into a distribution of ten categories, from the 10% lowest to the 10% highest income. It is thus made relative to each country.

The education and income variables had to be recoded relatively to construct consistent and comparable variables with the information from the different datasets, despite differences in measurement, demographics, and time. For this, Gilens' method of making variables relative to the number of people included was used (2012, 61). The relative number of people within each category was found using the midpoint of the percentage of the group. The respondents were placed in their relative 100^{th} percentile on each year-country distribution. This harmonisation will allow education and income to be included as two independent variables with observations from all three datasets.

Table 3. *Individual Level Variables: Education and Income*

Question in survey	Dataset	Years included
Highest educational level attainted	WVS/EVS	1995, 1996, 1997, 1998, 1999, 2000, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013
Scale of incomes		
Education: highest level completed	EES	2014

Sources: World Values Survey (1981-2017); European Values Survey (1981-2009); European Election Studies (2014).

4.2.3 Creating the Education- and Income Preference Groups

To compare how policy output reflects preferences unequally for people with different levels of education and income at the country level, it is necessary to aggregate the preferences of groups with varying levels of education and income by country, year, and issue. To do this, I created three separate variables with the preferences of the lower, middle and higher educated

respondents per country-year-issue, and three independent variables with the preferences of the low, middle, and high-income respondents per country-year-issue. This will enable the investigation of how each of the three groups' opinions affects policy output and thus how well policy output reflects their preferences. More importantly, it will allow me to compare the different groups' relationships with policy and thus potential unequal opinion-policy congruence.

First, the subgroups had to be created. The education- and income variables are made relative to each country and year, as described in section 4.2.2. The groups are created by dividing the individual level sample into three groups that are about equal in size. This is done by dividing and aggregating the preferences by the .33 and .66 percentiles on the education and income variables. The mean preferences of respondents below the .33 education percentile per country-year-issue are then used to create a variable with the lower educated group's preferences. The mean preferences of respondents between the .33 and .66 percentiles are used to create the middle-educated group's preferences per country-year-issue. The mean preferences of respondents above the .66 educational percentile are used to create the variable with the higher educated group's preferences per country-year-issue. The preferences variable is therefore aggregated to the country-level per educational group to allow for investigation of differences within each country unit and not just between. The same procedure is done with the preferences according to the three different income groups.

Variables measuring the differences between the preferences of lower and higher education- and income groups were also created. This allows for simpler models, solves some of the later mentioned problems with multicollinearity, and makes it possible to see who policy reflects when the different groups' preferences are more dispersed. As it is hypothesised that the higher educated citizens' preferences will be more greatly reflected in policy than the lower educated citizens' preferences, the variable is created by subtracting the preferences of the lower educated from the higher educated citizens' preferences. This enables investigation of whether there is unequal representation when the groups have different opinions.

4.3 Measuring Policy Output, Institutions and Partisan Actors

When the availability of information on citizens' preferences had been explored, the dataset had to be supplemented with data on whether the related policy was present or not. This allows

for investigation on whether the three groups' policy preferences are differently reflected in the actual policy. Data on the presence of different veto- points and players were also necessary to answer the second part of the research question regarding institutional and partisan determinants of unequal representation. I will now present the data and variables and how they have been processed.

4.3.1 Policy Output as Dependent Variable

The unequal representation will be investigated by looking at whether the different educational and income groups affect policy output differently. This makes policy output the dependent variable. More specifically, the dependent variable contains numerous dependent variables, as it consists of policy regarding different morality issues, measured in the same way, and on the same scale. The chosen issues all have in common that the legislation on the relevant subjects often is relatively straightforward to measure, with legislation data available. This leads to policy output being operationalised as the legality of the different issues.

Table 4. *Country Level Variables: Matching Policy Output with Preferences*

Issue	Preference to be matched	Policy output and main sources	Coding of policy output
Abortion	Justifiable: abortion	The legality of abortions. *UN- World Population Policies Database (Legal grounds for abortion, 1-7)* *Global Abortion Policies Database*	1: Legal - abortion can be acquired on request 0.5: Partly legal - abortion is legal in certain cases 0: Not permitted or only to save a woman's life
Homosexuality	Justifiable: homosexuality	Legality of homosexuality *Equaldex - LGBTQI rights*	1: Legal 0: Illegal
Prostitution	Justifiable: prostitution	Legality of prostitution *Britannica ProCon.org: Prostitution Laws per Country*	1: Legal 0.5: Partially Legal 0: Illegal
Euthanasia	Justifiable: euthanasia	Legality of euthanasia *Britannica ProCon.org: Legal Euthanasia*	1: Legal 0.5: Partially Legal 0: Illegal
Same-sex marriage	Same-sex marriage	Legality of same-sex marriages *Equaldex - LGBTQI rights*	1: Legal 0,75: Civil Unions 0,50: Other type of partnership 0,25: Unrecognized 0: Not legal

Sources: WVS (1981-2017); EVS (1981-2009); EES (2014).

The operationalisation of all variables and data sources used for the dependent variable is available in Table 4. The policy data had to correspond to the individual units in terms of country and time. I collected the information for the country-level data from various sources for the different issues. There is no collective database of legislation on morality issues, so the data on different policy outputs had to be collected independently. I found some comprehensive sources on each topic, and then I did further research in terms of cross-checking to assure the reliability of the data. I will now present the data used for the policy output on each issue.

Data for policy output on the legality of abortions was collected from two different sources, the United Nation's World Population Policies Database (2015) and the World Health Organization's (WHO) Global Abortion Policies Database (2021). The organisations' international acknowledgement and the data being readily available online for verification heightens the sources' reliability. The UN data was used when available for the relevant countries and years, and the Global Abortion Policies Database was used as a supplement when it was not. The data in the WHO's online database only shows today's legal situation, so the date for the implementation of legislation had to be accessed by looking at the legal documents attached to each country. Additional sources such as journals and news articles were used for some countries to assure that the legal documents were correctly translated and interpreted, thus heightening the reliability. Only the UN data was used in countries where laws vary by jurisdiction.

The legality of abortion variable was coded with three values, namely 1 - *Legal on request*, 0.5 - *Legal in certain cases*, and 0 – *Not legal or only to save a woman's life*. The category of *legal in certain cases* includes a combination of allowances for preserving a woman's physical health, preserving a woman's mental health, in case of rape or incest, because of foetal impairment, or for economic or social reasons. The category's inclusion allows for some nuance in the data while preserving a natural order.

The collaborative knowledge base Equaldex (2021) is the primary source used to measure the legality of homosexuality and same-sex marriage. The website aims to crowdsource laws related to LGBT rights to create a comprehensive overview of the LGBT rights movement. The website's collaborative nature compromised its' reliability and made the use of additional sources and checking necessary. The reliability is increased by legal documents available to account for all of the information. I went through all of the included papers, which made

collecting the data from the website time-consuming. It demanded caution and thoroughness. The available legal documents were checked to confirm the correctness of the information. If translations of the legal documents were not readily available, alternative sources were collected to verify the reliability of the stated information. If legal papers or alternative sources were not available on the website, data on the units were not included.

The legality of homosexuality was coded dichotomously, with 1 – *Legal* and 0 – *Illegal*. The few countries where homosexuality is legal for females but illegal for males were coded as illegal. The legal frameworks surrounding same-sex marriages are often more nuanced, with different kinds of unions and partnerships being legal. The variable is coded from 1 – *Legal* to 0 – *Illegal*. However, some nuances were included, with civil unions, other types of partnerships, and a lack of recognition being coded in order between 0 and 1, as displayed in Table 4.

Data on the legality of prostitution and euthanasia was mainly collected from Britannica's ProCon.org (2018, 2022). The data quality was heightened by Britannica being a well-known and reliable educational publisher. They have collected information on policies from 100 countries, with government documents available when possible. The website clearly states that the data should not be used before checking for current editions of the applicable laws. This led me to check the included government documents and use additional sources to validate the given information. This was also necessary to check the year of implementation for the different laws.

Prostitution policy is coded with values from 1 – *Legal*, to 0.5 – *Partially legal*, and 0 – *Illegal*. Countries such as Norway and France have been coded as having partially legalised prostitution as the selling of sex is legal, but the buying of sex is illegal. *Partly legal* have also been assigned to countries such as the United Kingdom, where the legality of prostitution is different for different parts of the country. The legality of euthanasia is coded from 1 – *Legal* to 0 - *Illegal*, with 0.5 – *Partially legal* applying to cases where the legislation is unclear and has grey areas. The question on preferences from WVS and EVS asks specifically about euthanasia, which can be defined as when a doctor administers a lethal dose of medication to a patient. The legality of physician-assisted suicide has thus not been considered.

4.3.2 Veto Points and Players

The analysis of veto points and players is on the country level, requiring data on the presence of veto points and players in different countries. The primary source of data is the Comparative Political Data Set 1960-2019 (CPDS), a collection of political and institutional data on 36 European democracies (Armingeon, Engler, and Leemann 2021). The observations were collected annually per country, allowing for the observation of longitudinal trends; it is combined with the opinion-policy data from the first part of the analysis to examine interaction effects in the second part.

Institutional veto points are measured by summarising the number of veto points present in each country-year. The variable is thus an additive index, consisting of indicators on bicameralism, executive-legislative relations, direct democracy, electoral system, and the presence of judicial review. The points are given in the following manner: The presence of strong bicameralism, meaning that the two legislative chambers have symmetrical and incongruent powers, provides one point, weak bicameralism and unicameralism give zero points. A semi-presidential system gives one point, and a parliamentary- or presidential system gives zero points. Countries with single-member, simple plurality systems gain zero points, modified proportional representation systems gain a half point, and proportional representation earns one point. The presence of legal provisions for either non-binding or binding initiatives provides one point, and the presence of judicial review provides one point. Data on the availability of initiatives have been collected from the V-Dem v10 dataset. This is summarised in Table 5.

The presence of institutional veto players is operationalised as a minority or oversized government present. An oversized government is operationalized as a single-party majority government, and a minority government is operationalized as a single-party minority government. The presence of either gives the value 1, and the absence gives a value of 0. Partisan veto players will be measured as the effective number of parties in the legislature. The effective number is calculated using information from the Rae-Index, which uses the share of seats and number of parties to calculate the legislative fractionalisation of the party system on a scale from 1 – *maximal fractionalisation* to 0 – *minimal fractionalisation*. The effective number of parties on the seat level is calculated by 1/(1-Rae-Index). The presence of religious partisan veto players is measured as a percentage share of seats in parliament for parties classified as belonging to the religious party family (McKay, Lane, and Newton 1997).

Table 5. *Variable Overview of Veto Points and Players*

	Variable	Operationalization	Coding (after recoding)
Institutional veto points	Political system	Executive/legislative relations according to Lijphart	0 = Parliamentary system or Presidential system 1 = Semi-presidential dominated by parliament, hybrid system or semi-presidential dominated by president
	Bicameralism	Index of bicameralism according to Lijphart	0 = Unicameralism or weak bicameralism, 1 = Medium strength bicameralism or strong bicameralism (symmetrical and incongruent).
	Electoral Systems	Electoral system: single member districts or proportional representation	0 = Single-member, simple plurality systems 0,5 = Modified proportional representation (parallel plurality PR-systems, majority-plurality/alternative vote) 1 = Proportional representation (PR)
	Courts	Judicial review (existence of an independent body which decides whether laws are conform to the constitution).	0 = No 1 = Yes
	Initiatives	The presence of legal provisions for either non-binding or binding initiatives.	0 = No 1 = Yes
Institutional veto player	The presence of a minority or oversized government	Minority or oversized government	0 = No 1 = Yes
Partisan veto player	Number of parties	Effective number of parties on the seats level	The effective number of parties uses the same information as the Rae-Index on legislative fractionalization of the party system, and is calculated from this index as follows: effpar_leg = 1 / (1 – rae_leg)
Religious partisan veto players	Presence of Religious Parties	Share of seats in parliament for parties classified as religious	The combined share of seats for all religious parties in the parliament.

Sources: Comparative Political Dataset (2021); V-Dem v10 (2020)

4.4 Control Variables

Three variables were included to take into account other contextual effects that might affect the policymaking process and which policy is eventually implemented. The values on all three variables have been standardised to go between a scale of 0 and 1 for the statistical analyses, to allow for some comparison. In this part I explain the inclusion of and the operationalisation of the variables and present the data sources.

4.4.1 Economic development

The analysis will control for the countries' economic situation by including a measure of gross domestic product (GDP) per capita. It is probable that this has an effect on which policy is produced in terms of prioritising, regardless of the issue. The variable has been converted to international dollar based on purchasing power parity (PPP) conversion factor, to reflect the countries' standard of living. Dollars were used as a measure instead of change in GDP as the overall analysis focus on levels of reflection as opposed to change. The data was collected from the World Bank, which contains the country data annually (2022) . The source is widely used and acknowledged as quite reliable, making it a valid measure.

4.4.2 Government ideology

The government is the political branch which most often decides on and executes policy, this means that its ideological composition is likely to affect what policy is produced. One might assume that a conservative government will have a less progressive standpoint on questions which address the legalisation of euthanasia or abortion than a liberal one, despite subgroups of the population's different opinions.

The analysis would optimally control government ideology in the sense of cultural liberalism, as it is the degree of liberal values related to morality that is at the centre. However, there are two reasons why I have chosen to include a variable based on cabinet composition according to the traditionally right/left parties instead. Firstly, it is a question of operationalisation and avoiding measuring the same variable twice. The degree of liberalism on the individuals' and minorities' rights is controlled in the operationalisation of liberal democracy, making it more interesting to operationalise government ideology on the traditional left-right axis. This allows me to investigate whether the theoretical expectation about the political left/right dimension not

capturing differences in morality policy is indeed correct. Secondly, it is a question of data availability. While measures of, for example, economic liberalism are available, there is no data available on social or cultural liberalism to the best of my knowledge. Government ideology is thus measured as cabinet composition according to the Schmidt-Index, with values originally ranging from 1 – *hegemony of right-wing (and centre) parties* to 5 – *hegemony of social-democratic and other left parties*. The variable was collected from the Comparative Political Data Set.

4.4.3 Liberal Democracy

The level of democracy undeniably affects policy, as it regulates the public's access to policymaking and the overall relevance of representation for policymaking (Dahl 1971). In chapter two, the link between public opinion and representation has been thoroughly explained, and so requires no detailed repetition. Democracy will be measured as liberal democracy, meaning that both the electoral democracy and the political freedom of individuals will be measured. The latter is especially beneficial in the current context, as it might indicate how protected individual and minority rights are and how this affects policy output. This likely affects, for example, same-sex marriage and abortion, which in many contexts are mentioned as rights. The variable is operationalized by the previously mentioned liberal democracy index from V-Dem v10. The same measurement was used to determine which countries should be regarded as sufficiently democratic to be included in the analysis. Although all units will have a score above .6, it is interesting to investigate whether this impacts which policy is produced.

5. Methodological Approach

In this chapter, I aim to present the methodological framework that will be applied when analysing (1) how education levels affect political representation and (2) institutional and partisan determinants of possible incongruences. In addition to introducing the analytical strategy and method, I will explain the prerequisites for running the pooled OLS regression and present the appropriate test results to consider whether the assumptions are fulfilled. The assumptions will be deliberated in light of the data being time-series-cross-sectional (TSCS). I will explain how I will include multiplicative interactions in regression models to investigate how unequal representation might be conditioned in the presence of institutions and partisan actors.

5.1 Analytical Strategy and Causal Expectations

The main analytical strategy is to use the pooled data on morality issues in a pooled ordinary-least square (OLS) regression estimate to investigate the relationship between different educational groups' opinions- and policy. The first part of the analysis that focuses on differences in congruence is descriptive in that I aim to show whether there is unequal representation (Gerring 2012a), based on the theoretical assumptions of causal mechanisms existing between representation and educational background. I aim to investigate whether there is differential covariation in the relationships between various opinions (x) and policy output (y), with the analysis assuming the relationship to have a causal structure in the sense of the former leading to the latter (Gerring 2012b, 199). The analysis does not seek to investigate the complex causal mechanisms and contexts that make this the case, and it does not rule out all alternative pathways as to why this is the case, both of which are necessary to prove the existence of causality (Falleti and Lynch 2009; Gerring 2012b, 228). This is because the first part of the research question is descriptive rather than causal in nature, which is reflected in the focus on levels of congruence instead of dynamic responsiveness.

To a greater degree, the analysis of institutional- and partisan determinants seeks to investigate causal mechanisms by looking at what interventions might cause differences in congruence for educational groups and providing a more comprehensive analysis. However, the lack of data on important factors such as the descriptive representation of educational groups and religious contexts does impair the analysis' ability to explain the causal relationship between opinion-

policy congruence and institutions or actors. Contextualising is essential to demonstrate causality (Falleti and Lynch 2009). So, although the analysis focuses on what is expected to be causal relationships, I do not in any way claim to prove it beyond interpreting the indications of covariation between variables.

5.2 Multiple Regressions with Time-Series-Cross-Section Data

I will run multiple regression analyses to investigate the relationship between several independent variables on a dependent variable and show how an independent variable may affect the relationship between another independent variable and the outcome variable. The former is necessary for both parts of the analysis. The inclusion of interactions between independent variables is needed to investigate how veto points and players condition the effect of differences in preferences between higher and lower educated groups on policy output. It is also advantageous that multiple regression analyses supply a measure of the explanatory power of the models through the adjusted R-square, which indicates how much of the variance in the dependent variable is explained by the included independent variables (Grønmo 2016, 337). Comparing different models helps to examine the differences in unequal representation for educational groups versus income groups.

The chosen regression model must be suited to the structure of the dataset. I will use a time-series-cross section (TSCS) dataset. The data consists of repeated observations of units across time, with multiple morality issues present for each country and year. The dataset's multidimensional nature allows one to look at spatial and temporal explanations, giving opportunities for investigating causal relationships, while also posing additional challenges as there are variances across both units and time. TSCS data differs from panel data by the repeated observations of the same countries over time not being sampled and the units themselves being of interest instead of being randomly selected (Beck and Katz 1995; Beck 2001, 273). It is also characterised by the units being observed over more extended periods to assure that the average for each unit over time makes sense.

The tendency of TSCS analyses to go over long periods makes missing data and unbalanced datasets a recurring problem. This is also the case for the data used in this thesis, which covers 34 country units spread unevenly over 17-time points. The international surveys used have collected data on preferences in waves rather than annually, making the dataset unbalanced.

This should not be problematic, as the missing data is not and results from the timing of the data collection by the surveys and the availability of data on policy output for the different morality issues.

Multi-level regression modelling was considered as a possible method. However, this is most often done in analyses of *macro-micro* situations, meaning that the dependent variable is on a lower level, and its variation is explained by independent variables on lower and higher levels (Snijders and Bosker 1999, 9-12; Croon and van Veldhoven 2007). Explaining the impact of education on the relationship between preferences at the individual level (X) and policy output at a country level (Y) presents a micro/macro situation. When faced with these kinds of micro/macro situations, the typical approach is to aggregate or disaggregate the variables to ensure that the dependent variable is at a higher level or at the same level as the independent variables. In the study of political representation and inequality, this is often done by aggregating the preferences of different subgroups of citizens to the country level (Gilens 2012; Elsässer, Hense, and Schäfer 2020; Schakel, Burgoon, and Hakhverdian 2020). I use this aggregation method to create a country level dataset. The combination of few options for micro/macro multilevel modelling and the relatively low intra-class correlation between the country units made the use of multilevel models less advantageous than other methods.

The aggregation of the preferences of different educational groups by country and year results in a time-series cross-sectional dataset. There are downsides to aggregating the individual level data to a higher level, with the main one being a loss of data and nuance. Aggregated variables will, however, allow for the demonstration of between-country variation, despite investigation of the within-country variation being more lacking.

5.3 Pooled Ordinary Least Squares (OLS) Regressions

The use of ordinary least squares is one of the most common methods for estimating regression models. The regression line is placed by minimising the residual sum of squares, meaning that the regression line is found by minimalising the sum of the squared deviances from the line (Gujarati and Porter 2010, 99; Midtbø 2016, 78). The use of OLS in time-series-cross-section models has been critiqued for not being optimal in terms of modelling dynamics and not estimating correct standard errors (Beck and Katz 1995). I will now argue why its still the most

suitable method in the current analysis, as long as certain measures are taken to reduce estimation issues and handle time dynamics

OLS estimations based on TSCS data have been criticised for giving incorrect standard errors as it does not take the temporal and spatial aspects of TSCS data into account. This is mainly seen in the incorrect report of standard errors, by the appearance of panel heteroskedasticity, correlation of errors across countries and serially correlated errors over time (Beck 2001, 275; Plümper, Troeger, and Manow 2005). Serially correlated errors mean that the errors are not independent from one point of time to another, while panel heteroscedasticity implies that the errors vary differently across the country units. The inclusion of panel corrected standard errors will give more accurate estimation in the presence of these panel error structures, as long as there are no extreme cases of heteroscedasticity or correlation present (Beck and Katz 1995, 645). I will use various tests to check that the data do not violate the standard assumptions for OLS estimations, emphasising the typical violations present in time-series-cross-sectional data.

