

**COUNTRY ROADS, TAKE ME TO THE POLLS: DOES YOUTH VOTER TURNOUT
VARY BETWEEN URBAN AND RURAL SETTINGS?**

BRENT JAMSA

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School of Political Studies
Faculty of Social Sciences
University of Ottawa

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Abstract

This thesis investigates whether or not urban-dwelling youth voters in Western democracies possess a universal voter turnout advantage compared to their non-urban peers. Utilizing the Comparative Study of Electoral Systems (CSES) integrated module dataset that consists of historical election study data from over 230 electoral studies that took place across about 59 jurisdictions between 1996 and 2021, the study employs country and year fixed-effect logistic regression models with interaction terms to test this relationship. The results reveal that there is no evidence of a universal voter turnout advantage for urban youth voters. Rather, it appears that any turnout advantage along the urban/rural divide found in a given country is a result of country-specific contextual factors. These findings also suggest that traditional micro-level factors, such as education, remain the dominant drivers of voter participation across all age cohorts. Consequently, the thesis concludes by stating that any electoral reforms or get-out-the-vote initiatives must focus on these country-specific contexts, rather than simply relying on urban density and resources to foster youth electoral participation.

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List of Abbreviations

CSES	Comparative Study of Electoral Systems
ESS	European Social Survey
EU27	European Union (27 member states)
OECD	Organization for Economic Co-operation and Development
GOTV	Get-out-the-vote
PR	Proportional representation

Chapter 1: Introduction

In many democracies across the Western world, voter turnout is on the decline. An illustration of this can be seen in the United Kingdom, where estimates suggest that only a dismal 37 percent of young Brits aged 18-24 years old turned out to vote in the most recent general election in 2024 (Ipsos, 2024). This trend is further substantiated when considering the turnout rate of this age cohort in previous elections, as the 2019 general election saw only 47 percent turnout and the 2017 general election registered 54 percent turnout for the youngest voters (Ipsos, 2024). This global trend of declining voter turnout overall has many scholars believing that it is at least driven, in part, by lagging youth voter turnout (Blais et al., 2004; Clarke et al., 2004). Looking elsewhere, scholars in Europe also observe varying degrees of voter turnout among youth. According to the findings of the European Social Survey (ESS) between 2002 and 2010, countries such as Sweden and Belgium saw a youth (15-24 years old) turnout rate of nearly 80 percent. Conversely, countries such as Ireland and Luxembourg saw rates of only about 37 percent in the same period (Sloam, 2016). While the age gap is well-documented (Blais et al., 2004; Clarke et al., 2004), another potential difference can be found along the urban-rural divide, in particular the notion that rural residents tend to turnout to vote at higher rates than their urban peers (Kenny et al., 2021; Tarrow, 1971; Monroe, 1977). Despite various investigations into this pattern, there has been no study of whether or not this potential difference in turnout between rural and urban residents holds for the youngest cohort of eligible voters. This study seeks to fill this gap in the research and refine understandings of voter turnout, exploring if and how the urban-rural divide interacts with age. It focuses on youth voters by asking: **Across Western democracies, how does youth voter turnout vary between urban and rural areas?**

Drawing upon theories based on socialization and resources such as social learning, status transmission, and political life cycle, this study posits that the density of resources such as

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educational institutions and public infrastructure found in cities reduces the costs of voting for young people. Therefore, the thesis sets the following competing hypotheses:

H(1): Young people who reside in urban areas will exhibit higher levels of self-reported voter turnout than young people living in non-urban areas.

H(2): Young people who reside in rural and non-urban areas will exhibit higher levels of self-reported voter turnout than young people living in urban areas.

To investigate if youth in urban areas turnout at a higher rate than their rural peers, this thesis makes use of the Comparative Study of Electoral Systems' (CSES) integrated module dataset. Along with using standard socio-economic and demographic control variables, four dummy variables are derived from the age variable. These dummies are each made to conform to a different definition of youth, that are guided by the academic literature on youth political participation, along with a non-youth reference category. The first cohort consists of 18-25 year olds, the second of 26-35 year olds, and the third comprising 36-40 year olds, to determine if there is a consistent urban turnout advantage across all stages of early adulthood. As well, a 41 year old and older cohort is employed as a reference category. With these variables, a country and year fixed effect model is then employed.

The results find that there exists no evidence of a universal, positive, voter turnout advantage in Western democracies for youth voters living in urban environments compared to their peers who live in non-urban areas. Thus, H(1) and H(2) are rejected, and the results ultimately confirm and reinforce what is already known about youth voter turnout: that socio-economic factors such as education, along with age, are the strongest determinants of voter turnout.

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The Literature on Voter Turnout

To fully capture the intricacies of youth voter turnout, it is imperative to explore the theoretical and empirical foundations of the voter turnout literature at large so that the youth-specific literature can be interpreted in the broader context of the overall literature. To accomplish this, this section will overview the main theories and patterns of voter turnout and connect these explanations to the youth-specific literature. Then, this section will present competing expectations and the main hypotheses regarding urban and rural youth turnout. The literature review will then conclude by relating how these theoretical assertions will inform the empirical analysis in the subsequent chapters of this thesis.