5.3.1 OLS Assumptions and Model Specification

There are some simple assumptions about the data distribution that must be in place for the sample used in the estimated regression model to give correct probabilistic inferences about the population: The values must be normally distributed, they must be homoscedastic and vary in the same way across the sample, and they must not be autocorrelated (Kellstedt and Whitten 2013, 190). I will now explain these three assumptions and how I have tested whether the assumptions are present in my data. The basic assumptions about linearity, stationarity and the absence of multicollinearity and outliers will be discussed and tested before the use of fixed effects is justified. The violation of the above effects will make it increasingly complicated to interpret the results of an OLS model in a straightforwardly manner.

Assumptions of Normality

Normality refers to the residuals being normally distributed, in the sense that there is not an inherent bias in the data that makes the expected mean value of each unit be something other than zero (Kellstedt and Whitten 2013, 191). I have tested whether the residuals are normally distributed by making quantile-quantile plots of the standardised residuals and examining whether the data points lie approximately on a straight line. It should be noted that a large sample size will ensure that the distribution of residuals approximate normality (Dougherty

2007). Tests done on the data used in this analysis seem to indicate that the residuals are not entirely normally distributed, with there being some tails in the distributions.[2] However, as the samples used consist of over 300 units, this should be enough to ensure that a variable that is the result of the effects of a large number of other random variables will still have an approximately normal distribution. I will also run some regression estimates with random effects as a robustness check, as Beck and Katz have demonstrated that random effects models are superior to other models in dealing with nonnormality (2007, 189).

Non-Correlated Error Estimates and Homoscedasticity

There are several ways the errors from TSCS models could be misleading due to the models violating distribution assumptions. Beck lists numerous kinds of problems that often appear in the error process in these models (2001, 275): Panel heteroskedasticity appears when each country has its own error variance, meaning that some country units, for example, might not fit the basic specifications, which would give less reliable standard errors. Contemporaneous correlation of errors involves that the units within the same year might have correlated errors. Serially correlated errors, i. e. autocorrelated errors, entail that the country unit's error might be correlated across time. I test for all of the above violations.

When using OLS estimates on TSCS data, panel heteroskedasticity and contemporaneous error correlation is inherent. It is assumed that the residuals in an OLS model have the same amount of variation, meaning that the error variance is uniform (Kellstedt and Whitten 2013, 191). This means that the model has homoscedasticity, as opposed to there being heteroscedasticity in the models. The latter would mean that the model fits certain cases in the population better than others, creating problems when estimating confidence intervals and thus significance levels. A Breusch-Pagan test was employed to test whether the variance in the residuals is constant in the different regression models included in the thesis (Breusch and Pagan 1979). [3] The test results differ for the different models, but most confirm the alternative hypothesis of there being heteroscedasticity in the models. Some are insignificant, but they are all close to the conventional five percent significance level. As mentioned above, this is not surprising, as heteroscedasticity is often likely to be present in time-series-cross-sectional analyses.

[2] See Appendix C for the quantile-quantile plots of the residuals.
[3] See Appendix C for the Breusch Pagan-scores for all models.

I seek to reduce the problem of heteroscedasticity by using panel correct standard errors (PCSE) They been shown to produce reasonably accurate errors, and thus allow for more precise interpretation of significance levels and hypothesis testing despite the presence of panel heteroskedasticity and contemporaneous correlation of errors (Beck and Katz 1995; Beck 2001). Beck even argues that PSCE should always be used when using OLS on time-series-cross-sectional data, as there is no cost to applying them, but always potential gains (Beck 2001, 278). This is thus done in all of the analyses in this thesis.

The Durbin-Watson test was used to test for serial correlation of errors in the models used in the analysis (Durbin and Watson 1950; Croissant et al. 2021, 70). It determines whether the residuals are independent, meaning that an insignificant result confirms that there is no correlation among residuals. The score should be as close as possible to 2, which means that there is no serial correlation. If the Durbin-Watson test has a significant p-value, the alternative hypothesis about the residuals in the regression model being autocorrelated is strengthened. This would mean that some degree of autocorrelation is detected in the model. The Durbin-Watson tests done on the OLS estimates included in this thesis are all insignificant, and close to 2. The Durbin-Watson statistic varies between 1.7 and 2.1, meaning that the errors are not serially correlated.[4]

Stationarity

An assumption for doing an OLS regression model with time-series data is that the statistical properties of the process generating the time series do not change over time, despite the series itself displaying temporal change. Non-stationarity is often associated with unit-roots or integrated series, which means that external shocks in the past continue to have an accumulating effect on the following time points (Beck and Katz 2011, 333-343). I have tested whether the data is stationarity by testing for unit roots using an augmented Dickey-Fuller test (Said and Dickey 1984; Trapletti et al. 2022). It tests for the null hypothesis of there being unit root, meaning that a significant p-value confirms the alternative hypothesis of there not being unit root. All tests performed on the data are significant below the one percent level, meaning that the data can be assumed to be stationary.

[4] See Appendix C for the Durbin-Watson-scores for all models.

Multicollinearity

The absence of multicollinearity is an assumption when doing any linear regression. There cannot be several independent variables having the same linear relationships with the dependent variable (Gujarati and Porter 2010, 98). The presence of multicollinearity hinders the estimation of the individual coefficients, as there is not enough information to provide accurate parameters or standard errors. I have used a variance inflation factor (VIF) test to calculate how the independent variables in the regression models vary, which allows for the checking of whether there is a possibility too much collinearity between the included variables. Generally, if the VIF gives a score that is larger than 5 or 10, the model might show incorrect standard errors for the coefficients, as it cannot separate the effects of the different independent variables.

Multicollinearity is expected to be problematic in the analysis potentially. This is mainly because of the inclusion of several education or income groups' preferences within the same regression models. Although it will later be demonstrated that there are significant differences between the preferences of the different groups, the different group preferences most likely vary somewhat in the same way. This was checked by doing the VIF-test on all included variables. The test confirmed that there is a problem with multicollinearity when all of the education- and income groups are included, with the middle group having the highest score for both variables. The problem is especially prominent for the preferences of the income groups, which is likely to be a result of the opinions being less different than between the educational groups.

Table 6 shows the variance inflation factor for all variables included in the models with several educational- or income groups' preferences. The removal of the middle group solves the problem of multicollinearity for the model including the educational groups' preferences, with the VIF-scores being beneath 10 in Model 6. Although it would have been preferable to have it even lower, this should be enough for the model to show quite accurate standard errors still. The scores on the income groups' preferences are problematic, as both scores are just above 10, despite the exclusion of the middle group. This will be considered when the results are analysed.

Table 6. *Variance Inflation Factor (VIF) Tests for Selected Regression Models*

	Variance Inflation Factor		
Variables	Model 5	Model 6	Model 12
Government ideology	1.050	1.043	1.082
GDP per capita (PPU)	1.374	1.371	1.652
Liberal democracy	1.492	1.491	1.401
Morality issue	2.614	2.399	1.590
Lower-educated groups' preferences	10.744	6.838	
Middle-educated groups' preferences	25.880		
Higher-educated groups' preferences	16.563	7.171	
Low-income groups' preferences			11.407
High-income groups' preferences			10.162

Notes: VIF-tests of variables in selected regression models. All of the models which are not included in this table have only variables with VIF-scores below 5. Sources: WVS (1981-2017); EVS (1981-2009), EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022)

The VIF-tests performed on the remaining regression models show that all variables have scores below 5, with exceptions for the multiplicative interaction terms for which it is natural that the score is somewhat higher. This is elaborated on in section 5.3 about interaction terms. This means that the assumption of there being no multicollinearity is fulfilled for the models that are not included in Table 6. [5]

Outliers

Outliers are units for which the values on variables are extremely high or low relative to the rest of the values for the same variable (Kellstedt and Whitten 2013, 116). This can either create doubt about whether the value is the cause of an error, or present difficulties if the value is unusual to the point where it alone disproportionately influences the estimates in the regression model. I tested for outliers using the Cook's distance to estimate the influence of each data point on the results (Cook and Weisberg 1982). Bar plots with Cook's distance of models estimating the effect of both the education- and income groups' preferences on policy show quite a few observations with strong influence, classified as outliers. [6]

[5] See Appendix C for all VIF-scores.
[6] See Appendix C for the bar plots with Cook's distance and bivariate regression lines with and without outliers.

The outliers are from different points of time, in Croatia, Cyprus, Slovakia, Slovenia, Malta, Lithuania, Luxembourg, and Ireland. The outliers are not systematic in terms of issues, as they are spread quite evenly on abortion, same-sex marriage, euthanasia, and prostitution. The non-systematic nature of the outliers makes them likely to natural variations, and thus true outliers. This is an argument for keeping them in the data, to provide an as realistic picture of reality as possible. I checked that the observations are not the results of errors in the coding. To check whether the outliers affect the results, I created a dataset without these observations and then plotted bivariate regression lines of the effect of the groups' preferences on policy output for both the original dataset (N=334) and the dataset without the influential observations (N=317). Comparing the regression lines with and without outliers shows that they do not significantly alter most regression lines or confidence intervals of interest, with the exception of the relationship between the opinions of the higher educated citizens and policy output. So, I chose to keep the influential observations, but also check the robustness of the results by running a regression model without the influential observations.

5.3.2 Estimation technique: Pooling

The pooled OLS model is used when a new sample for each period in the time-series-cross-sectional model is chosen instead of observing the same units at each time point (Wooldridge 2010, 146-7). This makes it fitting for the dataset used in the current thesis, as the analysis pools data on five morality issues from 34 country units spread unevenly over 17-time points from 1995 to 2014. All countries have at least one observation, with the total dataset consisting of 334 cases. A separate dataset for investigating the unequal representation of income groups consists of the same number of countries and time points, but from 1990 to 2013, there being a total of 266 cases. The number is somewhat lower because of the lack of data on the income variable in the European Election Survey (2014). Nonetheless, both datasets are highly unbalanced due to the surveys being done in waves instead of annually, which warrants the use of the pooled model.

The pooled OLS models pool all observations into a regression by treating each country-year as units, allowing the estimation of parameters despite time constant attributes being present. The Chow test for poolability of data was used to test whether the intercept can be assumed to be identical in all included cases, which should be the case when applying a pooled OLS model. The test shows that this is not the case, meaning that the intercept may vary for the included

observations. I thus test the robustness of the results by also running models with other estimation techniques.

Two of the most common estimation methods aside from pooling are random and fixed effects. The two differ in how they treat unobserved effects. When the unobserved component is treated as a parameter to be estimated for each cross-sectional observation, the model uses fixed effects. In this case, all variance on the higher levels is controlled with the use of dummy variables. When the unobserved component is treated as a random variable, it is called a random effects model (Wooldridge 2010, 285-6; Bell and Jones 2014, 138). The latter is often called a mixed model. The model divides the unexplained residual variance into a fixed part where the intercept is based on the covariates measured, and a random part which is different for the units (Bell and Jones 2014, 136). In this way, the data is partially pooled while still allowing for variance between the units. This is an appropriate alternative for the current analysis, as the highly unbalanced dataset benefits from the inclusion of partial pooling. This means that the group's effect estimate will be partially based on the other groups' more abundant data.

Bell and Jones (2014) argue that the random effects model is superior to both pooled- and fixed effects models, as the latter two do not allow for the residuals to vary for the different units, despite complete heterogeneity often being a violated assumption. This is contrary to arguments that random effects are no better than OLS estimates for time-series-cross-sectional data and that fixed effects are the 'golden standard' (Schurer and Yong 2012, 1). The decision to also test random effects models was strengthened by an insignificant Hausman test when comparing models with fixed- and random effects (Hausman 1978). The score of 0.58 confirmed that the unique errors are not correlated with the regressors, confirming the null hypothesis of random effects being the most consistent estimate compared to fixed effects. I will run some regression models using random effects as a robustness test, which, if assumptions are not violated, will allow for increased control for context (Bell and Jones 2014, 134).

5.3.3 Lagging the Dependent Variables

The analysis uses a lagged dependent variable, with the data on policy output being collected for two years after the data on preferences and background. The control variables on the country level also show data for two years before the policy output. A lagged dependent variable is a common approach used in political science to capture the dynamics present in political

processes (Keele and Kelly 2017). Even if one supposes that policy does reflect the public's opinions, it is not realistic that policy immediately responds to a change in preferences. On the contrary, the preferences have to be communicated, and possible policy changes result from policymaking processes, which take time. Although the thesis is not focused on measuring dynamic responsiveness per se, I argue that this temporal, causal order of processes should be included to accurately measure the degree of unequal representation in terms of congruence.

The duration of policy processes is different according to both context and issue. A lag of two years is conventionally used when looking at congruence for policy issues matched with level-preferences instead of preferences asking for direct change (Gilens 2012, 60; Page and Shapiro 1983, 177). I thus use a two-year lag to take the causal structure of the policymaking process into account. In addition to the theoretical foundations for using a lagged dependent variable in the analysis, there are advantages to the estimation technique. Modelling these dynamics with a lagged dependent variable lowers the risk of serial correlation, which, as mentioned above, is a common violation of the assumptions for OLS models in time-series-cross-section data (Beck 2001, 279; Keele and Kelly 2017).

5.3.4 Controlling for Differences Between Morality Issues

The analyses include pooled data on five different morality issues. The pooling of the various issues allows for an overall examination of the representation on morality issues while also increasing the number of observations. There likely exist differences in opinion-policy congruence for the different issues. This nested structure will be controlled for in the models in two ways. Firstly, the cases are based on country, issue, and year, with the model grouping the observations accordingly. This is done with the datasets for all the models. The effect of the standardised opinions on morality issues is connected to the corresponding standardised morality policy output in the same country and year. Secondly, differences between issues will be checked for by including the different issues as dummy variables. Prostitution is used as a reference category, as this is the issue with the least differences in preferences between those with a lower and higher educational experience. Homosexuality, abortion, euthanasia, and same-sex marriage are then included as dummy variables. This will allow me to control for differences between the issues.

5.4 Multiplicative Interactions

The analysis of whether unequal representation is conditioned by the presence of institutional and partisan veto- points and players is performed by the inclusion of multiplicative interaction terms in the pooled ordinary-least squared regression models. The inclusion of interaction terms is commonly used in political science to analyse how policy output may vary depending on the context, making it an appropriate method for interpreting conditional hypotheses such as H4 (Brambor, Clark, and Golder 2017).

Interaction terms allow the model to account for whether a relationship between variables X and Y is dependent on the value of one or more other variables Z (Brambor, Clark and Golder 2006, 64-65). Typical regression results display what the marginal effect of the independent variable (X) is on the dependent variable (Y) when the conditioning variable (Z) has a value of zero, meaning that it does not show whether there is a conditioned effect when the value on the conditional variable is something other than zero. This makes it necessary to also calculate the marginal effect of X on Y when variable Z has different meaningful values. What consists of a meaningful value will vary depending on analyses, and the easiest way to display this is often through the use of figures (Berry, Golder, and Milton 2012; Brambor, Clark, and Golder 2017).

The current analysis will look at how the effect of differences in opinion between higher- and lower educated (X) on policy output (Y) is conditioned on the presence of different veto points and players (Z). I will do so by graphically displaying how the effect of differences in opinion varies depending on the value of Z, meaning the presence of different veto- points and players. This will allow me to interpret whether the unequal congruence is affected by the presence of different institutions and actors. When analysing the interactions, it will be of interest to examine whether there is a *substantively* significant interaction, meaning whether there is a noticeable effect of magnitude between X and Y, and whether the effect of X on Y is statistically significant within conventional limits.

There are a couple of things that should be considered when analysing interactions in this way. To begin with, the distribution of values on the Z-variable is interesting to investigate, as it displays the density of observations across the range of X and thus allows for interpretation of how much information the estimated effects are based on (Berry, Golder, and Milton 2012, 11-12). This will naturally affect the results of the estimate and the coefficient's significance levels.

It is also useful to keep in mind that multiplicative interaction terms are by nature symmetrical – they do not make up a one-way moderation effect, but a symmetrical two-way interaction (Berry, Golder, and Milton 2012, 3). By presenting a hypothesis about how the effect of differences in opinion on policy output vary by the presence of veto points, I implicitly also suggest that the effect of veto points on policy output vary by the presence of differences in opinions. The interpretation of veto points and players as the conditioning variable is thus solely based upon the theoretical explanations to the relationships presented in section 3.3.2.

6. Descriptive Statistics and Preliminary Analyses

Table 7. *Descriptive Statistics on Variables for Analysis on Educational Groups*[7]

Variable	Mean	Standard deviation	Min	Max
Level of Education	.507	.059	.336	.655
Lower-educated group's preferences	.345	.162	.013	.762
Middle-educated group's preferences	.432	.173	.035	.861
High-educated group's preferences	.489	.183	.045	.932
Preferences	.423	.170	.035	.835
Preferences on homosexuality (N=102)	.452	.191	.096	.835
Preferences on prostitution (N=67)	.262	.108	.100	.505
Preferences on abortion (N=99)	.444	.135	.035	.782
Preferences on euthanasia (N=50)	.531	.106	.235	.726
Preferences on same-sex marriages (N=13)	.465	.163	.227	.742
Differences in preferences (Higher-lower educated)	.144	.087	-0.044	.443
Country-level variables				
Policy output	.778	.370	0	1
Institutional veto points	2.665	.952	0	5
Institutional veto players	.302	.460	0	1
Partisan veto players:				
Number of parties	3.889	1.336	1.989	9.080
Seats for religious parties	8.936	13.632	0	54
Control Variables				
Government ideology	.435	.367	0	1
GDP per capita (PPU)	.279	.161	0	1
Liberal democracy	.799	.061	.601	.886

Notes: Descriptive statistics on the variables used for the analysis on veto points and players. N=324. Note that the sociodemographic variables are made relative to each country-year, as described in part 4.2.2. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

[7] The datasets used for the first part of the analysis on opinion-policy congruence for educational groups include somewhat more units than the second part on veto points and players. Descriptive statistics on the variables in these datasets are included in Appendix D.

6.1 Descriptive Statistics

To better assess the relationship between the relevant variables, and thus the theoretical assumptions, it is interesting to first descriptively analyse the information given from the sample. This will allow for better understanding of the respondent's characteristics, before making statistical inferences by looking at how these characteristics might affect one another and policy outcomes. To further justify the examination of differences in opinion-policy congruence for different educational groups, it is useful to check that there are actual differences in preferences for the different groups. I have provided theoretical explanations above for this to be the case, and evidence from former research has been presented. Here, I will demonstrate how the difference in preferences between higher- and lower educated are also present in the current sample, by comparing their mean preferences both graphically and by applying independent t-tests. Differences between income groups are demonstrated for comparison, and to justify the comparison of unequal representation. The descriptive analysis is done on the unaggregated data.

6.2 Differences in preferences for educational groups

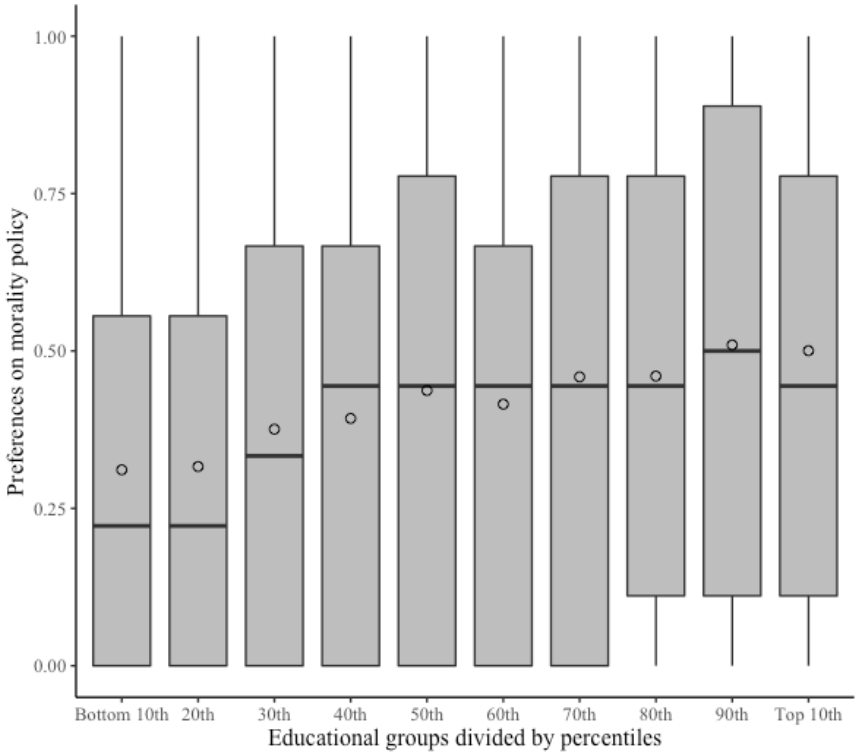

Figure 1. Differences in preferences on morality issues for citizens with different levels of education in 35 countries from 1995 to 2014 split by percentiles. The lines on the bars display the median, and the squares display the mean. N=441 942. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014).