Macro-level Variables of Voter Turnout

Scholars attribute the link between proportional representation (PR) and voter turnout (Blais and Carty, 1990; Geys, 2006; Lakeman, 1974) to two primary mechanisms. First, PR systems enhance representational efficacy by reducing wasted votes and facilitating competition in higher magnitude districts, PR allows for an array of choice and stronger links between political parties and society (Jackman, 1987; Ladner and Milner, 1989). Moreover, PR systems are theorized to boost turnout by incentivizing mobilization from a broader assortment of actors, including niche or extremist parties that target previously unmobilized, disinterested voters (Smith, 2018; Powell Jr., 1980).

Yet in spite of these theoretical conjectures, results from quantitative studies remain mixed. While early cross-national studies are suggestive of a positive relationship between PR and voter turnout (Blais and Carty, 1990), more recent analyses using CSES data (Selb, 2009) find that this link is driven by a by-product of PR in the form of the increased number of political

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parties participating in the electoral contests and that this effect often disappears outside of Western, industrialized democracies (Blais, 2006; Smith, 2018).

While research concerning youth voter turnout and PR systems is rather narrow in scope, the institutional mechanisms of PR likely affect young people in a more evident way. For instance, PR systems may improve youth turnout by increasing perceived external efficacy and lowering the bar to allow for more youth-centric parties to enter the electoral ecosystem. Empirically, New Zealand's transition to a PR system positively impacted turnout among those aged 18-35, particularly among those who identified themselves as left-leaning (Karp and Banducci, 1999).

Theoretically, the more political parties contesting the election permits a wider variety of choice for voters, reducing both the ideological distance between a voter and a given political party, as well as the cost of abstaining (Blais, 2006; Stockemer, 2017). Conversely, too many parties can increase cognitive costs of voting and force voters to navigate an overly complex electoral environment and subsequently depress turnout (Blais and Dobrzynska, 2009; Huber et al., 2005). The literature is ultimately indecisive on the effect, if any, of this particular variable, with scholars such as Zagórski (2021) finding that the number of political parties has an adverse effect on turnout, Taagepera et al. (2013) finding that the relationship between number of political parties and turnout to be U-shaped. While others such as Geys (2006), Cancela and Geys (2016), and Stockemer (2017) find that there is little, if any, conclusive effect.

For youth, these competing mechanisms are of particular importance. While having more political parties can facilitate targeted mobilization of youth on issues that matter the most to them, it can also potentially overload young, inexperienced voters who are not yet civically and electorally experienced (Davidson and Binstock, 2012).

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Another macro-level variable of interest with respect to voter turnout is compulsory voting. However, the efficiency of its effect is largely dependent on the level of enforcement and the severity of the penalty for non-compliance (Birch, 2009; Stockemer, 2017). Strict enforcement of compulsory voting, such as that seen in jurisdictions like Australia, consistently yields higher voter participation than jurisdictions like Luxembourg and Mexico with lower enforcement or penalties (Stockemer and Scruggs, 2012). Notwithstanding, individual-level factors are still important considerations in compulsory voting jurisdictions, as legal mandates do not completely absolve the effects of potent individual-level factors such as age, income, and education (Panagopoulos, 2008; Singh, 2011). This particular finding underscores that compulsory voting raises the baseline of participation, but does not fully eliminate disparities in turnout across different demographics.

For youth voters in particular, compulsory voting is often pitched as a solution for sluggish turnout rates. In polities with compulsory voting, youth voter turnout rates often excel in comparison to polities without it and can be comparable to their older peers (Wattenberg, 2024). Despite this, the literature is indicative that the effect of compulsory voting strongly interacts with age, as older voters are more responsive to legal obligations to vote, which is theorized by scholars to be a result of a higher sense of moral duty to comply with legal mandates (Quintelier, 2007). Nonetheless, younger voters largely remain responsive to their polity's respective political institutions and rules, as electoral participation rates increase significantly as enforcement becomes more intense (Quintelier et al., 2011).

Inequality is also often given consideration in the voter turnout literature and it is generally understood that those who are less wealthy are more often less likely to vote than their richer compatriots (Brady et al., 1995). However, there are others such as Meltzler and Richard

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(1981) who put forth the so-called ‘conflict theory’, which asserts that as inequality rises, it incentivizes the middle and lower classes to vote, and to do so for parties committed to more fairly distributing wealth and resources. There are a few mechanisms that are suspected to drive this divergence in turnout. Namely, scholars such as Gallego (2009) find support for the notion that increasing cognitive and other costs of voting pose more of a barrier to lower-income citizens, and hence suppress their turnout. Another mechanism studied relates to the mobilization of lower-income voters by left-leaning political parties. Anderson et al. (2012) put forth that a large electoral field of left-leaning parties, combined with inequality, incentivizes these parties to mobilize poor voters to the ballot box. These dynamics ultimately carry implications for youth voters, as youth often find themselves as some of the lowest earners in their economies. As a result, the increase in cognitive and other costs to voting imposed by inequality is bound to depress youth turnout more than it would compared to their older, more financially stable compatriots.

Political culture is another important consideration in the literature surrounding voter turnout. Putnam (2001) is often cited as a foremost framework in this regard, as he studies the American case and stipulates that high levels of social capital and civic networks framed voting as a civic obligation by all citizens, which lowered social and psychological barriers to voting. However, Putnam (2001) and other scholars such as Dalton (2008) contend that there has been a departure from this in favour of a shift towards forms of civic engagement that don’t involve participation in formal electoral institutions, such as social justice and activism. Applying this shift in dynamics to youth voters would help to explain the divergence in turnout among young people compared to older citizens, as young people would be more socialized under this new form of civic engagement, whereas the older generations were socialized under a civic

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engagement framework that placed heavier emphasis on engaging with electoral institutions as a primary means of political participation.

Individual-level Variables of Voter Turnout

Aside from the macro-level theories mentioned above, there are also individual-level theories of voter turnout that must be considered in any examination of voter turnout, given that these individual-level considerations are part of the broader mechanisms through which macro-level factors ultimately shape voter turnout. One of the most prominent theories of voting behaviour and voter turnout in this regard is rational choice theory (Downs, 1957). Rational choice theory views voters as being self-serving actors who seek to maximize their utility by weighing the benefits of electoral participation with the expected costs of participating. With this definition, one would expect voter turnout to be non-existent, as the chances of one's vote being the decisive one in an election are very low and thus, there is no incentive for voters to overcome the costs of voting. This is known as the paradox of voting and it arises as the fundamentally basic tenets of rational choice do not explain why people turnout to vote. As a result, scholars have proposed and tested further conditions to the theory. One notable case example of this is Riker and Ordeshook (1968)'s expansion on the basic theory in response to the paradox of voting, which includes an expected utility variable that is derived from voting, notwithstanding the fact that the voter's overall impact is likely negligible. In adding this condition to the theory, Riker and Ordeshook explicitly bring in factors such as feeling of civil obligation, social norms and pressures, in addition to the satisfaction attained from participating in a civic duty into the vote cost calculus. Another work of interest that expands upon Downs' original theory is the resource model of voter turnout put forth by Verba et al. (2005) and asserts that political participation is shaped less by socio-economic status itself, but rather more explicitly by the raw

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resources that factor into it such as time, money, and civic skills, combined with get-out-the-vote mobilization. The resource model relates to rational choice theory as it expands on the cost of voting component of the equation in explaining how the cost of voting varies from voter to voter, as differing levels of resources act as mechanisms that raise or lower the effective cost of voting depending on the resources available to any one voter.

It is imperative to consider how the theory of rational choice and its derivatives uniquely interacts with younger voters in any study of youth voter turnout, considering that the costs of voting affect young people in a different manner than their older counterparts. When looking plainly at Downs' version of the theory, one would expect that youth voters, like the median voter, would also theoretically abstain completely from turning out to vote. Yet, like the median voter, they do turnout to vote, albeit at a lesser rate than other age cohorts. Considering the cost component of the rational choice equation, lower youth voter turnout can be attributed to youth facing higher costs to vote such as transportation, information, and time constraints.

Additionally, youth voters face lower political interest, knowledge, and mobilization efforts, leaving them less motivated and less likely to turnout to vote than their older counterparts (Plutzer, 2002; Brady Verba et al., 1995). When considering Riker and Ordeshook (1968)'s addition of utility, young people are also likely to differ from older voters in the realm of civic obligation and satisfaction, which further conditions whether they convert institutional pressure and personal motivation into turning out to vote.

Other common theories for voter turnout include the sociological and psychological models of voting. The sociological model, popularly known as the Columbia school, ordains that an individual's social environment and affiliations influences their voting behaviour, in addition to other social factors such as their social class, religion, and ties to the community. Lazarsfeld et

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al. 's 1948 cardinal work, *The People's Choice* first lays out this cornerstone theory. For youth voters, the sociological model infers parental and peer socialization, as well as civic and social groups are central elements of youth voting habits and that weak socialization and connection to these civic networks can help rationalize lower electoral participation among youth.

In contrast, the psychological model, known as the Michigan school, seeks to rationalize individual voting behaviour through factors such as their partisan leanings and affiliations, political efficacy, and sense of civic duty and Campbell et al. first set forth this model in their 1960 book *The American Voter*. In particular, the psychological model asserts that party self-identification among voters is a vital component in shaping how individuals view politics and is a strong determinant of if and how someone votes. In bringing this back to youth voters, this model subsequently propounds that weaker partisan self-identification among younger voters can help account for lower youth turnout, given that scholars view younger cohorts of voters as being less attached to partisan identifications than other generations before them (Jocker et al., 2024).