Figure 1 demonstrates how the preferences of different educational groups differ from one another. It does so by dividing the citizens into groups by percentiles, meaning that the first group demonstrates the citizens that are at the bottom ten percent in level of education, while the last group shows the citizens that are at the top ten percent in level of education. A lower score on preferences indicates that the average respondent has more negative opinions on the issue, for example, that the respondents see the included issues as less justifiable or that they are opposed to the issue.

The figure shows that there are differences in opinions between educational groups, thus confirming previous findings. Furthermore, it demonstrates that the preferences are generally more progressive for the groups of citizens with higher levels of education. In this sense, it confirms not only that there are differences but also the theoretical expectations that less educated citizens may indeed be more conservative in their opinions on morality issues. This indicates which direction policy output might be biased if there is indeed an unequal degree of substantive representation between citizens with different education.

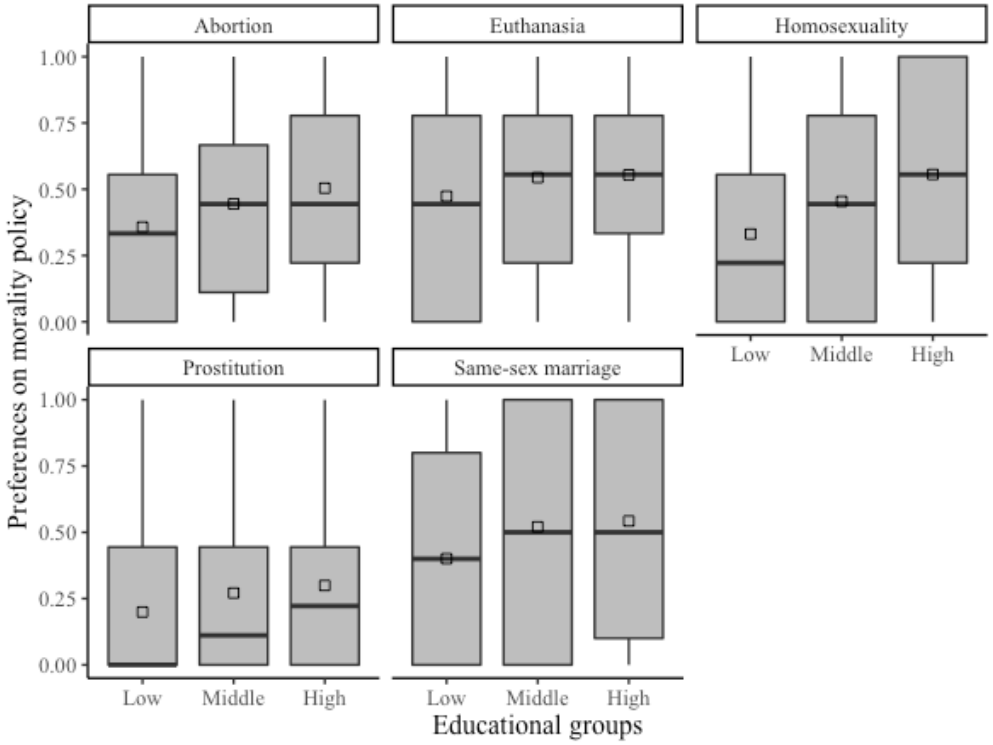

Figure 2. Differences in preferences on morality issues for lower-, middle- and higher educated citizens in 35 countries from 1995 to 2014. The lines on the bars display the median, and the squares display the mean. N=441 942. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014).

Figure 2 demonstrates how the preferences of citizens with relative lower, middle, and higher levels of education vary on the different morality issues. The overall observation of higher educated citizens having, on average, more progressive values is reflected on all issues both in terms of the average and dispersion of opinions. This is the case for some more than others, with the issue of prostitution standing out. On average, the respondents in all educational groups hold quite similar conservative opinions on prostitution, with the opinions not being dispersed much different for the three groups. Comparatively, the opinions of the three groups are broadly dispersed on same-sex marriage, possibly because there is only data on the issue from 2014. There is a clear indication in the issues of abortion and homosexuality that higher levels of education are correlated with more progressive preferences, although the opinions are quite dispersed. It is likely that more dispersion might make the policy harder to implement than when preferences are more aligned within the public. There is more dispersion in the opinions of the lower educated than the higher educated on the justifiability of euthanasia. However, the expectation of there to be differences in opinions according to levels of education seems to be confirmed.

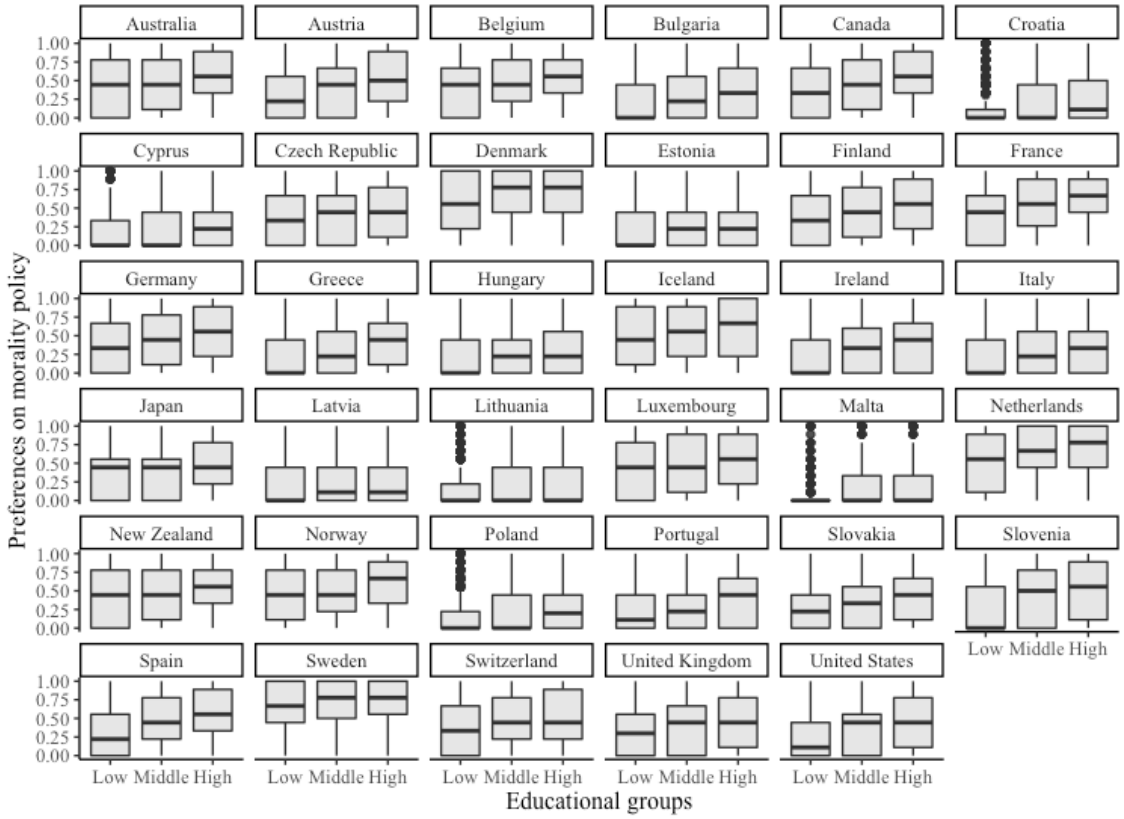

Figure 3. Differences in preferences on morality issues lower, middle- and higher educated citizens in 35 countries from 1995 to 2014 by country. N=441 942. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014).

There are differences in how much preferences vary between the groups in the different countries. Figure 3 demonstrates that the higher educated, on average, are more progressive than the lower educated in all countries except Lithuania. This is also the case when compared to the middle-educated group in most countries. However, countries such as Denmark, Estonia, Latvia, Sweden and Switzerland show similar opinions for the middle- and higher educated citizens. The differences in opinions are less prominent and overall progressive in countries like Denmark, the Netherlands, and Sweden, with similar and more conservative opinions for the two groups in the Baltics and most South-European countries. Austria, Canada, France, Spain, and the United States stand out as countries with quite apparent differences in opinion between the groups.

The broad investigation of differences in preferences on morality issues according to education and closer inspections of distinctions between issues and between countries confirm that there are indeed apparent differences in the mean preferences of the lower versus higher educated respondents. This is also confirmed when running an independent t-test of differences in means between the lower and higher educated groups. The test shows that there is a statistically significant and sizable difference in means, with the lower-educated group's preferences being at an average of 0.36 compared to the higher educated groups' being at an average of 0.49. The investigation of differential representation for educational groups in the shape of opinion-policy incongruence is thus highly justified.

6.3 Differences in preferences for income groups

The different income groups' preferences are demonstrated in Figure 4. Similarly, to the distribution of the educational groups' preferences in Figure 1, the top twenty per cent have significantly more progressive opinions than those with lower income levels. This provides a foundation for examining the unequal representation of different income groups and comparing the relative level of equality compared to educational groups. The overall dispersion of preferences is more similar for the different income groups than the different educational groups. This could indicate that income has less of an impact on morality opinions than education.

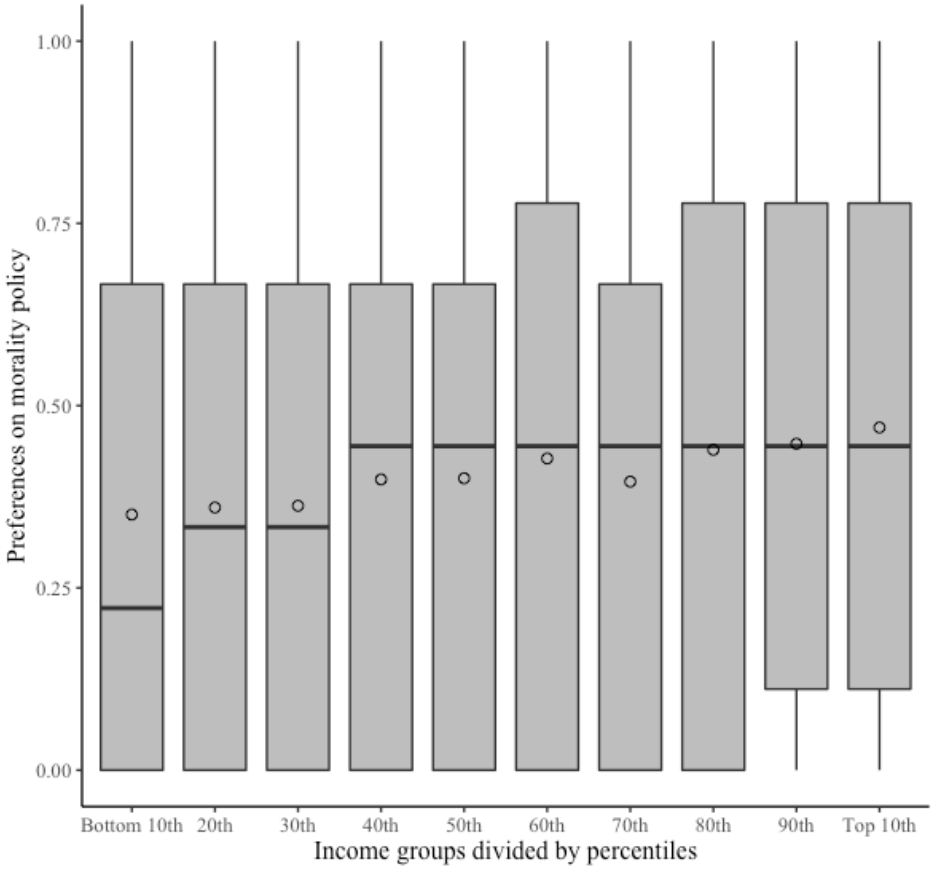

Figure 4. Differences in preferences on morality issues for the low-, middle-, and high-income groups split by percentiles. The issue of same-sex marriage is not included because of data shortages on the income variable. N=358 629. *Sources*: WVS (1981-2017); EVS (1981-2009).

The differences in opinion between income groups are quite consistent for the different issues, as demonstrated in Figure 5. The three groups are similarly dispersed on all the four included issues - abortion, euthanasia, homosexuality, and prostitution. Interestingly, the dispersion on the issues seems to be similar to that of the educational groups in Figure 2, as demonstrated by the differences being the greatest on abortion and homosexuality. The respondents' preferences on prostitution are also here averagely more conservative and less spread than the other issues.

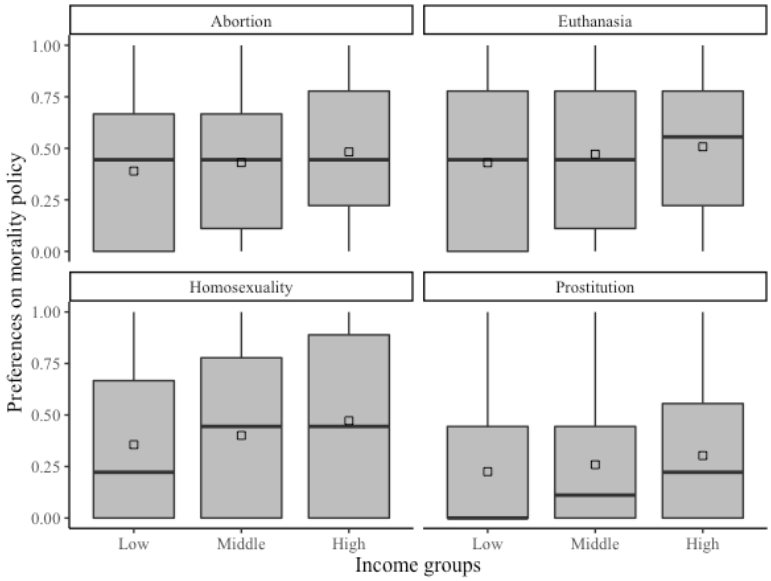

Figure 5. Differences in preferences on different morality issues for the low-, middle-, and high-income groups. The issue of same-sex marriage is not included because of data shortages on the income variable. N=358 629. *Sources*: WVS (1981-2017); EVS (1981-2009).

Overall differences between the low- and high-income groups are also demonstrated by a t-test showing that there is a significant difference between the two groups, with the low-income group having a mean of 0.36 compared to the high-income group having a mean of 0.45 on the opinion variable. The difference is thus here demonstrated to be smaller than that between the lower and higher educated groups' mean opinions, which had averages of 0.36 and 0.49. Interestingly, the groups with lower education and income share the same mean, with the differences being most apparent between the more affluent and educated citizens. This suggests that education may indeed be correlated with more progressive attitudes.

I have demonstrated both graphically and statistically with independent t-tests that there are apparent differences in income groups' preferences on morality policy. This means that it is feasible to investigate whether there exists an unequal representation of income groups in terms of opinion-policy congruence. Comparing the differences in preferences according to income compared to education suggests that there are indeed somewhat more systematic differences between opinions on morality issues for different educational groups than for income groups despite similarities. In the next chapter, I turn my attention to whether the demonstrated different preferences are reflected differently in the relevant policy.

7. Empirical Analysis and Results

In this chapter, I investigate the first part of the research question, namely whether the educational groups are differently represented in policy output on morality issues. I start by analysing the connection between public opinions and policy output to provide a foundation for looking at the effect of opinions on policy output. Differences in congruence are then analysed in two ways. Firstly, it is investigated whether the differences in opinion between the higher and lower educated groups affect policy output. This allows for comparing the representation of lower and higher educated citizens when the groups have different preferences. Secondly, differences in congruence are analysed by investigating the separate and independent effects of the different educational groups' preferences on policy output. This also allows for incorporating a middle-educated group, resulting in a more nuanced analysis and investigation of the median voter's impact.

The second part of the research question is analysed by looking at whether the presence of different kinds of veto- points and players conditions the effect of differences in opinions between the higher and lower educated groups on policy output. This is done by the examination of interaction effects.

7.1 Opinion-Policy Congruence

Model 1 shows the effect of the sample's mean preferences on policy output, with controls for government ideology, economic development, and democracy. It shows that the collective mean preferences do have a positive effect on policy output, with both the coefficient and the model being highly significant. This indicates that the average citizen's opinions do explain much of the variance in which morality policy is produced. It is nonetheless interesting to examine whether this is reflected in the representation of the mean preferences of different subgroups of the population. The suggested importance of opinions for morality policy also strengthens the case for examining whether political institutions and actors affect whose preferences it is that policy actually reflects.

Table 8. *The Effect of Overall Preferences on Policy Output*

	Model 1		
	Coeff.	Std. Error	P-value
General preferences	.589***	.160	.000
Government ideology	-0.004	.009	.639
GDP per capita (PPU)	-0.010	.019	.601
Liberal democracy	-0.551	.367	.134
Issues			
Homosexuality	.032	.064	.622
Abortion	-0.151**	.065	.021
Euthanasia	-0.852***	.077	.000
Same-sex marriage	-0.168**	.078	.033
Constant	1.150	.279	.000
R-Squared		.608	
Adjusted R-Squared		.598	
F-statistic		25.591	
P-value		.000	
N		334	
		*p<0.1 **p<0.05 ***p<0.01	

Notes: Model 1: Pooled OLS regression with panel corrected standard errors. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Government ideology and GPD per capita are shown to have no effect on policy output. The inclusion of the different morality issues as dummy variables exemplifies important differences in policy output according to the different issues. Abortion, euthanasia, and same-sex marriage all have significant negative effects. Opinions and policy output are coded so that a higher value translates to more progressive views and policy, meaning that abortion, euthanasia, and same-sex marriage policies are more conservative than the reference category, which is prostitution. The subject of homosexuality does not have a statistically significant effect on policy output.

7.1.1 Difference in Representation for the Different Educational Groups

Table 9 shows how the differences in preferences between the higher and lower educated groups affect policy output. The positive coefficient indicates that generally when the higher educated group has greater support for a policy than the lower educated group, this has a positive effect on the policy output. The same connection is apparent when there is a difference between the higher and middle-educated groups' preferences, as shown in Model 3.

Table 9. *Effects from Differences in Opinion Between Educational Groups on Policy Output*

	Model 2			Model 3		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Government ideology	-0.002	.009	.827	-0.001	.285	.885
GDP per capita (PPU)	.017	.019	.402	0.017	.020	.391
Liberal democracy	-0.088	.355	.804	-0.045	.357	.900
Difference in opinion (Higher-lower educated)	.408	.265	.124			
Difference in opinion (Higher-middle educated)				.261	.349	.454
Issues						
Homosexuality	.102	.066	.127	.133	.062	.033
Abortion	-0.059	.060	.329	-0.040	.058	.491
Euthanasia	-0.710***	.071	.000	-0.711	.072	.000
Same-sex marriage	-0.106	.088	.232	-0.070	.085	.408
Constant	.892***	.282	.001	.883	.285	.002
R-Squared		.576			.572	
Adjusted R-Squared		.566			.561	
F-statistic		22.343			21.955	
P-value		.000			.000	
N		334			334	
						*p<0.1 **p<0.05 ***p<0.01

Notes: Model 2-3: Pooled OLS regression with panel-corrected standard errors, controlling for issues.
Sources: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

The coefficients for differences in opinion in Models 2 and 3 are statistically insignificant, with both p-values being over the ten per cent level. Interestingly, the differences in opinion between higher- and lower educated groups are close to significant, which indicates that there might be a connection. However, this is not enough to confirm the first hypothesis about the higher educated citizens being better represented than lower educated citizens in the sense that their opinions are better reflected in morality policy. The insignificance of the effect of differences between higher and middle-educated citizens suggests that none of the groups unproportionally affects policy output when their opinions differ. None of the control variables has an effect on policy output in the models.