Scholars also take great interest in individual demographic factors and their influence on electoral turnout. In this regard, age and education are the largest determinants of voter turnout in the overall electorate (Blais et al., 2004; Glen and Grimes, 1968), as the long established consensus in the literature dictates that the older and more educated an individual is, the more likely they are to vote. Although the effects of age and education are discussed in greater detail below, it is important to note that these two variables serve as major mechanisms that can be applied or integrated into many of the major theoretical rationalizations of voter turnout, including the resource model, which asserts that higher socio-economic status, which is driven by income and education, provides a boost to more easily overcome the costs of voting (Brady

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et al., 1995). Additionally, age is a major mechanism in life cycle effect theories, where electoral participation increases as individuals attain more “adult” experiences, such as stable employment, a long-term relationship, and home ownership (Smets, 2012). Moreover, these life cycle effects are often discussed in tandem with generational cohort effects, which is the contention that electoral participation patterns are informed by the specific socio-political contexts in which a respective generation is first socialized in (Putnam, 2001; Wattenberg, 2024). However, unlike life cycle effects where individuals’ electoral participation increases as they acquire more stakes in society, generational cohort effects differ in the sense that it is suggestive that newer generations may not be as civically engaged as previous ones. Scholars such as Putnam (2001) and Wattenberg (2024) posit that this is likely due to changing media consumption habits and a declining sense of duty to be civically engaged.

Given this thesis’ interest in the voting habits of urban and rural youth, residential mobility is another demographic variable of interest, as young people are considerably more mobile than their older peers and that this mobility has been associated with lower voter turnout. (Amantini, 2025; Highton, 2000; Squire et al., 1987). Other common variables included in quantitative studies examining voting behaviour and turnout include demographic variables such as gender, in light of the discussion in the literature concerning whether or not the once established gender gap in voter turnout has truly disappeared (Kostelka et al., 2019). Ultimately, these variables serve as a baseline that interacts with institutional factors such as compulsory voting, voter mobilization, as well as community contexts to shape voter turnout.

Voter Turnout and Age

Aside from educational attainment, age is the most important indicator of whether or not someone turns out during an election (Blais, et al., 2004). Scholars of voting behaviour ordinarily

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understand the relationship between age and voter turnout to be that as citizens get older, the more likely they are to vote (Glenn and Grimes, 1968). Some scholars also note in some cases a decrease in voter turnout as voters begin to reach advanced age, which they normally attribute to decreasing physical mobility that comes with reaching advanced age (Milbrath 1981; Wolfinger and Rosenstone, 1980). The effect of age appears in most, if not all, studies that concern voter turnout, and scholars attribute it to a multitude of factors (Goerres, 2007). For example, conventional knowledge stipulates that older people are more entrenched in their communities compared to younger citizens through homeownership and long-standing connections made within the community, making them more inclined to care about the place they live and its political future (Goerres, 2007). As well, some scholars attribute the effect of age on habit formation. This is to say that in order to become a consistent voter, one must have prerequisite voting experience, which is only possible among older voters as a result of age restrictions on casting a ballot and the habitual timing of elections (Hubner and Eichorn, 2025; Franklin, 2019; Franklin, 2004).

The literature on voter turnout among youth is abundant and clear: young people turn out at a lesser rate than their older counterparts in most Western democracies (Blais et al., 2004; Franklin, 2004), which strongly corresponds with the relationship observed between age and turnout and has since become a focal point in the literature. Scholars have generally pointed to three distinct theories in rationalizing individual voter turnout and these theories provide valuable insights into the decline of youth voter turnout. These theories are the status transmission theory, social learning theory, and the political life cycle theory.

The status transmission theory is relevant to understanding both individual voter turnout and the decline in youth electoral participation. Verba et al. (2005) represents the core tenet of

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the theory as boiling down to child-parent socialization, which acts as an operational mechanism that sees parents ‘transmit’ their socio-economic advantage to their children, thus influencing the likelihood of their child engaging in political activities such as voting. The cardinal principle of the theory is that the resources and behaviours associated with the parent’s socio-economic status such as education, income, and networks play an integral role in their child’s development, including their political development and engagement (Verba et al., 2005). The status transmission theory is explicitly of interest in examining youth voters as young people are typically still in close proximity with their parents, both socially and physically. Jennings and Niemi (1968)’s article is one of the earliest works that underscores the centrality of intergenerational transmission as a cornerstone of political value and behaviour formation in young people. Within this work, Jennings and Niemi utilise national probability samples and student responses to a questionnaire regarding political opinions and behaviours. They then compare the responses to those of the students’ parents and using rank-order and product-moment correlations, they determine the quantification of intergenerational transmission across a wide array of socio-political activities and opinions. The results reveal that the strongest correlation between parent and child is seen in areas that are associated with repeated and reinforced values, such as political party and religious identification. This finding demonstrates that adolescence is a pivotal period for the uptake of political behaviours and that parents serve as an important contributor to the formation of early voting habits and political engagement well before the introduction of major external sources of socialization such as higher education institutions, political campaigns and groups, and get-out-the-vote efforts.

With respect to youth electoral participation, researchers believe that two key mechanisms of the status transmission theory influence the propensity of turnout. The first

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mechanism is that youth experience political conversations and behaviours in the home. This is pertinent, especially amongst the youngest cohort of youth voters who are still living in the family home. The finding by Bhatti and Hansen (2012) reinforces that those young voters who still live at home are more likely to cast a ballot than their peers who do not. Furthermore, Verba et al. (2005) finds that adults who can recall their parents discussing politics or otherwise being politically active are more likely to politically active themselves compared to those who could not recall such conversations happening in their childhood.

The second mechanism of the status transmission theory suggests that the transmission of socio-economic advantage between parent and child includes the transmission of political knowledge and efficacy. In real terms, this can simply be a parent explaining the electoral process, current political issues to their children, or encouraging their children to vote, to name a few. These actions provide the prerequisite knowledge and skills for successful electoral participation and in the literature. Studies such as Siegel-Stechler's (2019) analysis of data from the Commission on Youth Voting and Civic Knowledge's Youth Post-Election Survey exhibit this mechanism in action. This work finds that parental encouragement and instruction positively affects youth turnout as 67 percent of respondents who disclosed parental encouragement to vote prior to an election turned out to cast a ballot, compared to the 36 percent of respondents in the study that voted without any parental encouragement: a difference of 31 percentage points! Additionally, Siegel-Stechler also finds that those who received encouragement from their parents were better informed voters than those who did not receive parental encouragement. Findings such as these reinforce the key notions of the status transmission theory as they demonstrate that parents who equip their children with political knowledge through early exposure to politics shape their voting habits and create more civic minded young adults.

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The second central theory to understanding voter turnout among youth is the social learning theory, which stipulates that individuals learn behaviours and attitudes through observing and imitating others (Bandura, 1977). We can apply the concepts of this theory to youth voter turnout to posit that children who observe influential role models, such as parents, being politically active and voting have a higher probability of exhibiting these forms of political engagement later in life in contrast to those who do not observe such activities in their households during their formative period. In this context, this theory places particular emphasis on the notion that during their upbringing, young people learn the value and normalcy of political engagement and voting through witnessing their role models in their life replicate this behaviour. The literature indicates that social learning is most determinative in children and young adults, with its effects peaking before the age of 25 (Hofman and van den Bos, 2022). With this in mind, early exposure and demonstration of voting habits can aid in both demystifying the electoral process and make it a routine activity.

The literature provides ample instances of the social learning theory in action. One such example can be seen in Cicognani et al. (2012)'s study of Belge high schoolers in Liège, which examines students' political participation in comparison with their parents. By administering surveys to students and their parents to measure their level of political and civic participation, they found that those students who had parents who were politically and civically active are more likely to be politically active themselves. A similar study conducted in Denmark that uses verified data from the 2009 municipal election reports a similar result of children who still lived with their parents as having a higher likelihood of turning out to vote in juxtaposition to their peers who have moved out of the family home (Bhatti and Hansen, 2012). These studies demonstrate the real-world influence of parental political behaviour on their children through

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them observing and replicating the behaviour of their parents, findings that directly align with the core tenets of the social learning theory. Further examples of social learning in action can be seen in Gidengil et al. (2016)'s study of linked Finnish election data, which finds that while parental education levels does have a positive relationship with the voter turnout of their children, the effect of whether or not their parents voted had a significantly higher impact, with children of parents who voted having a 34 to 39 percent chance higher odds of voting those children who had both parents abstain for electoral participation. As well, an examination conducted by Kudrnáč and Lyons (2016) uncovers a similar finding in their study of high schoolers in Czechia, who have an 81 percent probability of voting if both of their parents vote, compared to 41 percent of those who have both parents abstain from voting.

The magnitude of the effect of parental voting habits on children implies that the normalization of electoral participation in the family unit through mechanisms such as directly observing parents constitutes an integral part of political behaviour reproduction. Due to this, considering social learning theory in this study concerning youth voter turnout across the urban-rural divide is crucial, given the potential distinctions in how social networks, community, and family dynamics operate across the urban-rural divide.

The third and final theory of interest that seeks to explain youth voter turnout is the political life cycle theory, which proposes that a complementary relationship exists between the uptake of adult roles and the uptake of electoral participation. The key principle of this theory stipulates that lower turnout among young people is not strictly due to their youthfulness. Rather, it proposes that as individuals transition into adulthood and achieve milestones such as marriage, homeownership, and steady employment, they develop a greater interest in integrating into their community due to their stronger interest in their community and ensuring its wellbeing. Due to

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this stronger interest, they then in turn are predisposed to be more likely to be active electoral participants (Glenn and Grimes, 1968; Smets, 2012). Nie and Verba (1974)'s work on voter turnout is one of the earliest instances in which voter turnout is framed within the framework of the life cycle. This work confirms that voter turnout increases with age and attributes depressed turnout among the youngest voters to so-called "start-up problems", primarily that youth have no basis of concern with politics that stem from conditions such as being married or owning a home. Another foundational case that exhibits elements of the political life cycle theory is Glenn and Grimes' (1968) investigation of political engagement and voting that likewise puts forth that the relationship between age and turnout is rooted in decreasing distractions that come with getting older.