Table 10. *Effects from the Lower, Middle, and Higher Educated Groups' Opinions on Policy Output*

	Model 4			Model 5		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Government ideology	-0.004	.009	.652	-0.003	.009	.704
GDP per capita (PPU)	-0.007	.019	.698	-0.007	.019	.718
Liberal democracy	-0.572	.367	.120	-0.569	.367	.122
Lower-educated groups' preferences	-0.094	.311	.762	.052	.274	.849
Middle-educated groups' preferences	.353	.394	.372			
Higher-educated groups' preferences	.310	.333	.353	.511**	.248	.041
Issues						
Homosexuality	.012	.069	.867	.008	.069	.910
Abortion	-0.160**	.065	.015	-0.157**	.065	.017
Euthanasia	-0.847***	.079	.000	-0.839***	.078	.000
Same-sex marriage	0.184**	.082	.025	-0.186**	.083	.025
Constant	1.153***	.279	.000	1.151***	.278	.000
R-Squared		.61			.609	
Adjusted R-Squared		0.598			.598	
F-statistic		20.816			23.221	
P-value		.000			.000	
N		334			334	
						*p<0.1 **p<0.05 ***p<0.01

Notes: Models 4 and 5. Pooled OLS regression with panel-corrected standard errors. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Model 4 shows that the preferences of the groups with low and middle levels of education have positive relationships with policy output, as opposed to the lower educated group's preferences which have a negative effect. The model is significant, but the preferences have no statistically significant impact on the dependent variable. Interestingly, the lower educated group's preferences have a negative coefficient when the middle-educated group's preferences are included and controlled for, but a positive coefficient when it is excluded. This might indicate that groups with lower levels of education have less of an impact when the middle-educated groups' opinions are accounted for. However, the variable is highly insignificant in both models, and the change in magnitude of the relationship is small.

As mentioned in section 5.3.1, measuring the size of the effects of the lower, middle and higher educated groups' preferences together in one model is challenging as the presence of multicollinearity in the group preferences makes the results quite unreliable. Multicollinearity makes the coefficients less precise and could cause the variables' significance level to be wrongly estimated. The problem of multicollinearity between the different educational groups' preferences is avoided with the exclusion of the middle-educated group, as referred to when the problem was introduced in section 5.3.1. This is because the effects from the preferences of the lower and higher educated are both more correlated with the middle group than preferable when running an OLS regression. However, the two former groups' effects are not correlated with each other. The problem can also be solved by running separate regressions with the preferences of the individual groups to get more correct coefficients and p-values. Model 5 displays the first approach.

The inclusion of only the lower and higher educated groups' preferences in Model 5 confirms the indications from Models 2 and 4 by showing that the higher educated groups' preferences have a significantly positive effect on policy output. In contrast, the lower-educated groups' preferences have no significant impact. The statistical significance of the former relationship provides increased support for the first hypothesis (H1) about the higher educated citizens being better represented than the lower educated citizens in the sense that their opinions are better reflected in morality policy.

Models 6-8 show the effect of each educational group when included separately while controlling for differences between the issues. All three models are significant, and interestingly, all three groups' preferences have statistically significant, positive effects on policy output. The findings here give some indications on in which contexts unequal representation appears. When the preferences of the more educated are controlled for in Models 4 and 5, it is indicated that the less educated have little impact on policy output. Models 6 and 7 show that when the higher-educated group's preferences are not included, there is a positive relationship between the preferences of the less educated and the policy output. This indicates that all the groups' preferences may indeed impact policy, but the higher educated citizens' opinions have a more considerable impact which might overshadow the opinions of less-educated citizens. This is also indicated by the positive coefficient for the effect of differences in opinion in Model 2 being close to statistically significant.

Table 11. *The Separate Effects of the Educational Groups' Opinions on Policy Output*

	Model 6: Lower educated			Model 7: Middle educated			Model 8: Higher educated		
	Coeff.	Std. Error	P	Coeff.	Std. Error	P	Coeff.	Std. Error	P
Government ideology	-0.003	.009	.739	-0.004	.009	.622	-0.003	.009	.704
GDP per capita (PPU)	-0.004	.019	.799	-0.007	.019	.685	-0.006	.019	.735
Liberal democracy	-0.467	.367	.203	-0.552	.367	.134	-0.565	.365	.123
Lower-educated groups' preferences	.532***	.163	.001						
Middle-educated groups' preferences				.577***	.156	.000			
Higher-educated groups' preferences							.551***	.146	.000
Issues									
Homosexuality	.072	.060	.232	.034	.063	.588	.005	.068	.943
Abortion	-0.123*	.063	.051	-0.153**	.065	.019	-0.157**	.065	.017
Euthanasia	-0.843***	.078	.000	-0.858***	.078	.000	-0.835***	.074	.000
Same-sex marriage	-0.118	.076	.121	-0.160**	.076	.037	-0.190**	.082	.021
Constant	1.122***	.281	.000	1.152***	.279	.000	1.147***	.277	.000
R-Squared	.6			.608			.609		
Adjusted R-Squared	.590			.599			.599		
F-statistic	24.774			25.491			25.990		
P-value	.000			.000			.000		
N	334			334			334		

*p<0.1 **p<0.05 ***p<0.01

Notes: Models 6-8: Pooled OLS regression with panel-corrected standard errors, with controls for different issues. Different educational groups individually. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Interestingly, Table 11 shows that the middle-educated groups' preferences have a greater impact on policy output than the preferences of the highest educated group. Although the coefficients for all three groups are similar, the middle-educated is somewhat higher than the other two, and the lowest educated group has the smallest effect. This might lend some support to the theory of policy being implemented to match the opinions of the median voter. However, it is hard to investigate this claim further, as the variable cannot be included in models with the two other groups' preferences without providing multicollinearity problems. However, the three

models in Table 11 strengthen the indication of the opinions of citizens with lower levels of education being less congruent with policy than the opinions of citizens with higher levels of education.

Overall, citizens' opinions have a significant positive relationship with policy output on morality issues. This is demonstrated both by the overall preferences showing a significant positive effect and by all the educational groups' preferences illustrating significant positive effects when the other groups' preferences are not accounted for. However, there are also indications of there being a representational bias in favour of the higher educated citizens. This is demonstrated by there being signs of the higher educated group's preferences consequently being more influential when they have different opinions from the lower educated, although the results are not all significant. The strongest indication is present when only the lower and higher educated groups' preferences are included. When the higher educated group's preferences are statistically significant, the preferences of the lower educated group have very little influence on morality policy, meaning that their preferences are less likely to be reflected. Their opinions are rendered statistically insignificant when the higher educated group's preferences are accounted for. There is thus some quite robust supporting evidence for Hypothesis 1: *Morality policy is more congruent with the preferences of higher educated citizens than lower educated citizens* to be accurate.

While the control variables are shown to have little effect on policy output in all variables, liberal democracy is interestingly shown to have a negative effect on policy in all models, with a p-value showing that it is close to being significant on the ten percent level. While the control variables are shown to have little effect on policy output in all variables, liberal democracy is interestingly shown to have a negative effect on policy in all models, with a p-value showing that it is close to being significant on the ten percent level. It is counterintuitive in the sense that the variable measures not only electoral democracy but also to what extent liberal principles are enforced in protecting individual and minority rights against the state and the majority. It is then puzzling that liberal democracy makes morality policy *less* liberal. However, if seen in connection to the preferences of lower educated citizens being more conservative, it might make sense that more democracy in itself and thus ideally better representation will make policy more conservative.

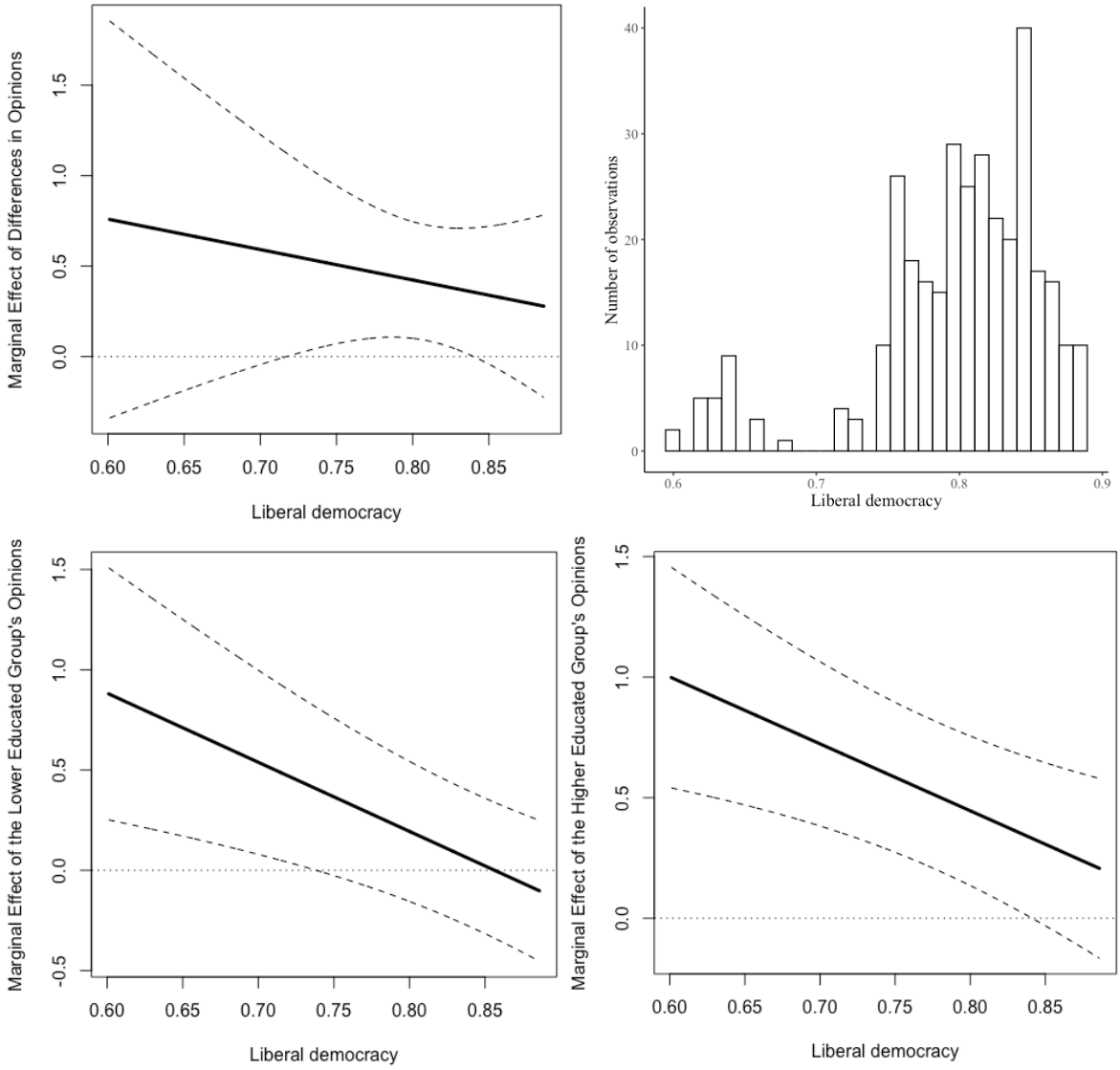

Figure 6. Interaction effects between liberal democracy and educational groups' preferences on policy output. *Top left:* The marginal effect of differences in opinion on policy output with a 90 per cent confidence interval, conditioned on the level of liberal democracy. *Top right:* The distribution of observations on liberal democracy. *Bottom:* The marginal effects of the lower – and higher educated groups' opinions on policy output conditioned on the level of liberal democracy. N=334. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Figure 6 shows how differences in opinion for the higher versus lower educated affect policy output when conditioned on the degree of liberal democracy.[8] The figure shows that more liberal democracy makes the effect of differences in opinion increasingly negative, meaning

[8] The regression tables are available in Appendix E.

that more democracy makes the representation of the lower educated better at the cost of the higher educated. The results are statistically insignificant when liberal democracy has lower values but significant when the values of the liberal democracy coefficient are high. This is possibly caused by there being a higher number of country observations included with higher levels of democracy, as demonstrated by the distribution of preferences in Figure 6.

The interactions between liberal democracy and both the lower and higher educated citizens' opinions in Figure 6 show that the preferences of both groups have increasingly negative effects on policy output as the degree of democracy increases. These interactions are both statistically significant, meaning that more democracy makes opinions less congruent with morality policy. However, interestingly, the increasingly negative effect renders the effect of the lower educated groups' opinions negative, while the opinions of the highest educated citizens still have a positive coefficient. This shows that more democracy makes the impact of preferences on policy more minor, but this has a more substantive effect on the lower educated citizens' preferences, whose opinions matter less to begin with. This is confirmed by the coefficient of the independent effect of lower educated groups' preferences changing to positive when the interaction with democracy is also included. This strengthens the case for examining how the presence of different democratic institutions affects the representation of the different groups.

7.1.2 Difference in Representation for the Different Income Groups

Table 12 shows how differences in preferences between the higher and lower-income groups and the higher and middle-income groups affect policy output, with controls for government ideology, economic development, liberal democracy, and issue. Both variables measuring differences in opinion have negative coefficients, meaning that policy reflects better the low-income groups'- than the high-income groups' preferences. They are, however, highly insignificant. This indicates that income might not influence who is represented in policy related to morality issues. The results also indicate that the control variables have no relationship with morality policy output.

Table 12. *Effects from Differences in Opinion Between Income Groups on Policy Output*

	Model 9			Model 10		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Government ideology	.005	.010	.598	.005	.009	.575
GDP per capita (PPU)	.016	.018	.376	.017	.018	.353
Liberal democracy	-0.233	.370	.529	-0.230	.370	.534
Difference in opinion (High-Low income)	-0.164	.373	.661			
Difference in opinion (High-Middle income)				-0.167	.478	.726
Issues						
Homosexuality	.121*	.062	.054	.119*	.062	.059
Abortion	-0.078	.061	.203	-0.079	.061	.195
Euthanasia	-0.775***	.073	.000	-0.776***	.073	.000
Constant	1.061***	.296	.000	1.052***	.296	.000
R-Squared		.664			.665	
Adjusted R-Squared		.655			.655	
F-statistic		25.999			25.929	
P-value		.000			.000	
N		266			266	
						*p<0.1 **p<0.05 ***p<0.01

Notes: Models 9 and 10: Pooled OLS regression with panel-corrected standard errors. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

There are some important differences between the results in Models 2-4, which measure the effect of differences in opinion between higher and lower-educated groups, and the results in models 9 and 10. The main one of interest is the significance level of the difference in opinion variables. Although the differences between the higher and lower educated groups' preferences are not significant within conventional estimates, it is close with a p-value of twelve-point four percent. This contrasts with the effect of differences between the income groups' opinions, which is highly insignificant. Furthermore, it is interesting that the latter's coefficients display the opposite of what is expected by indicating that morality policy reflects the opinions of the less affluent better than the more affluent. This supports the theoretical expectations that educational background may have a greater effect on preferences on morality issues than affluence, thus also having a greater effect on unequal representation regarding morality policies.

Table 13. *Effects from Differences in Opinion Between Income Groups on Policy Output*

	Model 11		
	Coeff.	Std. Error	P-value
Government ideology	-0.005	.009	.563
GDP per capita (PPU)	-0.031	.019	.111
Liberal democracy	-0.610*	.349	.081
Low-income groups' preferences	.834**	.375	.027
High-income groups' preferences	-0.148	.346	.669
Issues			
Homosexuality	.013		.835
Abortion	-0.200***		.001
Euthanasia	-0.918***		.000
Constant	1.229***	.272	.000
R-Squared		.702	
Adjusted R-Squared		.693	
F-statistic		30.669	
P-value		.000	
N		266	
		*p<0.1 **p<0.05 ***p<0.01	

Notes: Model 11: Pooled OLS regression with panel-corrected standard errors. *Sources*: WVS (1981-2017); EVS (1981-2009), CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

The low and high-income groups' preferences are included as separate independent variables in Model 11. The middle-income group is not included to remove the issue of multicollinearity. As mentioned in section 5.3.1, there is more correlation between the effects of different income groups' preferences than the educational groups' preferences, making the inclusion of the middle group's preferences with the others in the same model entirely impractical. This is possibly caused by the differences between income groups' preferences being smaller than between educational groups.

Model 11 supports the results in Models 9 and 10 about morality policy reflecting the preferences of groups with lower income levels better than the high-income group's preferences. Surprisingly, the low-income groups' preferences have a clear positive effect on policy output, with the effect being statistically significant below the five percent level. This

contradicts the theoretical expectations of more affluent citizens' opinions being more congruent with policy than the poorer citizens' opinions.

The high-income groups' preferences have a negative coefficient, indicating that their opinions are less likely to reflect morality policy. However, the variable is insignificant, meaning that only the low-income groups' preferences affect policy when the effects from both groups are included and controlled for. This weakens the second hypothesis (H2) that *morality policy is more congruent with the preferences of high-income groups than low-income groups.*

Table 14. *The Separate Effects of the Different Income Groups' Opinions on Policy Output*

	Model 12: Low-Income			**Model 13: Middle-Income**			**Model 14: High-Income**		
	Coeff.	Std. Error	P	Coeff.	Std. Error	P	Coeff.	Std. Error	P
Government ideology	-0.005	.008	.563	-0.003	.009	.708	-0.003	.009	.738
GDP per capita (PPU)	-0.030	.019	.117	-0.024	.019	.195	-0.018	.019	.349
Liberal democracy	-0.607*	.009	.083	-0.571	.352	.106	-0.512	.357	.153
Low-income groups' preferences	.687***	.155	.000						
Middle-income groups' preferences				.644***	.149	.000			
Higher-income groups' preferences							.538***	.146	.000
Issues									
Homosexuality	.007	.060	.906	.005	.061	.928	.010	.063	.874
Abortion	-0.202***	.061	.001	-0.199***	.062	.002	-0.181***	.063	.004
Euthanasia	-0.918***	.073	.000	-0.913***	.072	.000	-0.884***	.073	.000
Constant	1.214***	.273	.000	1.166***	.274	.000	1.124***	.277	.000
R-Squared	.702			.699			.692		
Adjusted R-Squared	.694			.690			.684		
F-statistic	35.022			34.307			32.698		
P-value	.000			.000			.000		
N	266			266			266		

*p<0.1 **p<0.05 ***p<0.01

Notes: Models 12-14: Pooled OLS regression with panel-corrected standard errors with controls for different issues. Different income groups individually. *Sources*: WVS (1981-2017); EVS (1981-2009); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

Table 14 includes the low, middle, and high-income groups in separate regressions. The results in the three models are similar to the ones displayed when the three educational groups are included separately in Models 6-8. Like with the educational groups, the preferences of all three income groups have statistically significant positive effects on policy output when included separately, strengthening the previous indications of public opinion affecting which morality policy is produced. Interestingly, the high-income group's preferences have a considerably smaller effect on policy output than the other two groups' preferences, and the group with the lowest levels of income has the largest coefficient. This is reflected in the explanatory power of Models 12 and 13 being higher than that for Model 14 according to the adjusted R-square. This strengthens the indication of the low-income group's opinions being more congruent with policy than the high-income group.

The overall analyses of unequal representation for different income groups indicate that less affluent citizens are better represented on morality issues than groups with higher income levels. Their preferences positively affect the policy output, which, when controlled for, renders the high-income group's preferences insignificant. More affluent citizens thus have in common with the less educated citizens that their opinions have less impact on which policy is produced. This indicates that the second hypothesis' statement that (H2) *morality policy is more congruent with the preferences of high-income groups than low-income groups* should be dismissed, as the opposite seems to be the case.

The results give some different indications for the interpretation of H3: *There is a larger gap in opinion-policy congruence for the preferences of low and highly educated groups than for the low and high-income groups.* It is strengthened by there being no indicators of differences in preferences between the income groups affecting policy outcome, as the coefficient is highly insignificant. While the coefficient for differences in opinions between higher and lower educated groups is insignificant at conventional levels, this result is more significant than for the former, strengthening the hypothesis.

A comparison of the models including lower and higher-educated groups (Model 5) and low and high-income groups (Model 11), shows that there differences exist in effect in both cases, but in opposite ways. In the case of different educational groups, the higher educated group's preferences have a clearer positive effect on policy than the lower educated group's preferences. In the case of different income groups, the opposite is the case. There is supporting evidence

that the less affluent group's preferences have a more considerable influence on policy than the more affluent citizens. This indicates that there are quite different mechanisms for what affects the representation of different income groups versus different educational groups. This strengthens the case for research emphasising education as a crucial political cleavage in its own right.

7.2 The Impact of Veto Points and Players on Unequal Representation

The coefficients and significance levels shown for interaction terms in regression tables show the effect of differences in preferences on policy output when the value of the modifying variable (Z) is zero. This is not very informative. To see the effect of the interaction, it is thus helpful to visualise the changing marginal effect of each conditioned variable as values on the conditioning. Regression tables for the multiplicative interactions between differences in opinion between the higher and lower educated groups and the various veto- points and players, as well as the regression tables with interactions with the lower and higher educated groups' preferences are included in Appendix F. Separate regression estimates were run for the inclusion of each interaction term and dummies for the issues are included in all models.