Smets' (2012) study provides a more contemporary example of the political life cycle theory, where she utilizes British Election Study data from 1964 to 2010 and confirms her hypothesis that a delay in the uptake of fundamental adult activities such as marriage, homeownership, and permanent employment has a significant effect on youth voter turnout as she finds that had maturation levels remained at a consistent level with the post-1970s cohort, turnout would be at least 12 percentage points higher. While Smets' study is limited to the United Kingdom, it nonetheless provides valuable insights into how delays in assuming adult roles can impact electoral participation among young people. Smets' conclusions are particularly poignant considering that many young people across the globe are increasingly experiencing delayed transitions to adulthood and the uptake of traditional adult responsibilities due to factors including increased cost of living pressures and changing cultural norms. For instance, The United States Census Bureau reports that in 1970, 8 in 10 Americans were married by the time they were 30 years old. By 2016, this level of marriage was not seen until age 45 (Vespa, 2017).

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In considering these studies, delayed adulthood could have a much more considerable impact and serve as a potential rationale for declining youth voter turnout in democracies beyond the United Kingdom.

Another investigation that lends credence to the theory of the political life cycle is Konzelmann et al. (2012)'s investigation into voter turnout in Germany. This work utilizes Repräsentative Wahlstatistik (RES) data from 1953 to 2009 and isolates the pure age effect of turnout using an age-period-cohort model to demonstrate that life cycle effects account for between approximately 27 percent and 68 percent of the variance in voter turnout in Germany during the study period. Similar research in Finland and Canada have also yielded similar results, where they find that life cycle effects play an influential role in shaping turnout patterns as these studies affirm in their particular country's contexts that younger voters are less likely to turnout than older ones (Blais et al., 2004; Wass, 2007). Combined with the British case, these findings highlight the merits of the political life cycle theory due to its ability to measure a large portion of variance in turnout in quantitative studies. Accordingly, it is imperative to consider the political life cycle in any study of youth voter turnout in urban and rural areas. While age is clearly a major factor in voter turnout, scholars do not know as to whether its effect on voter turnout operates consistently or if different conditions youth experience across the urban-rural divide moderate its effect and interact with the electoral process. Subsequently, the life cycle events of adulthood and the political engagement that follow in this instance must be framed within the parameters of the urban-rural divide to determine if these geographical considerations significantly alter youth electoral participation.

Urban/Rural Divide

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As this study aims to examine differences in youth voter turnout across the urban/rural divide, it is imperative to understand how electoral behaviour generally converges between urban and rural residents so that the effect of age on voter turnout among young voters, as well as any variances in it across the urban/rural divide, can be properly contextualized. This is particularly crucial given the literature's tendency to view young people as a homogenous group and compile them into a single youth category. This approach often ignores the heterogeneity of youth experiences, such as how differences in political socialization driven by diverging structural and social environments may drive contrasting electoral participation across urban and non-urban areas. To contextualize these differences, one must explore the broader literature on the intersection of electoral behaviour and geographical considerations. The literature on electoral behaviour and the urban/rural divide reveals particular tension on the perceived ideological differences between urban and rural voters. However, there is also some attention paid to differences in voter turnout as well, with scholars reaching some conflicting conclusions. Some scholars such as Tarrow (1971), Monroe (1977), and Pattie et al. (2025) find in their specific study cases that rural residents, despite typically higher costs to voting such as further travel distance to the polls, turnout at a higher level than their urban counterparts. At the same time, scholars hypothesize that higher costs suppress the rural vote, leading to decreased turnout compared to urban areas. Investigations by Dyck and Gimpel (2005) subsequently suggest an urban edge with their study parameters, given the nonlinear relationship they are able to ascertain between distance to the polling station and participation in which those who live closer to the polling station are, to an extent, more likely to vote. Another study of the impact of inequality on voter turnout in Spain concludes that the effect of income inequality on voter turnout manifests differently across the urban-rural divide. While this work finds an overall 'U' shaped relationship

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between income inequality and turnout, it also discovers that urban municipalities experience an initial increase in voter turnout as income inequality starts to rise. Additionally, it finds that rural municipalities' voter turnout tends to be more sensitive to income inequality, as turnout drops more sharply in the face of higher income inequality (Martín-Legendre and Rungo, 2025). This raises an important consideration when contemplating how different elements influence whether urban and rural youth turnout to vote, as contextual components such as inequality, community structures and norms, and access to political resources and knowledge may influence the ability and motivation of young people to participate in the electoral process uniquely across the urban-rural divide. Thus, the literature concerning electoral participation along the urban-rural divide shows no clear consensus. Rather, it affirms that factors including social networks, community norms, and political mobilization also influence voting calculus. One potential rationalization for higher turnout among rural residents is that politics may be more personal in rural areas, meaning that voters are familiar with the candidates and their values. This familiarity with the candidate could reduce the political knowledge barrier that often discourages political participation (Geys, 2006). Along similar lines, urban areas are seen as fostering individualism. As a result, there are fewer personal connections to the political process (Geys, 2006). These assertions underline the social pressure theory, which contends that interpersonal networks, concern for reputation, and the societal expectation to participate in mutually beneficial civic duties places pressure on an individual to partake in the electoral system. In the context of the urban-rural divide, the theory contends that urban areas create an ecosystem in which people feel less societal pressure to participate in civic duties such as voting (Blank, 1974; Geys, 2006). Furthermore, the landscape of urban spaces enables urbanites to conceal their absenteeism from the polls, which in turn reduces any potential shame or social pressure with regards to not

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completing an action that is collectively viewed as a civic duty (Blank, 1974; Kaufman, 2019). Beyond more structural and social pressure mechanisms that are seen as potential factors in differences between urban and rural political engagement, Cramer (2016) posits a conceptual framework of ‘rural consciousness’. Through her extensive qualitative study of rural communities in Wisconsin, Cramer uncovers that rural residents have a salient political identity grounded in place, noting that it is often driven by perceptions of political, cultural, and economic marginalization at the hands of urban political elites and policymakers. These feelings of marginalization and subsequent feelings of resentment towards those living in urban areas can directly impact how citizens view their political institutions and thus their propensity to engage in electoral activities such as casting a ballot.

In addition to Wisconsin, similar place-based resentment has been documented elsewhere in the world. Particular examples include Rodríguez-Pose (2018)’s identification of a broader ‘geography of discontent’ emerging in more rural areas and its linkages to declines in agricultural and industrial sectors, outward migration and brain drain. These economic circumstances, along with the impression that urban areas are prioritized politically and receive more resources from the state subsequently foster feelings of hopelessness in having a future in their communities. Consequently, place-based resentment, coupled with perceptions that urban areas are favoured by the state and policymakers, can heighten distrust of political and electoral institutions and potentially act as a suppressant of voter turnout.

In examining these urban-rural dynamics and connecting back to youth, Maxwell (2019) observes in their study of urban-rural differences in attitudes on immigration in Western Europe that geographical differences in attitudes are largely driven by compositional sorting, rather than local contextual socialization. In other words, young and more educated citizens relocate to

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urban areas for economic and educational opportunities, which can lead to the brain drain posited by Rodríguez-Pose. As a result, rural areas can be left demographically older and socially distinct. Contrasting the more dense social ties of rural areas which can reinforce norms of civic and electoral participation with the social dynamics of urban living that include the ability to remain anonymous provides a potential key mechanism for understanding key differences between urban and rural residents and their politics. Ultimately, these dynamics underscore the necessity to further research how geographical contexts could shape electoral engagement across different types of communities.

Multiple cases in the literature explore the links between geographic factors, political attitudes, and electoral behaviour. One such case can be seen in Kenny et al. (2021)'s study that examines attitudes on topical political issues and electoral behaviour in Europe by drawing upon individual level European Social Survey data from 2002 to 2018 in the EU27 countries as well as the United Kingdom, Norway, and Switzerland. While Kenny et al. is primarily focused on urban-rural differences in political attitudes and finds that rural areas in Europe tend to lean more conservative and eurosceptic, their conclusions also indicate that when controlling for country and year idiosyncrasies, those who live outside major cities are much more likely to vote than those who live in other type of communities, with those living on a farm or other isolated rural area having a 33.5 percent higher chance of casting a ballot than the average urban core resident. These results are supportive of the conjecture that rural voters turnout at a higher rate on average compared to urban voters. More recent works that investigate the urban-rural divide take interest in the context of the 2016 and subsequent United States presidential elections. Particularly, there is a noted interest in the influence of rural voters on the electoral successes of Donald Trump. One such case is Durkan (2022)'s study of Michigan in the presidential elections of 2016 and

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2020. Durkan's results reveal that rural areas in the state that had lower turnout compared to their urban counterparts prior to 2016 experienced a significant increase in the 2016 election that outpaced their urban counterparts, which only saw a below-average increase in turnout. Durkin goes on to note that this increase in rural turnout went on to greatly favour Republican candidate Donald Trump and that this trend continued into the 2020 election. In the case of the 2020 election however, a more substantial increase in urban turnout compared to that in 2016 that favoured Democratic candidate Joe Biden tempered the overall effect of the increased rural turnout and was enough to allow Biden to win the state's electoral college votes. While Durkan's study is limited to Michigan, it nonetheless highlights the often present and studied ideological gap between urban and rural areas, in addition to showing that even minor shifts in turnout among urban-rural lines can have a decisive impact on an election.