Table 15 shows the estimated effects of the difference in preferences and the veto points and players before including any of the multiplicative interactions. Interestingly, including all the veto points and players makes the effect positive effect of differences in preferences between higher- and lower educated on policy output statistically significant. This indicates that when institutional- and partisan actors are controlled for, higher educated citizens' preferences are clearly better represented on morality issues when the groups disagree.

The inclusion of the higher- and lower educated groups' preferences in the regressions with veto points and players also confirms the results from the first part of the analysis (See Appendix F). It consistently shows that the higher educated groups' opinions have a positive effect on policy. In comparison, the effect from the lower educated groups' preferences is consistently insignificant with a negative coefficient. This suggests that the higher educated citizens' opinions are generally more congruent with policy. Greater differences in opinion between the higher and lower educated also make policy more congruent with the opinions of the former.

Table 15. *The Effect of Difference in Preferences with Veto Points and Players, without Interactions*

	Model 15		
	Coeff.	Std. Error	P-value
Difference in preferences for lower and higher educated	.712***	.270	.009
Government ideology	.005	.034	.888
GDP per capita (PPU)	.003	.112	.977
Liberal democracy index	-0.106	.337	.751
Institutional veto points	-0.009	.023	.679
Institutional veto players	-0.029	.046	.538
Partisan veto players: Number of parties	.048***	.015	.002
Religious partisan veto players: Seats for religious parties	-0.001	.001	.557
Issues			
Homosexuality	.053	.063	.403
Abortion	-0.091	.057	.112
Euthanasia	-0.720***	.067	.000
Same-sex marriage	-0.129	.088	.146
Constant	.740***	.278	.008
R-Squared		.621	
Adjusted R-Squared		.606	
F-statistic		18.681	
P-value		.000	
N		331	

Notes: Model 15: Pooled OLS regression with panel-corrected standard errors with controls for different issues. *Sources*: WVS (1981-2017); EVS (1981-2009); CPDS (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

Interestingly, Table 15 also show that the partisan veto players have a statistically significant independent effect on policy output, with more partisan veto players making policy more progressive. The other veto points and players have no independent effects on the dependent variable.

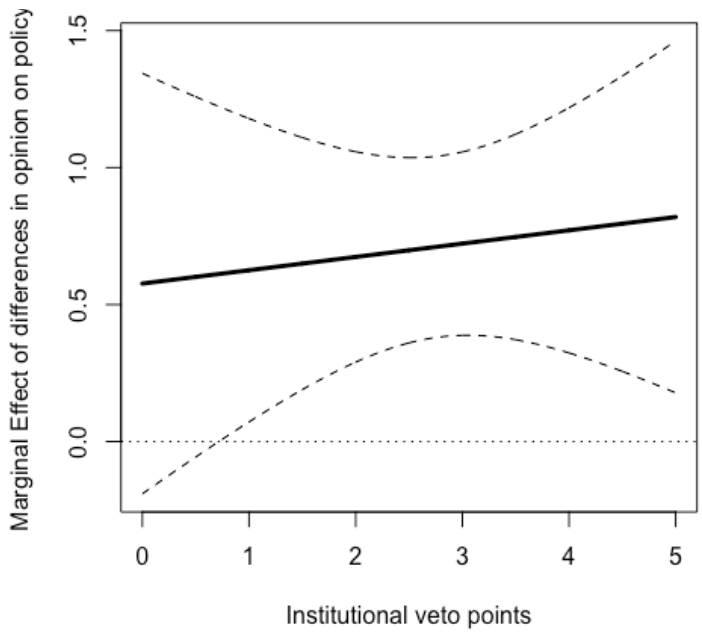

Figure 7. The marginal effect of differences in opinion for higher- versus lower educated conditioned on the presence of institutional veto points. N=331. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Figure 7 shows the marginal effect of differences in the higher versus lower educated groups preferences when conditioned on the presence of institutional veto points. The figure shows that as the number of institutional veto points increases, the difference in opinion has a somewhat more positive impact on policy output. This means that more institutional veto points make the opinions of the higher educated groups have an increasingly positive effect when the educational groups disagree. The interaction effect between differences in opinion and institutional veto points is however small, and statistically insignificant. This is displayed by the coefficient's ninety percent confidence interval in the figure. The confidence interval shows that the interaction effect is especially insignificant when few and many institutional veto points are present.

The results shown in Figure 7 indicate that differences in opinion between the higher and lower educated have an increasingly positive effect on policy output when conditioned on institutional veto points. This weakens H4: *A higher number of institutional veto points will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences*. It is indicated that this is the case also when exploring the marginal effect of the lower and higher education groups'

preferences conditioned on the presence of institutional veto points in Figure 8. The number of veto points does not seem to have either substantive or significant relationships with the effects of any groups' preferences on policy, weakening H4.

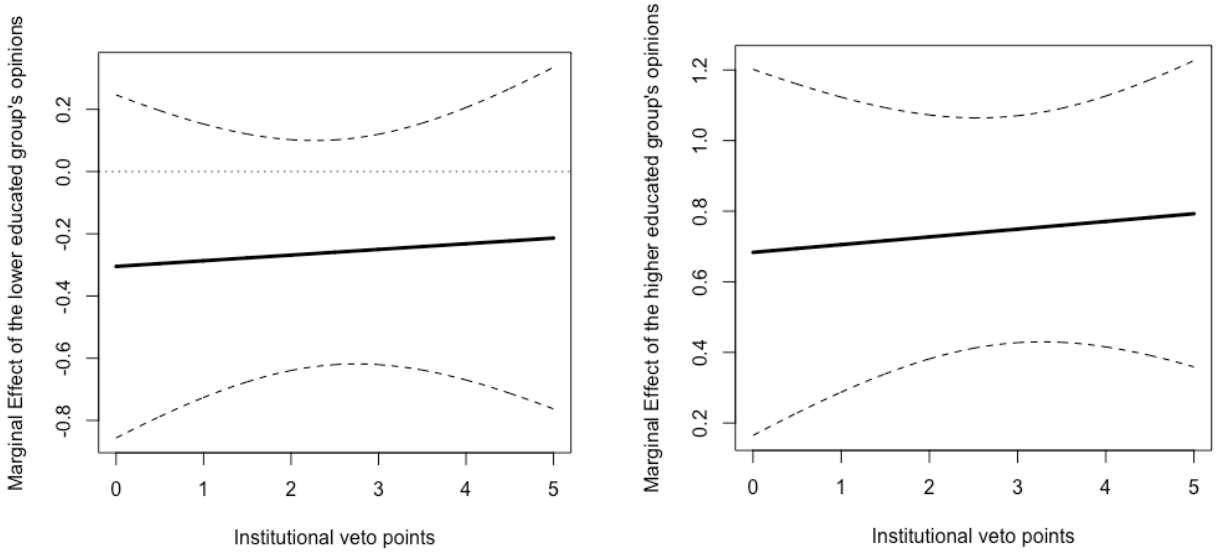

Figure 8. The marginal effects of the lower educated group's preferences (to the left) and the higher educated group's preferences (to the right) conditioned on the presence of institutional veto points. N=331. Sources: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Figure 9 shows the marginal effect of differences in opinion between the higher versus lower educated groups conditioned on the presence of institutional veto players. The graph indicates a slightly conditional effect in the expected direction from differences in opinion variables when there are institutional veto players present. It shows that the presence of institutional veto players in the shape of oversized or minimal-winning coalitions makes policy more congruent with the preferences of higher educated groups' opinions. As with the veto points, the relationship is however not very substantive and not statistically significant. There is thus no support for H5: *A higher number of institutional veto players will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences.*

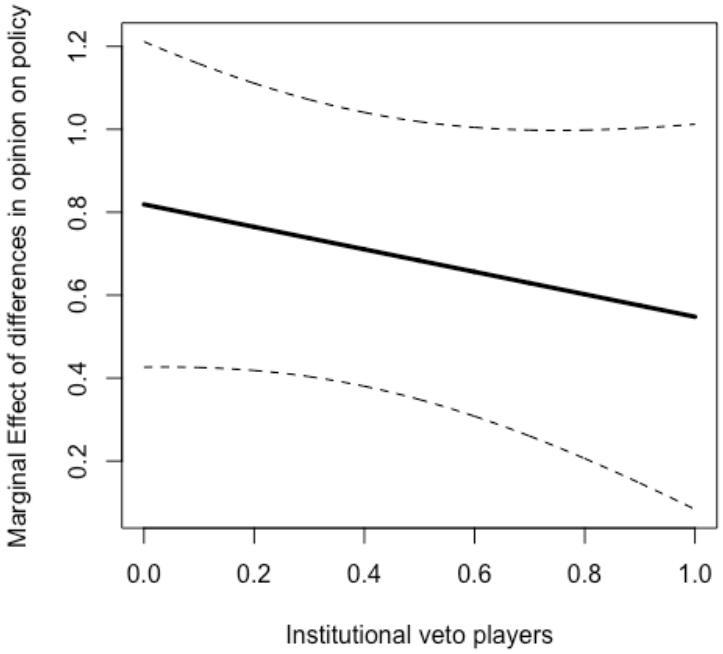

Figure 9. The marginal effect of differences in opinion for higher versus lower educated conditioned on the presence of institutional veto players. N=331. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

The marginal effect of differences in opinion is shown to have an increasingly negative impact on policy output when the number of partisan veto players increases in Figure 10. The interaction effect is substantively significant in that there is an apparent magnitude in direction. Still, the interaction varies in statistical significance, as demonstrated with the ninety percent confidence interval. The interaction is quite significant for values on the x-axis between 2 and 6, meaning that there seems to be a negative interaction effect until that point. When seen in relation to the distribution of observations on the conditioning variable (available in Appendix G), the number of partisan veto players, this is quite natural as the data foundation for the estimate grows smaller. There is thus some support for H6: *A higher number of partisan veto players will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences.*

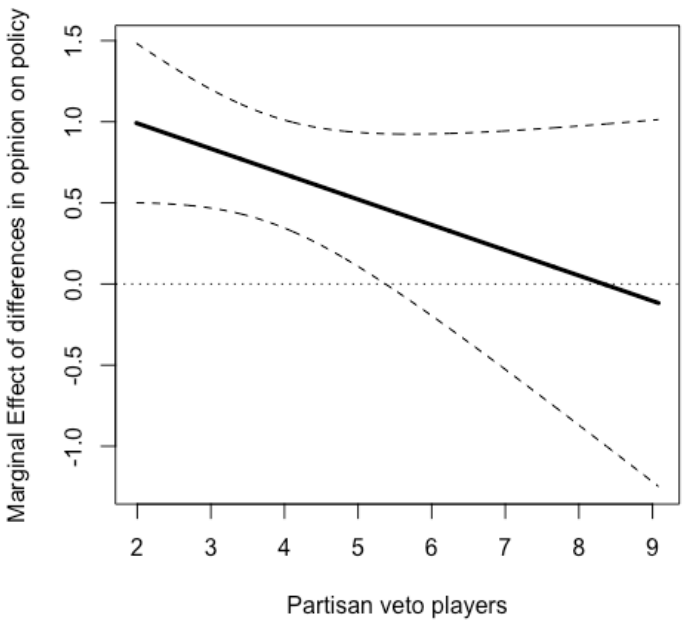

Figure 10. The marginal effect of differences in opinion for higher versus lower educated conditioned on the presence of points partisan veto players. N=331. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Plots of the lower and higher educated groups' preferences effect on policy conditioned on partisan veto players in Figure 11 provides some support for hypothesis H6's statement of partisan veto players making representation more equal. However, it does so in the opposite direction of what was expected. Instead of partisan veto players making the opinions of lower educated citizens better reflected, there seems is a substantively significant interaction between the higher educated citizens' opinions and the number of parties present in the legislature. Their opinions have an increasingly negative effect on policy output as the number of parties rises. There is comparatively no substantive interaction between lower educated citizens' preferences and partisan veto players. Both interactions are statistically insignificant, but the results indicate that H6 should not be entirely dismissed.

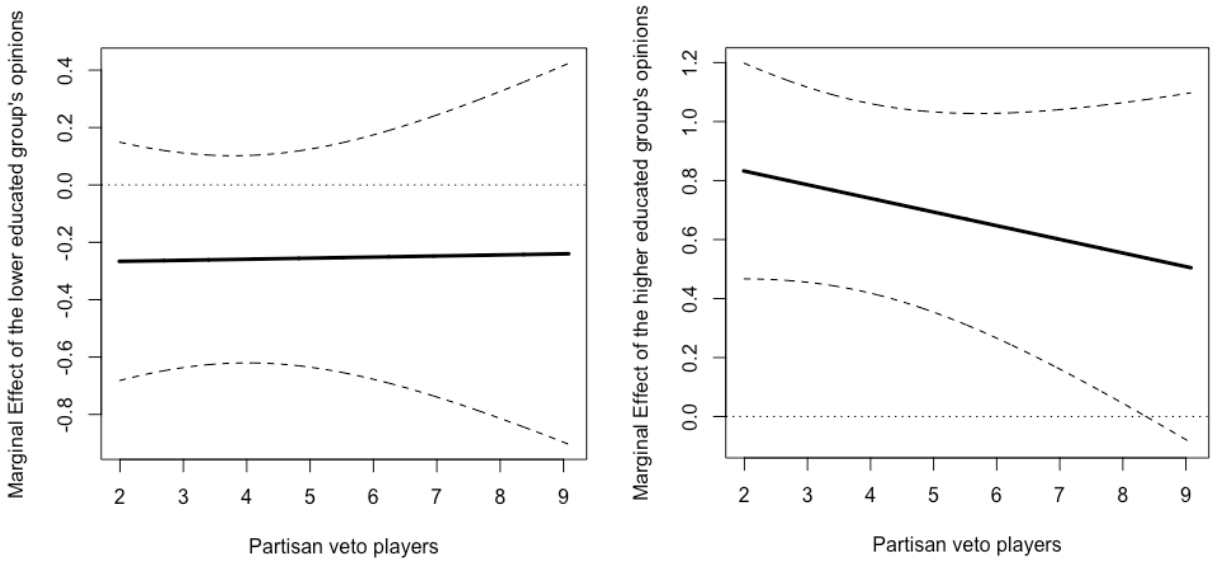

Figure 11. The marginal effects of the lower educated group's preferences (to the left) and the higher educated group's preferences (to the right) conditioned on the presence of partisan veto players. N=331. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

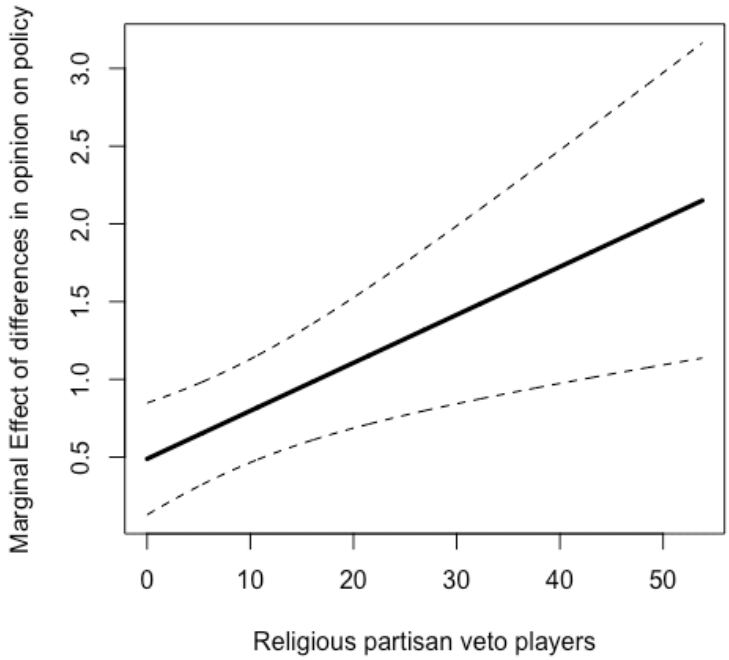

Figure 12. The marginal effect of differences in opinion for higher versus lower educated groups conditioned on the presence of religious partisan veto players. N=331. Sources: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Figure 12 shows the marginal effect of differences in opinion conditioned on the presence of religious partisan veto players. It shows that differences in opinion for higher versus lower educated groups have an increasingly positive impact on policy output as the share of religious partisan veto players increases. The interaction is substantively significant as the interaction has a clear direction. It is statistically significant, as demonstrated in both the regression table in Appendix F and by the ninety percent confidence interval. This means that a higher share of religious parties will make the differences in opinion have an increasingly positive effect, meaning that policy increasingly reflects the higher educated group's views. This weakens H7: *A higher number of religious parties present as partisan veto players will lead to more opinion-policy congruence for lower-educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences*, as the opposite seems to be true.

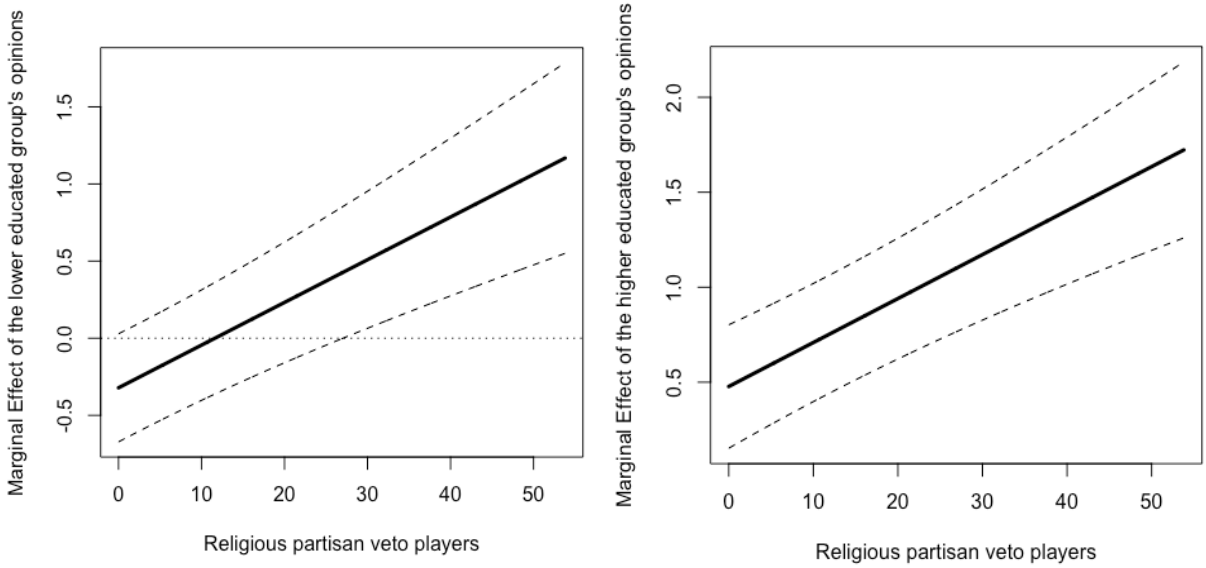

Figure 13. The marginal effects of the lower educated group's preferences (to the left) and the higher educated group's preferences (to the right) conditioned on the presence of religious partisan veto players. N=331. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Figure 13 shows that the presence of more religious partisan veto players makes the opinions of both lower and higher educated citizens' have a greater effect on policy output. The interactions are both statistically significant. Fascinatingly, the presence of more religious partisan veto players is shown to make the preferences of the lower educated group go from having a negative to a positive effect on policy output when the higher educated groups' preferences are also controlled for in the regression. This implies that while both groups have

an increasingly positive, conditioned effect, it does make the opinions of the lower educated citizens go from having a negative effect, to actually being reflected in policy. This might indicate that more religious parties do improve the representation of the lower educated citizens, despite the representation remaining unequal compared to the higher educated citizens.

7.3 Robustness Tests

I will investigate the robustness of the analysis results in two ways. I will run some of the pooled OLS regression models in 7.1 with random effects instead of pooling as an estimation technique to check whether the results remain the same when the residuals are allowed to vary between units. I will check whether results are affected by the removal of the observations that I earlier identified as outliers.

7.3.1 Random Effects Models

Table 16 tests the robustness of the pooled OLS regressions results by estimating the regressions with random effects instead. Models 16 and 17 show similar results as the otherwise identical pooled regressions in Models 4 and 6. The differences in opinion between the higher and lower educated groups have a lower effect and are less significant in the random effects model than in the pooled estimate. The inclusion of both the lower and higher educated groups' preferences confirms the results from the pooled model. The higher educated groups' preferences have a somewhat smaller but still positive and statistically significant effect on policy output. The lower educated groups' preferences are somewhat less statistically significant in the random effects model than in the pooled model, but this does not change.

The most significant difference between the pooled and random effects models is that the effect of GDP per capita now has a significant positive effect on policy output. A better economy in terms of a higher GDP makes policy more progressive. The opposite has happened with the effect of liberal democracy, which is still negative but highly statistically insignificant. This means that when the residuals are only partially pooled and allowed to vary between countries, the impact of GDP becomes significant, and the effect of liberal democracy is rendered insignificant.

Table 16. *Random Effects Models of Educational Groups' Preferences on Policy Output*

	Model 16			Model 17		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Government ideology	.006	.005	.245	.005	.005	.237
GDP per capita (PPU)	.036***	.011	.001	.028**	.012	.018
Liberal democracy	-0.020	.265	.941	-0.157	.254	.537
Difference in opinion (Higher-Lower educated)	.188	.165	.257			
Lower-educated groups' preferences				.004	.169	.980
Higher-educated groups' preferences				.354**	.173	.041
Issues						
Homosexuality	.169***	.064	.008	.096	.066	.143
Abortion	-0.012	.061	.849	-0.079	.062	.202
Euthanasia	-0.683***	.072	.000	-0.775***	.075	.000
Same-sex marriage	-0.046	.086	.595	-0.116	.080	.147
Constant	.794***	.213	.000	.820***	.203	.000
R-Squared		.399			.429	
Adjusted R-Squared		.384			.413	
P-value		.000			.000	
N		334			334	
						*p<0.1 **p<0.05 ***p<0.01

Notes: Models 16 and 17. OLS regression with random effects and panel-corrected standard errors, controlling for issues. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Table 17 shows each educational group included in separate random effects models, wherein the estimates are otherwise identical to the pooled models in Table 11. The models themselves have less explanatory power than the pooled estimates, although they are at the same level of statistical significance. The coefficients for the three educational groups are also still significant, although the effects are somewhat weaker.

Table 17. *Separate Random Effects Models of the Lower, Middle, and Higher Educated Groups' Opinions on Policy Output*

	Model 18: Lower educated			**Model 19: Middle educated**			**Model 20: Higher educated**		
	Coeff.	Std. Error	P	Coeff.	Std. Error	P	Coeff.	Std. Error	P
Government ideology	.004	.004	.336	.004	.004	.353	.005	.004	.226
GDP per capita (PPU)	.028**	.012	.017	.027**	.012	.018	.028**	.012	.019
Liberal democracy	-0.059	.249	.814	-0.111	.251	.657	-0.158	.252	.530
Lower-educated groups' preferences	.297***	.096	.002						
Middle-educated groups' preferences				.394***	.109	.000			
Higher-educated groups' preferences							.358***	.097	.000
Issues									
Homosexuality	.150**	.060	.012	.113*	.062	.067	.096	.064	.133
Abortion	-0.047	.060	.436	-0.078	.061	.204	-0.079	.061	.199
Euthanasia	-0.765***	.076	.000	-0.796***	.077	.000	-0.775***	.073	.000
Same-sex marriage	-0.058	.076	.443	-0.099	.075	.186	-0.116	.078	.137
Constant	.785***	.203	.000	.788***	.202	.000	.820***	.202	.000
R-Squared	.420			.432			.430		
Adjusted R-Squared	.405			.418			.416		
P-value	.000			.000			.000		
N	334			334			334		

*p<0.1 **p<0.05 ***p<0.01

Notes: Models 18-20: OLS regression with random effects and panel-corrected standard errors, with controls for different issues. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Like in the pooled estimates, the separate models show that the middle-educated groups' preferences have a slightly larger coefficient than the other two groups, with the lower-educated groups' preferences having the weakest effect. These findings support the indications from the pooled OLS models and support the first hypothesis (H1) about the higher educated citizens' opinions being more congruent with morality policy than the opinions of the lower educated citizens, constituting an unequal representation between educational groups.

Table 18. *Random Effects Models of Income Groups' Preferences on Policy Output*

	Model 21			Model 22		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Government ideology	.001	.004	.792	-0.001	.004	.826
GDP per capita (PPU)	.020*	.012	.089	.005	.014	.733
Liberal democracy	.129	.272	.635	.029	.278	.918
Difference in opinion (High-Low income)	.007	154	.961			
Low-income groups' preferences				.219	.186	.238
High-income groups' preferences				.038	.156	.808
Issues						
Homosexuality	.125**	.059	.035	.087	.062	.158
Abortion	-0.068	.059	.250	-0.110*	.057	.052
Euthanasia	-0.803***	.068	.000	-0.855***	.069	.000
Constant	.758***	.222	.000	.782***	.220	.000
R-Squared		.493			.524	
Adjusted R-Squared		.480			.510	
P-value		.000			.000	
N		266			266	
						*p<0.1 **p<0.05 ***p<0.01

Notes: Models 21 and 22: OLS regression with random effects and panel-corrected standard errors, controlling for issues. *Sources*: WVS (1981-2017); EVS (1981-2009); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

The models in Table 18 show regression results estimated with random effects, including the same variables as Models 10 and 11, which investigate the impact of different income groups' preferences on policy output. The results are similar in the models using random effects as the models using pooling. Still, as with the previous models, the explanatory power of the models is lower according to the adjusted r-squared, and the results are somewhat less significant. The indication that differences in opinion between income groups do not affect policy output is strengthened. Interestingly, the positive coefficient for low-income groups' preferences which was significant in the pooled estimate, is now insignificant. The coefficient of the high-income groups' preferences, which was negative in the pooled model, is now positive but still statistically insignificant.

Table 19. *Separate Random Effects Models of the Low, Middle, and High Income Groups' Opinions on Policy Output*

	Model 23: Low-Income			**Model 24: Middle-Income**			**Model 25: High-Income**		
	Coeff.	Std. Error	P	Coeff.	Std. Error	P	Coeff.	Std. Error	P
Government ideology	-0.001	.004	.827	-0.000	.004	.953	-0.000	.216	.923
GDP per capita (PPU)	.005	.014	.738	.006	.013	.655	0.010	.013	.446
Liberal democracy	.026	.277	.923	.030	.273	.912	.063	.273	.817
Low-income groups' preferences	.255***	.084	.002						
Middle-income groups' preferences				.259***	.068	.000			
Higher-income groups' preferences							.198***	.069	.004
Issues									
Homosexuality	.089	.061	.147	.085	.061	.167	.089	.062	.154
Abortion	-0.110*	.057	.053	-0.113**	.057	.046	-0.103*	.058	.074
Euthanasia	-0.854***	.069	.000	-0.857***	.069	.000	-0.843***	.070	.000
Constant	.787***	.216	.000	.772***	.215	.000	.755***	.215	.000
R-Squared	.525			.524			.517		
Adjusted R-Squared	.512			.511			.504		
P-value	.000			.000			.000		
N	266			.266			266		

*p<0.1 **p<0.05 ***p<0.01

Notes: Models 23-25: OLS regression with random effects and panel-corrected standard errors, with controls for different issues. Different income groups individually. *Sources*: WVS (1981-2017); EVS (1981-2009); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

Table 19 shows the preferences of each income group included in separate regression models with random effects. This estimate gives similar results to those offered from the pooled estimate, with all of the groups' preferences having significant positive effects on policy output. The high-income group again has a somewhat smaller effect than the two other income groups.

The use of random effects models confirms the robustness of the analysis results of opinion-policy congruence for educational groups by showing approximately the same results as the pooled OLS models. However, random effects as an estimation technique in analysing opinion-

policy congruence for different income groups indicates that these results are somewhat less robust. There might be several reasons for this. The data sample is smaller than the sample used in the analysis with educational groups, and there is potentially a problem with multicollinearity. It has also been mentioned theoretical explanations as to why the connection between citizens' economic backgrounds may not have a clear connection with opinions and policy related to morality issues. This will be further discussed in the next chapter, which discusses the results.

7.3.2 Opinion-Policy Congruence without Outliers

The use of a Cook's distance test identified seventeen observations with a strong influence on the results. The outliers seemed to represent natural variation which led me to include them in the main analysis. Removing the outliers did also not seem to affect the relationship between the variables much, with the exception being the relationship between higher educated citizens' preferences and policy output. Therefore, to check whether the robustness of the results is reliant on these observations, I run the pooled OLS regression estimate on a sample where they are excluded.

The results in Table 20 demonstrate that the direction of the effects all stay the same. However, the effect of democracy is now significant, strengthening the robustness of the results showing that it makes policy more conservative. The effect of the preferences of the higher educated group is still positive and of greater magnitude than that of the lower educated group's opinions. However, it is now insignificant with a p-value of seventeen-point-six percent. This indicates that while there are indications of there being unequal representation still, the unproportioned reflection of the higher educated citizens' preferences in policy is likely greater in the removed observations, as their inclusion makes the effect statistically significant.

Table 20. *The Effect of Educational Groups' Preferences on Policy Output without Including Outliers*

	Model 26			Model 27		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Government ideology	-0.033	.024	.184	-0.035	.004	.173
GDP per capita (PPU)	-0.021	.066	.749	-0.104	.014	.187
Liberal democracy	-0.347**	.173	.045	-0.552**	.278	.033
Difference in opinion (High-Low education)	.183	.128	.152			
Lower educated groups' preferences				.028	.198	.888
Higher educated groups' preferences				.260	.184	.176
Issues						
Homosexuality	.068**	.059	.021	.020	.049	.688
Abortion	-0.068**	.059	.011	-0.121**	.013	.013
Euthanasia	-0.870***	.068	.000	-0.855***	.054	.000
Same sex marriage	-0.022	.054	.685	-0.932	.048	.148
Constant	1.188***	.130	.000	1.312***	.191	.000
R-Squared		.807			.815	
Adjusted R-Squared		.802			.810	
P-value		.000			.000	
N		317			317	
						*p<0.1 **p<0.05 ***p<0.01

Notes: Models 26 and 27: Pooled OLS regression with panel-corrected standard errors. Outliers identified with a Cook's distance test have been removed *Sources*: WVS (1981-2017); EVS (1981-2009); Comparative Political Dataset (2021); V-Dem v10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

8. Discussion and Conclusion

This thesis investigates unequal substantive representation by examining how education levels affect political representation regarding issues related to moral values. Furthermore, it seeks to study what might be the institutional and partisan determinants of the possible incongruences between opinions and policy. It does so by linking the opinions of groups with different levels of education- and income to policy output. This approach to investigating unequal representation has its foundation in the democratic value of all citizens having an equal amount of influence on public policy.

In this chapter, I assess the analysis results by discussing their implications for the hypotheses. I first discuss the implications for the first part of the research question: *How do education levels affect political representation regarding issues related to moral and religious values?* I do so by looking at whether lesser and greater educated citizens' opinions are reflected differently in policy, both by examining their separate impact and examining whose opinions are reflected when the groups' opinions differ. I then discuss the results of the second part of the analysis, which seeks to answer the following question: *What are the institutional and partisan determinants of possible incongruences?* Theoretical shortcomings are discussed along the way. I present some empirical shortcomings in the analysis and discuss how these might be improved in future research. I conclude by offering some suggestions for further research within the field of political inequality and unequal representation.

8.1 Do Education Levels Affect Political Representation in Morality Policies?

The analysis shows that morality policy does indeed reflect the opinions of the average citizen quite well. This is unsurprising considering earlier research suggesting that more salient issues tend to reflect the public opinion to a greater degree than policies that are less relevant and talked about. The salience of morality policy is demonstrated by the prevalence of discussions related to, for example, abortion rights and the legalisation of same-sex marriages in the media (Gerstein and Ward 2022; Koltrowitz 2021). It is strengthened by the easy accessibility to the discussions for all citizens due to the simplicity of arguments which are often based on easily comprehensive first principal values.

The high congruence of morality policy with the opinions of average citizens does not rule out that it might reflect the preferences of some subgroups more than others. In chapter 3, I presented a hypothesis about the higher educated citizens being better represented in morality policy than the lower educated citizens. I explained this assumption with there being a combination of unequal descriptive representation and substantive differences in opinion on morality issues for the educational groups. More specifically, the citizens with more educational experience tend to be more politically active in terms of political participation and voting (Easterbrook, Kuppens, and Manstead 2015; Mayer 2011; Persson 2013), education has a central role in forming opinions on morality issues (Scheepers, Te Grotenhuis, and Van Der Slik 2002, 171; Werfhorst and Graaf 2004, 228), and there is an increase in politicians with higher levels of education (Bovens and Wille 2017, 111-135). Estimations of pooled ordinary least squares regressions with panel corrected standard errors indicate that these assumptions might be correct, as higher educated citizens are shown to be better represented in morality policy than the lower educated citizens.

A comparison of the opinion-policy congruence of lower and higher educated citizens gives strong indications that the preferences of citizens with higher levels of education are more reflected in policy than those of citizens with lower levels of education. This indicates that policy is generally more congruent with the opinions of the higher educated than the lower educated, strengthening H1: *Morality policy is more congruent with the preferences of higher educated citizens than lower educated citizens*. The results are robust, with both random effects models and models excluding outliers confirming the findings.

When there are differences in opinion between lower and higher educated citizens, policies are more likely to reflect the opinions of the higher educated. When institutional and partisan actors are accounted for, the analysis shows significant robust results indicating that greater differences in preferences between the lower and higher educated groups make politics more congruent with the higher-educated opinions. This means that when all the institutional and partisan actors are accounted for, the higher educated citizens' preferences are once again more congruent with morality policy.

Although problems with multicollinearity prevented the inclusion of the middle-educated group in parts of the analysis, the results do suggest that there are not the same differences in opinion-policy congruence between the higher and middle educated citizens when their opinions

disperse, as between the higher and lower educated groups. This does not mean that the median voter theorem should be entirely dismissed, especially in light of the potentially inaccurate measurement. However, the results do not indicate that the median voters' opinions are better represented than citizens with neither higher levels of education nor income when the groups disagree.

In chapter 3, I argued that the increased descriptive representation of the affluent citizens, as well as the wealthier citizens' ability to influence political actors and processes through financing and donations, will make it so that *morality policy is more congruent with the preferences of high-income groups than low-income groups* (H2). The analyses find no support for this hypothesis in the analysis, with the results indicating that the opposite is the case. The pooled OLS regressions suggest that morality policy is more congruent with the opinions of the poorer groups of citizens than the wealthier groups of citizens. This can be interpreted as unequal representation in terms of congruence, but not in the expected direction. This seems to be confirmed when the opinion-policy congruence for each group is analysed separately, with both the lower and middle-income groups' preferences being substantively more congruent with policy output than the high-income groups' opinions.

The robustness of the results on opinion-policy congruence for different income groups is weakened when tested using random effects instead of pooling as an estimation technique. While the estimates including each separate income group confirm that the high-income group's preferences are less reflected in policy than the poorer citizens' preferences, the regressions including more than one group's opinions no longer show any statistically significant relationships, indicating that when the residuals are allowed to vary between countries the different income groups' opinions no longer have an impact on policy output. Thus, one might doubt whether there are substantive differences in congruence between the different income groups' opinions and morality policy. This lends some support for *H3: There is a more significant gap in opinion-policy congruence for the preferences of low and highly educated groups than for the low and high-income groups.*

In chapter 3, I presented earlier research showing a greater gap in congruence between the preferences of low and high-education groups than between the low- and high-income groups and arguments as to why this is the case (Gilens 2009, 399). It was argued that education significantly affects attitudes on immaterial and cultural issues as opposed to income affecting

material and economic issues (Werfhorst and Graaf 2004, 228). This lays a foundation for more differences in preferences between citizens with different levels of education than levels of income. This is confirmed by the descriptive analysis, which shows more differences in preferences between less and more educated people than less and more affluent people. The lack of support for H2, combined with the lack of robustness for the results on opinion-policy congruence for income groups, lends support for H3: *There is a more significant gap in opinion-policy congruence for the preferences of low and highly educated groups than for the low and high-income groups*.

The finding that representation is unequal for both education and income groups but in opposite directions has important implications. To begin with, it suggests that one must be careful when investigating the two as closely joined, such as in measures of class. It has been demonstrated that preferences on morality issues differ more according to education than affluence. There are several theoretical indications of this also being the case for other immaterial and cultural issues. Furthermore, it argues for education being considered a political cleavage in itself, as it captures political divides that are not caught up in the traditional socioeconomic left-right axis, which is mainly based on economic interests. This is confirmed by the analysis results consistently showing government ideology on the left-right axis to have no relationship with morality policy.

8.2 Institutional and Partisan Determinants of Incongruences

In chapter 3, I argued that an increased number of veto points and players present would make the representation of different educational groups more equal. The assumption was conditional, as it was based on higher educated citizens being better represented in terms of opinion-policy congruence than the lower educated citizens. The first part of the analysis provides supporting evidence for this to be the case. The assumption was made based on an increased number of veto points and players, allowing for more points of influence for more extensive parts of the public and thus more policy change. The increased number of partisan veto players should also allow for more proportional representation, creating more influence points for the lower educated. The assumption was also based on the fact that an increased number of veto points and players often creates a bias toward the political status quo, which I argued should benefit the citizens with lower education whose opinions are more conservative than those of higher educated citizens.

The analysis shows no support for H4: *A higher number of institutional veto points will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educated groups' preferences,* and no support for H5: *A higher number of institutional veto players will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educated groups' preferences.* The bias in representation towards citizens with higher levels of education is thus not affected by the flexibility of the political system in terms of the institutions. This shows that lower educated citizens being more conservative and the institutional bias toward the status quo does not necessarily matter if the higher educated citizens disagree with the former on morality issues. It is then indicated that if the higher educated citizens are more progressive, the policy will reflect this.

The analysis indicates that a higher number of partisan players generally make the opinions of the lower educated citizens better reflected in policy. However, it also makes the preferences of the higher educated citizens better reflected. The results from the multiplicative interactions show that the partisan veto players have a substantively significant negative effect on the relationship between differences in opinion and policy output. Interestingly, it is suggested that this is the case because more political parties make the opinions of the higher educated citizens less congruent with policy. In contrast, the opinion-policy congruence for citizens with lower levels of education is not at all affected. Although not in the expected direction, this lends some support to the assumption about a higher number of veto points and players making representation more equal:

H6: *A higher number of partisan veto players will lead to more opinion-policy congruence for the lower educated citizens and hence a reduced difference in the representation of lower and higher educated groups' preferences.*

More research should be done into the cause of why more partisan veto players make representation more equal. My findings indicate that it makes the preferences of the higher educated citizens less influential both generally and when the groups disagree, while the lower educated citizens generally stay at the same level of congruence. It would be interesting to investigate whether this is related to the backgrounds of the politicians when there is room for

more different and thus also more alternative parties. It is possible that this might create room for politicians with less traditional academic backgrounds.

The results show strong support for an increased number of religious partisan veto players to make the higher educated citizens' opinions more congruent with morality policy when their opinions depart from those of the lower educated citizens, hence making the unequal representation greater. However, it should be noted that the presence of religious parties also makes policy more congruent with the opinions of lower educated citizens. Their presence seems to make it more likely that their preferences are reflected in policy. This might be caused by religious parties making morality issues more salient, or them being elected because of the salience of the issues. This means that more religious partisan veto players might contribute to making the policy more congruent with both lower and higher educated citizens' opinions, which would benefit citizens with less education. However, it does not have an effect on making representation more equal, as policy unproportionally reflects the opinions of citizens with higher levels of education if the groups disagree. While there is some support for the first part of H7, the second part of the hypothesis is thus not supported:

H7: *A higher number of religious parties present as partisan veto players will lead to more opinion-policy congruence for lower-educated citizens and hence a reduced difference in the representation of lower and higher educational groups' preferences.*

The general assumption of more veto points and players creating more avenues for influence and thus more proportional representation in the political arena which highly educated politicians and officials increasingly dominate seems to have some holding regarding partisan determinants, although further research should be done to check the robustness of the results and to explore what causal mechanisms are at work. It would be useful and interesting to examine further the connection between the presence of more parties and the decrease in representation for citizens with higher levels of education.

Lastly, the results of the analysis indicate that while the number of institutional veto points and players do not seem to have a connection to degrees of unequal representation, the levels of liberal democracy might indeed make policy less congruent with public opinion. This indicate that while a veto points and players network are not necessarily connected to unequal

representation for different educational groups, the relationship between democratic institutions and representation should doubtlessly be further explored.

8.3 Shortcomings and Implications for Future Research

The findings in this thesis suggest that the political cleavages in society do vary substantively by issue, as demonstrated by the relative importance of education compared to income for determining citizens' attitudes on issues based upon values and morals. The analysis has some shortcomings based on the absence of available data. A longer time series would have been benefitable better to capture the changes and differences in morality policy. For example, there have been few changes in legislation on issues such as the legality of homosexuality in the period from 1995 to 2014. More country units would also have created more externally valid results, and the strong influence of certain observations in the analysis suggest that more focus should be put on differences between geographical entities and their traits.

The question of legality on issues such as abortions, same-sex marriages, and euthanasia will most likely continue to have a place in politics in the following decades. The element of morality essential in discussions about such issues makes high levels of salience and polarisation likely, making investigation of relations between morality policy and public opinion necessary to understand the political landscapes in modern democracies.

The literature and the theoretical background presented in this thesis have emphasised the potential role of descriptive representation in ensuring substantive representation. Proponents argue that citizens' preferences are better looked after by representatives that share their characteristics. A shortcoming of the analysis is thus that it does not include indicators of the descriptive representation of different educational groups, as there is a lack of time-series cross-section data on elected representatives' educational backgrounds. Future research is thus dependent on further data collection to shed more light upon unequal representation related to citizens' education. This is especially important if one hope to establish causal relationships as opposed to descriptions simply indicating the presence of causality.

A common problem in investigating issues related to religion is a lack of data and problems concerned with operationalisation. This also affects the analysis in this thesis. To the best of my knowledge, longitudinal cross-sectional data on religious beliefs, attitudes and

memberships is scarce. The data sources that do exist often struggle with data shortages. These are factors likely to affect the public's attitudes towards morality policy, but which are seldom included in statistical analyses because of a lack of data. Future research should thus seek to collect more encompassing data on religious attitudes and behaviour to further investigate religion's role in politics. Only when additional data is available will it truly be possible to attempt establishing the complex causal mechanisms leading to unequal representation by the use of quantitate methods.

8.4 Conclusion

This thesis has shed light on *how education levels affect political representation regarding issues related to moral values* by showing robust findings of the opinions of citizens with higher levels of education being more congruent with policy than the opinions of citizens with lower levels of education. This is the case in general and when the two groups disagree. I argue that this is caused by a combination of unequal descriptive representation and opinions on morality issues being affected by citizens educational experiences. Future research should thus continue to investigate unequal representation for educational groups both in terms of descriptive and substantive representation. The collection of more comprehensive data is thus necessary.

I have shed light on *institutional and partisan determinants of incongruences* by showing that representation remains unequal to the benefit of the higher educated citizens regardless of the number of institutional veto points and players present. There are indications of more partisan veto players making representation more equal by weakening the opinion-policy congruence for higher educated citizens, but further research should be done to test the reliability of the results. I have shown that the presence of more religious partisan players makes morality policy more congruent with citizens' opinions with both lower and higher levels of education. This is potentially caused by their presence putting the issues on the agenda or by there being a correlation between their presence and the issues being salient. When there are differences in opinion between the groups, the presence of more religious partisan players increases the unequal representation by favouring the opinions of those with higher levels of education. The thesis thus provides an incentive for future research to focus on the relationship between educational background and unequal representation, but also how this is determined by the presence of different kinds of partisan actors.

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Appendix

Appendix A: Overview of Included Countries and Years

Table A1. *Overview of included countries and years*

Countries	Education dataset (N=334)	Income Dataset (N=266)	Veto points and players dataset (N=331)
Australia	1995, 2012	1995, 2005, 2012	1995, 2012
Austria	1999, 2008, 2014	1990, 1999	1999, 2008, 2014
Belgium	1999, 2009	1990, 1999	1999, 2009
Bulgaria	1997, 1999, 2005, 2008	1996, 1999, 2005	1997, 1999, 2005, 2008
Canada	2000, 2006	2000, 2006	2000, 2006
Croatia	2008, 2014		2008, 2014
Cyprus	2006, 2008, 2011, 2014	2006, 2011	2006, 2008, 2011, 2014
Czech Republic	1998, 1999, 2008, 2014	1991, 1998, 1999	1998, 1999, 2008, 2014
Denmark	1999, 2008	1990, 1999	1999, 2008
Estonia	1996, 1999, 2008, 2011	1996, 1999, 2011	1996, 1999, 2008, 2011
Finland	1996, 2000, 2009, 2014	1990, 1996, 2000, 2005	1996, 2000, 2009, 2014
France	1999, 2006, 2008, 2014	1990, 1999, 2006	1999, 2006, 2008, 2014
Germany	1997, 1999, 2006, 2008, 2013, 2014	1990, 1997, 1999, 2006, 2013	1997, 1999, 2006, 2008, 2013, 2014
Greece	1999, 2008, 2014	1999	1999, 2008, 2014
Hungary	1998, 2008, 2009	1991, 1999, 2009	1998, 2008, 2009
Iceland	1999, 2009	1999	1999, 2009
Ireland	1999, 2008, 2014	1990, 1999	1999, 2008, 2014
Italy	1999, 2005, 2009, 2014	1990, 1999, 2005	1999, 2005, 2009, 2014
Japan	2000, 2005, 2010	1990, 1995, 2000, 2005, 2010	2000, 2005, 2010
Latvia	1996, 1999, 2008	1996, 1999	1996, 1999, 2008
Lithuania	1997, 1999, 2008	1997, 1999	1997, 1999, 2008
Luxembourg	1999, 2008	1999	1999, 2008
Malta	1999, 2008	1999	1999, 2008
Netherlands	1999, 2006, 2008, 2012	1990, 1999	1999, 2006, 2008, 2012
New Zealand	1998, 2004, 2011	1998, 2004, 2010	1998, 2004, 2011
Norway	1996, 2007, 2008	1990, 1996, 2007	1996, 2007, 2008

Poland	1997, 1999, 2005, 2008, 2012	1997, 1999, 2005, 2012	1997, 1999, 2005, 2008, 2012
Portugal	1999, 2008	1990	1999, 2008
Slovakia	1998, 1999, 2008, 2014	1998, 1999	1998, 1999, 2008, 2014
Slovenia	1995, 1999, 2005, 2011, 2014	1999, 2005, 2011	1999, 2005, 2011, 2014
Spain	1995, 1999, 2000, 2007, 2008, 2011, 2014	1990, 1995, 1999, 2000, 2007, 2011	1995, 1999, 2000, 2007, 2008, 2011, 2014
Sweden	1996, 1999, 2006, 2009, 2011	1996, 1999, 2006, 2011	1996, 1999, 2006, 2009, 2011
Switzerland	1996, 2007, 2008	1996, 2007	1996, 2007, 2008
United Kingdom	1998, 1999, 2005, 2009, 2014	1990, 1998, 1999, 2005	1998, 1999, 2005, 2009, 2014

Sources: WVS (1981-2017); EVS (1981-2009), EES (2014); Comparative Political Dataset (2021); V-Dem 10 (2020); World Bank (2022).

Appendix B: Level of Education Variable

Table A2. *Operationalisation of Level of Education*

Question in survey	Coding	Dataset	Years included
Highest educational level attainted	1:Inadequately completed elementary education 2:Completed (compulsory) elementary education 3:Incomplete secondary school: technical/vocational type/(Compulsory) elementary education and basic vocational qualification 4:Complete secondary school: technical/vocational type/Secondary, intermediate vocational qualification 5:Incomplete secondary: university-preparatory type/Secondary, intermediate general qualification 6:Complete secondary: university-preparatory type/Full secondary, maturity level certificate 7:Some university without degree/Higher education - lower-level tertiary certificate 8:University with degree/Higher education - upper-level tertiary certificate	WVS/ EVS	1995, 1996, 1997, 1998, 1999, 2000, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013
Scale of incomes	1: Lower step – 11: Highest step		
Education: highest level completed	01: No qualifications, and left school before the age of 11 02: No qualifications, and left school between the ages of 11 and 14 inclusive 03: No qualifications, and left school after the age of 14 04: One or more of the following: •NVQ Level 1 •GNVQ or GSVQ Foundation Level •BTEC or SCOTVEC First or General Certificate •RSA Levels 1-3 •City & Guilds Part 1 •YT or YTP Certificate •Other equivalent qualification 05: One or more of the following: •NVQ Level 2 •GNVQ Intermediate Level •BTEC or SCOTVEC First or General Diploma •RSA Diploma •City & Guilds Part 2 •Other equivalent qualification 06: One or more of the following: •One or more CSEs below Grade 1 •one or more GCSEs below Grade C •One or more O Levels •One or more GCSEs Grades A-C or equivalent •Other equivalent qualification 07: One or more: A Levels or AS Levels •One or more SCE Higher Grade •Scottish Certificate of Sixth Year	EES	2014

	Studies •Other equivalent qualification 08: NVQ Level 3 •GNVQ or GSVQ Advanced Level •Other equivalent qualification 09: Higher Education Access Course, or equivalent qualification 10: NVQ Level 4 •HNC or HND •Diploma in Higher Education •Teaching qualification, e.g. Teaching Certificate, PGCE •Nursing qualification •RSA Higher Diploma •Other equivalent qualification 11: NVQ Level 5, or equivalent qualification 12: First degree: BA or BSc, or equivalent qualification 13: Higher degree, e.g. MA, MBA, MSc, Mphil or equivalent qualification 14: Doctorate: PhD or DPhil		

Appendix C: Model Diagnostics

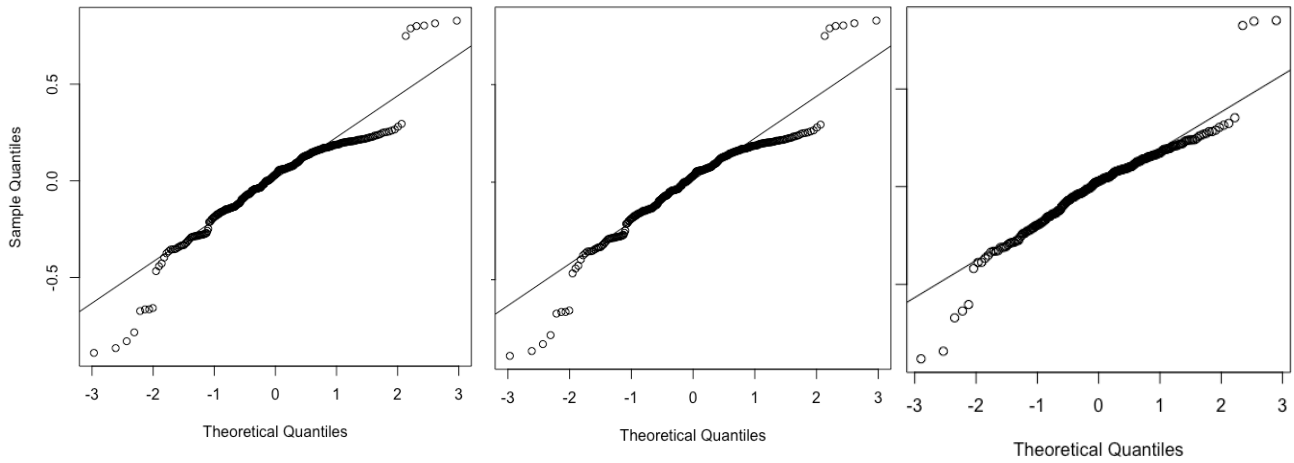

Figure A1. Quantile-quantile plot of residuals in Models 1 (to the left) and 2 (in the middle) on education, and Model 11 (to the right) on income. N=334. Sources: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Table A3. *Results of Breusch Pagan and Durbin Watson Tests for all Models*

	Breusch Pagan score	*Durbin Watson score*		*Breusch Pagan score*	*Durbin Watson score*
Model 1	36.027***	1.879	Model 14	16.73**	1.728
Model 2	37.444***	1.884	Model 15	40.927***	2.022
Model 3	38.835***	1.905	Model 16	37.444***	1.780
Model 4	36.096***	1.864	Model 17	34.092***	1.761
Model 5	34.092***	1.869	Model 18	36.158***	1.755
Model 6	36.158***	1.901	Model 19	35.543***	1.756
Model 7	35.543***	1.875	Model 20	33.96***	1.759
Model 8	37.444***	1.867	Model 21	22.322***	1.922
Model 9	22.322***	1.709	Model 22	18.974**	1.902
Model 10	23.188***	1.7	Model 23	17.844**	1.906
Model 11	18.974**	1.793	Model 24	18.332**	1.892
Model 12	17.844**	1.784	Model 25	16.73**	1.890
Model 13	18.332**	1.748			

Notes: Tests checking for heteroscedasticity and autocorrelation in all models before applying the PCSE.
Sources: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022)

Table A4. *Variance Inflation Factor (VIF) Tests for all Models (Education)*

	Variance Inflation Factor							
Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Government ideology	1.045	1.042	1.045	1.050	1.043	1.043	1.045	1.043
GDP per capita (PPU)	1.392	1.250	1.250	1.374	1.372	1.369	1.367	1.354
Liberal democracy	1.482	1.300	1.290	1.492	1.492	1.461	1.480	1.487
Morality issue	1.577	1.719	1.652	2.614	2.399	1.489	1.582	1.671
General preferences	1.976							
Differences in opinions (high-low)		1.597						
Differences in opinions (high-middle)			1.536					
Lower-educated groups' pref.				10.744	6.838	1.869		
Middle-educated groups' pref.				25.880			1.949	
Higher-educated groups' pref.				16.563	7.171			1.959

Notes: VIF-tests of variables in regression models on education. Sources: WVS (1981-2017); EVS (1981-2009), EES (2014); Comparative Political Dataset (2021); V-Dem 10 (2020); World Bank (2022)

Table A5. *Variance Inflation Factor (VIF) Tests for all Models (Income)*

	Variance Inflation Factor					
Variables	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
Government ideology	1.042	1.048	1.082	1.082	1.072	1.076
GDP per capita (PPU)	1.278	1.271	1.652	1.646	1.586	1.543
Liberal democracy	1.316	1.315	1.401	1.400	1.391	1.379
Morality issues	1.151	1.167	1.590	1.440	1.457	1.417
Differences in opinions (high-low)	1.124					
Differences in opinions (high-middle)		1.128				
Low-income groups' pref.			11.407	2.079		
Middle-income groups' pref.					1.985	
High-income groups' pref.			10.162			1.853

Notes: VIF-tests of variables in the regression models analysing the representation of different income groups. *Sources*: WVS (1981-2017); EVS (1981-2009), CPDS (2021); V-Dem 10 (2020); World Bank (2022)

Table A6. *Variance Inflation Factor (VIF) Tests for all Models (Veto Points and Players)*

	Variance Inflation Factor
Variables	Model 15
Government ideology	1.233
GDP per capita (PPU)	1.484
Liberal democracy	1.322
Morality issues	1.863
Differences in opinion (high-low)	1.857
Institutional veto points	1.425
Institutional veto players	1.913
Partisan veto players: Number of parties	1.402
Religious partisan veto players: Seats for religious parties	1.167

Notes: VIF-tests on regression model including veto points and players. Sources: WVS (1981-2017); EVS (1981-2009), EES (2014); Comparative Political Dataset (2021); V-Dem 10 (2020); World Bank (2022)

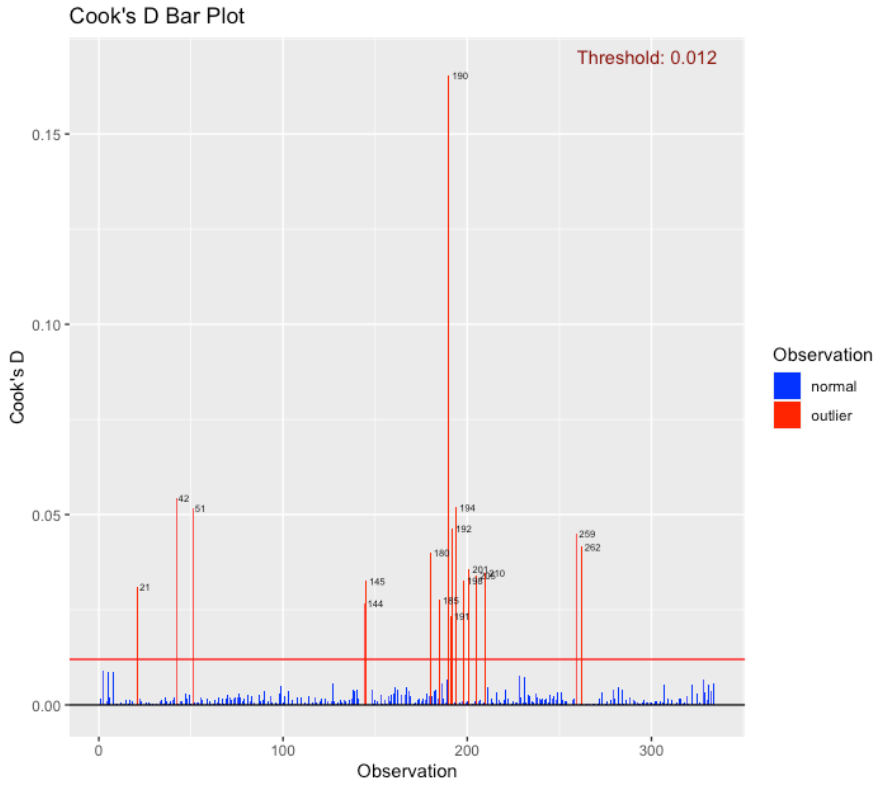

Figure A2. Cook's distance test to check for outliers (education). N=334. Sources: WVS (1981-2017); EVS (1981-2009); EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

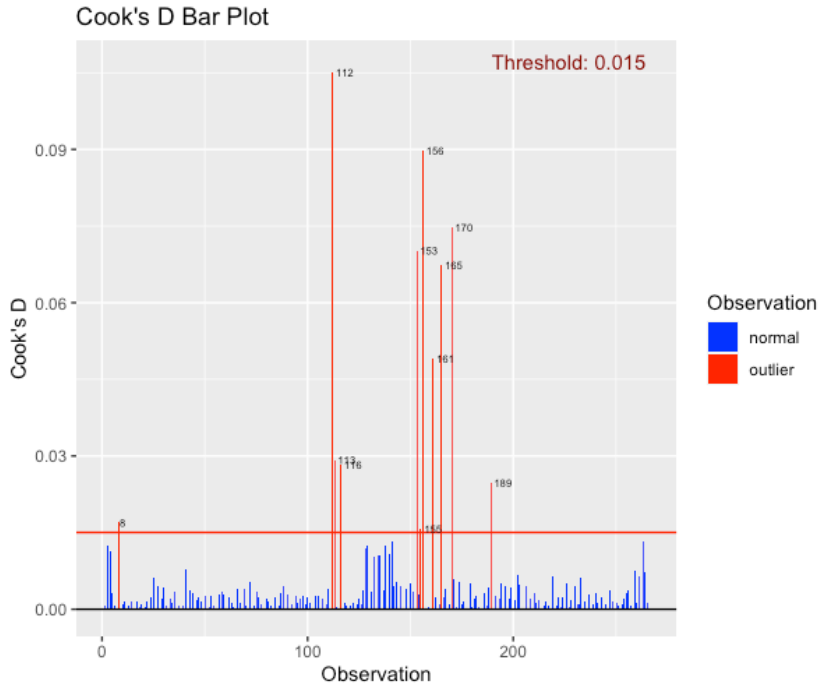

Figure A3. Cook's distance test to check for outliers (income). N=266. Sources: WVS (1981-2017); EVS (1981-2009); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

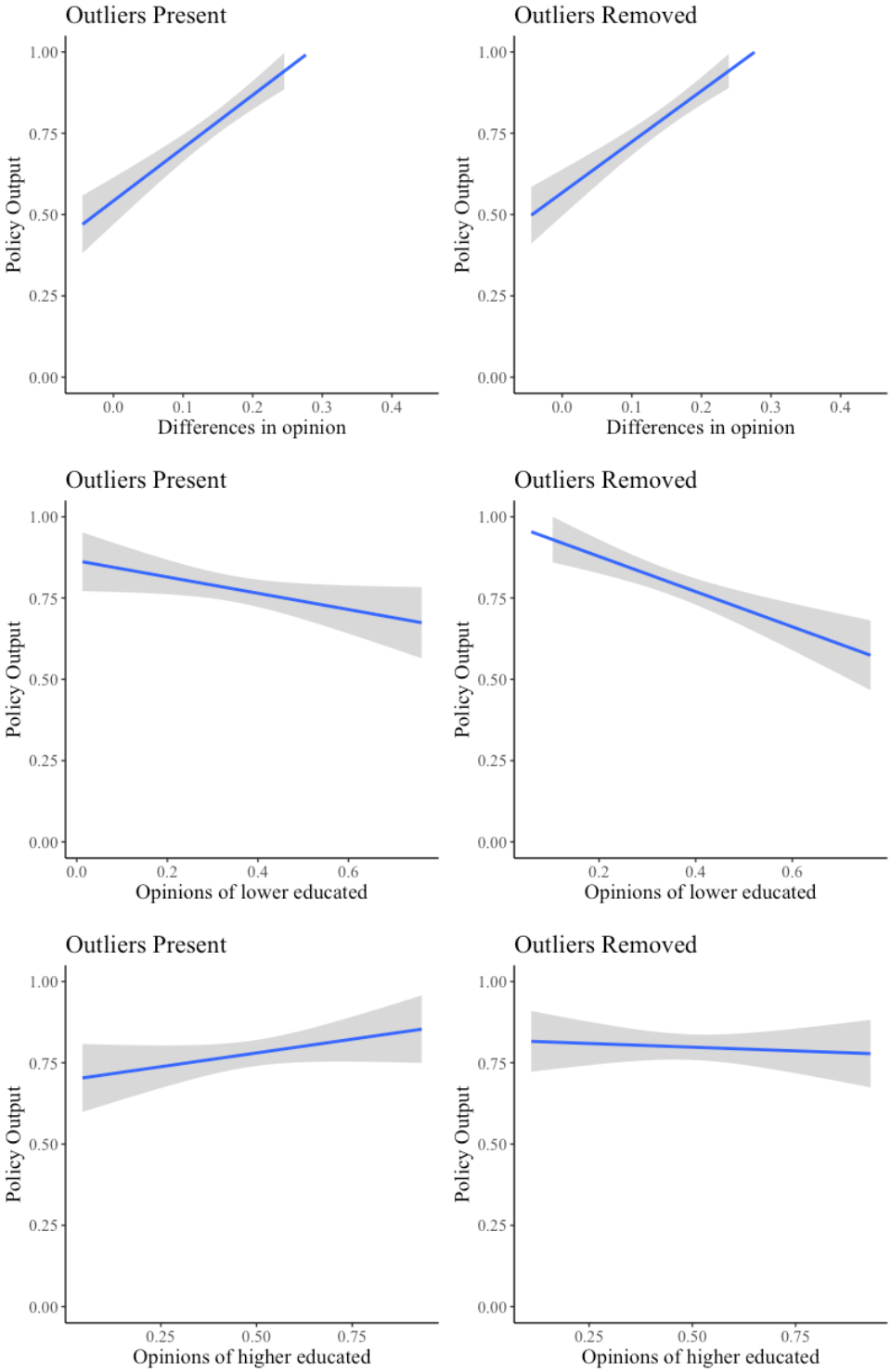

Figure A4. Bivariate regressions to check whether the outliers change the results. The results are similar on income groups, but the changes for the high-income group's effect is not of the same magnitude as for education. N=324 with outliers, N=317 without outliers. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Appendix D: Descriptive Statistics on Variables for Analysis on Opinion-Policy Congruence for Educational and Income Groups

Table A7. *Descriptive Statistics on Variables for Analysis of Educational Groups*

Variable	Mean	Standard deviation	Min	Max
Level of Education	.507	.060	.336	.656
Lower-educated group's preferences	.344	.163	.013	.762
Middle-educated group's preferences	.432	.174	.035	.861
High-educated group's preferences	.490	.183	.045	.932
Preferences on morality issues	.423	.170	.035	.835
Preferences on homosexuality	.451	.191	.035	.835
Preferences on prostitution	.262	.107	.100	.505
Preferences on abortion	.445	.134	.035	.782
Preferences on euthanasia	.531	.106	0.235	.726
Preferences on same-sex marriages	.465	.163	.227	.742
Differences in preferences (Higher-lower educated)	.145	.087	-0.044	.443
Differences in preferences (Higher-middle educated)	.058	.056	-0.080	.250
Country-level variables				
Policy output	.778	.170	0	1
Government ideology	.435	.367	0	1
GDP per capita (PPU)	.277	.162	0	1
Liberal democracy	.799	.061	.601	.886

Notes: Descriptive statistics on the variables used for the analysis on veto points and players. N=331. *Sources*: WVS (1981-2017); EVS (1981-2009), EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for an overview of policy data.

Table A8. *Descriptive Statistics on Variables for Analysis of Income Groups*

Variable	Mean	Standard deviation	Min	Max
Level of income	.496	.056	.354	.701
Low-income group's preferences	.377	.160	.012	.810
Middle-income group's preferences	.425	.159	.033	.833
High-income group's preferences	.473	.166	.054	.868
Preferences	.424	.162	.033	.830
Homosexuality	.432	.186	.050	.830
Prostitution	.276	.112	.099	.496
Abortion	.443	.130	.033	.777
Euthanasia	.510	.108	.234	.732
Differences in preferences (high-low income)	.096	.055	-0.068	.274
Differences in preferences (high-middle income)	.048	.040	-0.067	.219
Country-level variables				
Policy output	.746	.389	0	1
Government ideology	.420	.379	0	1
GDP per capita (PPU)	.377	.220	0	1
Liberal democracy	.798	.059	.601	.886

Notes: Descriptive statistics on the variables used in the first part of the analysis on opinion-policy congruence for different income groups (N=266). *Sources*: WVS (1981-2017); EVS (1981-2009); CPDS (2021); V-Dem 10 (2020); World Bank (2022)

Appendix E: Multiplicative Interactions with Liberal Democracy

	Differences in opinion			**Lower educated**			**Higher educated**		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Government ideology	-0.009	.037	.807	-0.018	.036	.616	-0.019	.036	.604
GDP per capita (PPU)	.100	.121	.411	-0.040	.113	.724	-0.042	.270	.709
Liberal democracy	.135	.627	.829	.408	.632	.519	.592	.762	.438
Difference in opinion (High-Low education)	1.769	3.154	.575						
Diff. in opinion Liberal democracy*	-1.683	3.909	.667						
Lower-educated groups' preferences				2.951*	1.522	.053	.137	.270	.612
Diff. in opinion Liberal democracy*				-3.445*	1.809	.058			
Higher-educated groups' preferences				.401	.247	.106	2.665**	1.256	.035
Diff. in opinion Liberal democracy*							-2.775*	1.582	.080
Issues									
Homosexuality	.102	.066	.126	.027	.069	.670	.024	.069	.729
Abortion	-0.058	.060	.331	-0.157**	.065	.016	-0.156**	.065	.017
Euthanasia	-0.714***	.072	.000	-0.836***	.077	.000	-0.185***	.077	.000
Same-sex marriage	-0.111	.089	.216	-0.175**	.080	.030	-2.775**	.082	.024
Constant	.682	.495	.169	.393	.484	.417	.243	.589	.680
R-Squared		.577			.617			.616	
Adjusted R-Squared		.565			.605			.604	
F-statistic		19.876			21.624			21.554	
P-value		.000			.000			.000	
N		334			334			334	
									*p<0.1 **p<0.05 ***p<0.01

Table A9. Pooled OLS regression estimates with panel-corrected standard errors. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Appendix F: Regression Tables for the Multiplicative Interactions

Table A10. *Regression Tables for the Multiplicative Interactions with Differences in Opinions and Veto Points and Players*

	Interaction with Institutional Veto Points			**Interaction with Institutional Veto Players**		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Difference in preferences for lower and higher educated	.577	.613	.347	.819***	.302	.007
Government ideology	.004	.035	.916	-0.000	.034	.995
GDP per capita (PPU)	.002	.111	.987	-0.001	.111	.996
Liberal democracy index	-0.108	.336	.748	-0.095	.336	.778
Institutional veto points	-0.017	.040	.658	-0.010	.023	.647
*Diff. in pref.*Institutional veto points*	.049	.192	.801			
Institutional veto players	-0.028	.046	.547	.013	.071	.860
*Diff. in pref.*Institutional veto players*				-0.271	.390	.488
Partisan veto players:						
Number of parties	.047***	.015	.002	.047***	.015	.002
Seats for religious parties	-0.001	.015	.575	-0.001	.001	.508
Issues						
Homosexuality	.054	.064	.396	.049	.063	.436
Abortion	-0.090	.057	.114	-0.093	.057	.104
Euthanasia	-0.721***	.068	.000	-0.720***	.067	.000
Same-sex marriage	-0.128	.088	.147	-0.271	.390	.488
Constant	.764***	.293	.009	.727***	.278	.009
R-Squared		.621			.046	
Adjusted R-Squared		.605			.019	
F-statistic		17.235			1.697	
P-value		.000			.088	
N		331			331	

*p<0.1 **p<0.05 ***p<0.01

Table A10a. Regression Tables for the Multiplicative Interactions in Figures 7 and 9. Pooled OLS regression with the difference in the higher and lower-educated groups' preferences included as interactions. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

	Interaction with Partisan Veto Players			Interaction with Religious Partisan Veto Players		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Difference in preferences for lower and higher educated	1.303**	.658	.048	.489*	.293	.100
Government ideology	.008	.034	.815	-0.004	.034	.900
GDP per capita (PPU)	.013	.112	.910	.016	.110	.880
Liberal democracy index	-0.123	.335	.712	-0.103	.332	.755
Institutional veto points	-0.008	.023	.710	-0.006	.022	.776
Institutional veto players	-0.037	.046	.428	-0.011	.046	.809
Partisan veto players:						
Number of parties	.067***	.023	.004	.047***	.015	.002
*Diff. in pref.*Number of parties*	-0.156	.157	.320			
Seats for religious parties	-0.001	.001	.599	-0.005*	.003	.064
*Diff. in pref.*Seats for religious parties*				.031*	.017	.074
Issues						
Homosexuality	.056	.064	.381	.047	.063	.455
Abortion	-0.090	.057	.116	-0.091	.057	.109
Euthanasia	-0.723***	.067	.000	-0.718***	.067	.000
Same-sex marriage	-0.131	.157	.320	-0.128	.017	.145
Constant	.674**	.285	.019	.761***	.274	.006
R-Squared		.623			.045	
Adjusted R-Squared		.607			.018	
F-statistic		17.434			1.675	
P-value		.000			.094	
N		311			331	
					*p<0.1	**p<0.05 ***p<0.01

Table A10b. Regression Tables for the Multiplicative Interactions in Figures 10 & 12. Pooled OLS regression with the difference in the higher and lower-educated groups' preferences included as interactions. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Table A11. *Regression Tables for the Multiplicative Interactions with the Lower Educated Group's Preferences and Veto Points and Players*

	Interaction with Institutional Veto Points			**Interaction with Institutional Veto Players**		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Lower educated groups' preferences	-0.259	.454	.502	-0.231	.290	.427
Higher educated groups' preferences	.745***	.257	.004	.739****	.254	.004
Government ideology	.000	.008	.952	.001	.008	.931
GDP per capita (PPU)	-0.106	.109	.335	-0.110	.112	.328
Liberal democracy index	-0.503	.347	.147	-0.491	.347	.158
Institutional veto points	-0.007	.051	.884	-0.001	.021	.968
Lower educated groups' preferences	.018	.141	.897			
**Institutional veto points*						
Institutional veto players						
Lower educated groups' preferences	-0.022	.044	.620	.000	.085	.996
**Institutional veto players*				-0.066		.756
Partisan veto players:						
Number of parties						
Seats for religious parties	.040***	.015	.008	.040***	.015	.007
	-0.000	.001	.934	-0.000	.001	.914
Issues						
Homosexuality						
Abortion	-0.022	.067	.741	-0.022	.066	.740
Euthanasia	-0.173***	.062	.006	-0.173***	.062	.006
Same-sex marriage	-0.831***	.074	.000	-0.832***	.074	.000
	-0.201	.083	.106	-0.200**	.083	.017
Constant						
	1.001	.275	.897	.967***	.278	.001
R-Squared		.643			.644	
Adjusted R-Squared		.628			.628	
F-statistic		17.835			17.871	
P-value		.000			.000	
N		331			331	
					*p<0.1	**p<0.05 ***p<0.01

Table A11a. Regression Tables for the Multiplicative Interactions in Figure 8. Pooled OLS regression with the lower-educated groups' preferences included as interactions. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

	Interaction with Partisan Veto Players			Interaction with Religious Partisan Veto Players		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Lower educated groups' preferences	.991	.444	.538	-0.321	.274	.241
Higher educated groups' preferences	.747***	.255	.004	.627***	.242	.001
Government ideology	.000	.008	.957	-0.000	.008	.960
GDP per capita (PPU)	-0.104	.111	.347	-0.120	.106	.262
Liberal democracy index	-0.506	.347	.146	-0.710**	.344	.040
Institutional veto points	-0.001	.021	.952	.007	.020	.724
Institutional veto players	-0.013	.036	.703	-0.014	.042	.745
Partisan veto players:						
Number of parties	.038	.031	.221	.028**	.014	.046
*Lower educated groups' preferences *Number of parties*	.004	.083	.964			
Seats for religious parties	-0.000	.001	.912	-0.008***	.002	.001
*Lower educated groups' preferences *Seats for religious parties*				.028***	.008	.000
Issues						
Homosexuality	-0.023	.067	.735	-0.008	.064	.898
Abortion	-0.173***	.062	.006	-0.153***	.059	.010
Euthanasia	-0.831****	.074	.000	-0.820***	.071	.000
Same-sex marriage	-0.201***	.083	.016	-0.820***	.084	.009
Constant	.991	.303	.001	1.235***	.278	.000
R-Squared		.644			.045	
Adjusted R-Squared		.628			.018	
F-statistic		17.843			1.675	
P-value		.000			.094	
N		331			331	
					*p<0.1	**p<0.05 ***p<0.01

Table A11b. Regression Tables for the Multiplicative Interactions in Figures 11 & 13. Pooled OLS regression with the lower-educated groups' preferences included as interactions. *Sources*: WVS (1981-2017); EVS (1981-2009); EES (2014); CPDS (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.

Table A12. *Regression Tables for the Multiplicative Interactions with the Higher Educated Group's Preferences and Veto Points and Players*

	Interaction with Institutional Veto Points			**Interaction with Institutional Veto Players**		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Lower educated groups' preferences	-0.000	.000	.374	-0.260	.282	.358
Higher educated groups' preferences	.000	.000	.118	.764***	.265	.004
Government ideology	.000	.000	.962	.002	.034	.960
GDP per capita (PPU)	-0.000	.000	.330	-0.110	.111	.325
Liberal democracy index	-0.000	.000	.148	-0.486	.348	.164
Institutional veto points	-0.000	.000	.844	-0.001	.021	.956
*Higher educated groups' preferences *Institutional veto points*	.000	.000	.853			
Institutional veto players	-0.000	.000	.617	.010	.103	.922
*Higher educated groups' preferences *Institutional veto players*				-0.066	.193	.734
Partisan veto players:						
Number of parties	.000***	.000	.008	.040***	.015	.007
Seats for religious parties	-0.000	.000	.946	-0.000	.001	.896
Issues						
Homosexuality	-0.000	.000	.749	-0.023	.067	.735
Abortion	-0.000***	.000	.006	-0.173***	.062	.006
Euthanasia	-0.000***	.000	.000	-0.831**	.074	.000
Same-sex marriage	-0.000**	.000	.016	-0.201**	.083	.016
Constant	.000***	.000	.002	.962***	.280	.001
R-Squared		.644			.644	
Adjusted R-Squared		.628			.628	
F-statistic		17.837			17.853	
P-value		.000			.000	
N		331			331	
					*p<0.1	**p<0.05 ***p<0.01

Table A12a. Regression Tables for the Multiplicative Interactions in Figure 8. Pooled OLS regression with the higher-educated groups' preferences included as interactions. Sources: World Values Survey (1981-2017), European Values Survey (1981-2009), European Election Studies (2014).

	Interaction with Partisan Veto Players			Interaction with Religious Partisan Veto Players		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Lower educated groups' preferences	-0.000	.000	.381	-0.166	.272	.543
Higher educated groups' preferences	.000**	.000	.014	.477*	.246	.053
Government ideology	-0.000	.000	.998	-0.008	.032	.809
GDP per capita (PPU)	-0.000	.000	.366	-0.102	.105	.333
Liberal democracy index	-0.000	.000	.146	-0.655*	.340	.055
Institutional veto points	-0.000	.000	.966	.008	.021	.710
Institutional veto players	-0.000	.000	.673	-0.002	.042	.956
Partisan veto players:						
Number of parties	.000	.000	.101	.030**	.014	.036
*Higher educated groups' preferences *Number of parties*	-0.000	.000	.548			
Seats for religious parties	.000**	.000	.014	-0.010***	.003	.001
*Higher educated groups' preferences *Seats for religious parties*				.023***	.007	.001
Issues						
Homosexuality	-0.000	.000	.725	-0.012	.064	.856
Abortion	-0.000***	.000	.006	-0.152**	.060	.012
Euthanasia	-0.000***	.000	.000	-0.815***	.071	.000
Same-sex marriage	-0.000**	.000	.013	-0.214**	.084	.011
Constant	.000***	.000	.005	1.198***	.275	.000
R-Squared		.644			.045	
Adjusted R-Squared		.629			.018	
F-statistic		17.931			1.675	
P-value		.000			.094	
N		.311			331	
				.	*p<0.1	**p<0.05 ***p<0.01

Table A12b. Regression Tables for the Multiplicative Interactions in Figures 11 & 13. Pooled OLS regression with the higher-educated groups' preferences included as interactions. Sources: WVS (1981-2017), EVS (1981-2009), EES (2014).

Appendix G: Distribution of Observations on Conditioning Variables in Interactions

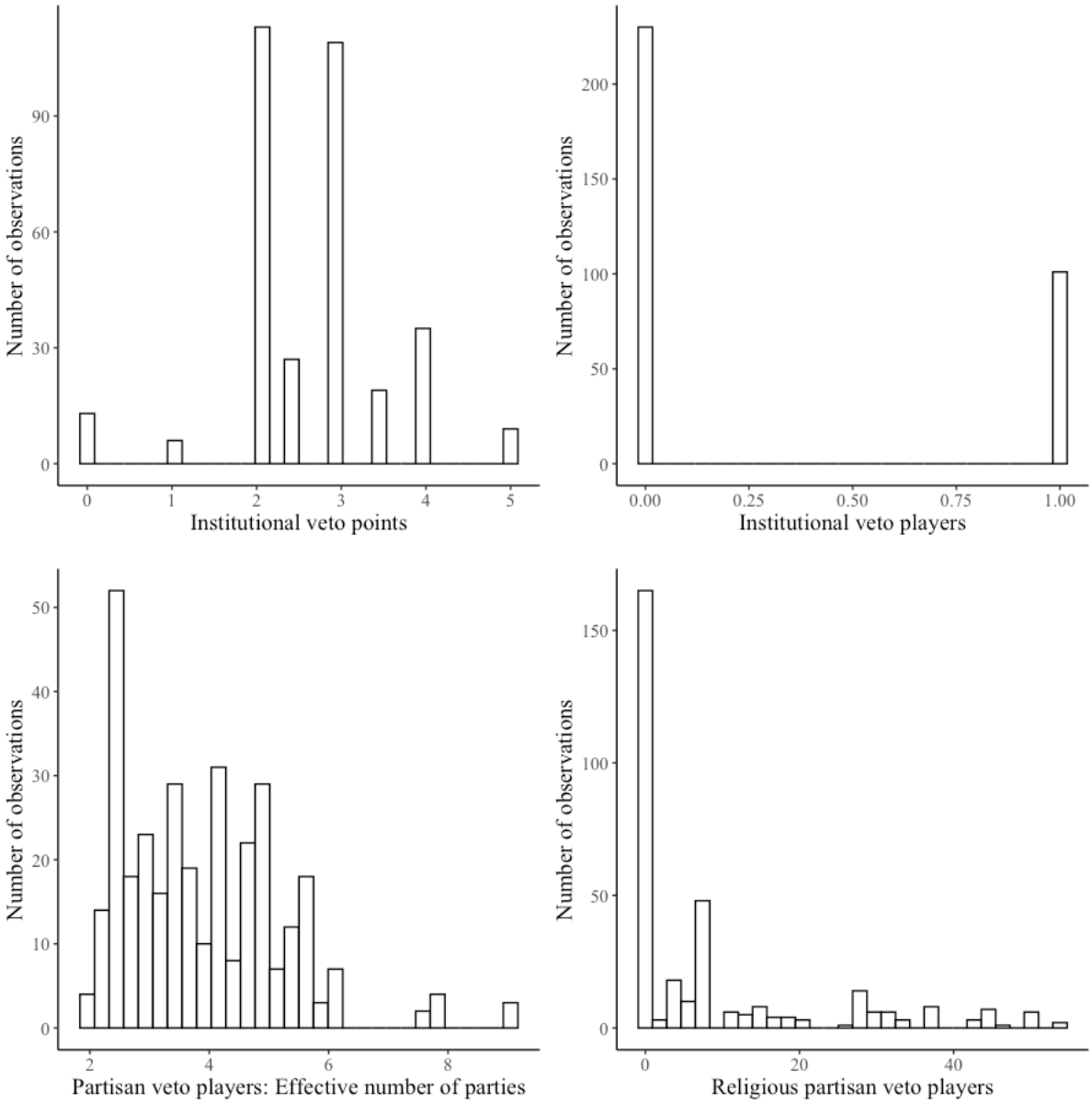

Figure A5. Distribution of observations on the conditioning variables used in the multiplicative interaction analyses. N=331. Sources: WVS (1981-2017); EVS (1981-2009); EES (2014); Comparative Political Dataset (2021); V-Dem 10 (2020); World Bank (2022); See Table 4 for overview of policy data.