Youth in Urban and Rural Spaces

There exists limited literature that directly concerns itself with the political differences of urban and rural youth. Notwithstanding this, the existing literature of youth voter turnout and the urban-rural divide and their key mechanisms can be applied to investigate potential factors that could explain a potential difference in the likelihood of urban and rural youth voters casting a ballot. One such factor is political knowledge, which the literature often discusses as a salient predictor of turnout. For example, Stockemer and Rocher (2017) observes that political knowledge is a crucial indicator in determining if a youth casts a ballot or not in Canada. This finding is significant, especially when considering that the sheer number of opportunities in the city to acquire political knowledge such as higher education institutions, are much more vast to those in more rural areas. Moreover, urban areas tend to have a higher concentration of people with post-secondary credentials, which itself is a key indicator of whether or not someone casts a

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ballot (Wolfinger and Rosenstone, 1980). These conditions likely have implications for urban youth as well, as greater exposure to politically active and educated individuals, whether through family, social networks, mobilization efforts, or academic institutions can help reinforce the norm of being politically active and a voter (Carpini and Keeter, 1996; Rosenstone and Hansen, 1993). In contrast, rural areas may afford fewer opportunities to young people aside from family to engage in political activities and acquire political knowledge compared to their adult counterparts, which may in turn affect their turnout rate (Putnam, 2001).

Apart from socio-political differences, structural and institutional factors could be consequential in explaining any variance in youth voter turnout between urban and rural areas. One such structural factor is that the density of urban areas and greater availability of public services and infrastructure, which facilitates the mobilization of voters through more polling stations, less distance required to travel to the polls, and notably absent from many rural areas, public transportation as a means of getting oneself to and from the polling place. These benefits of city living may give urban youth an edge over rural youth, as numerous studies indicate that distance from a polling station as potentially having an effect on turnout when examining electors across all age groups (Blais and Daoust, 2020). One study done in Ontario concludes that there may be a negative, albeit non-linear, relationship between distance to the polling station and turnout (Garnett et al., 2021). Another case looks at the 2003 recall election in Los Angeles, California, where Brady and McNulty (2011) noted a 2 percent drop in turnout among those voters whose polling stations changed, compared to those whose polling stations were unchanged. Similarly, research on elections in urban and rural Maryland suggests that the fewest accessibility barriers to voting exist in urban areas as a result of increased transit options and polling stations (Gimpel and Schuknecht, 2003). These conclusions implicate that structural

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advantages in urban areas such as access to public transportation and a larger number of polling stations may contribute to higher turnout among urban youth compared to their rural peers.

Connecting the issue of distance to the polling station and accessibility of the vote to youth voters more explicitly, a study of the 2018 general election in Florida finds that the introduction of on-campus early voting in select counties made it more likely for younger voters to cast a ballot (Shino and Smith, 2020). While the exact results vary from county to county, Shino and Smith uncover that some counties saw as much as a 5 percentage point increase in youths' likelihood to vote compared to counties that did not implement on-campus early voting. This implies that bringing the electoral process closer to young people may increase their turnout as it arguably lowers the barriers they normally face in participating in the electoral process, such as finding information about the election and transportation to the polls. Above all, when we consider this finding with earlier mentioned studies, it highlights that like the overall electorate, young voters are sensitive to structural barriers to casting a ballot.

In pondering these challenges faced by youth voters under the auspices of the urban-rural divide, urban youth may have an advantage due to the increased concentration of polling stations and the wider availability of non-vehicular methods of transportation, such as public transportation and bike sharing. On the other hand, rural youth may face greater challenges to casting a ballot as a result of lower mobility and access to transportation resources. In theory, these particular advantages and disadvantages of city versus rural life should also apply to non-youth voters. Yet, these factors interact differently with age. A case in point exists in the fact that youth voters face higher start-up costs to voting, such as learning how to register, find their polling station, and correctly fill out a ballot compared to older and more experienced voters (Plutzer, 2002). Furthermore, youth voters often lack the amount of resources that adult voters

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have available to them, namely their own vehicle and disposable income (Plutzer, 2002). This arguably renders younger voters as less desirable targets for candidates' get-out-the-vote efforts and other voter mobilization efforts that not only turnout voters, but also educate them on current political issues (Plutzer, 2002). To further contextualize this, 6.8 percent of rural households in the United States do not have a car and these households are on average poorer and less mobile compared to their urban counterparts who likewise did not own a car (Wang et al., 2025). While this illustration is reflective of all urban and rural residents regardless of age, being without a car in a rural area or not having a sufficient number of them to meet the transportation needs of your household uniquely disadvantages youth. This is due to the fact that limited or non-existent transportation alternatives to a personal vehicle like a car cannot meet their mobility needs. Or, their needs may be deprioritized in favour of their head of household. Wolfinger and Rosenstone (1980) aptly point out that young voters do not bear the start-up costs of voting equally. In the case of rural youth voters, they must overcome both the traditional information gap, and unlike urban youth voters, also overcome more distance to the polling stations amidst a more extensive lack of transportation options. These structural differences highlight how geographic factors influence voters' decisions about whether to vote and help explain why urban youth would turnout at higher rates than their rural counterparts. With this in mind, this thesis seeks to fill the gaps in the literature concerning youth voter turnout across the urban-rural divide through an empirical study of the Comparative Study of Electoral Systems' (CSES) combined module data from established Western democracies, examining how youth voter turnout varies across urban and rural areas and it seeks to answer the following question: **Across Western democracies, how does youth voter turnout differ between urban and rural areas?** To answer this question, I propose the following hypotheses:

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H(1): Young people who reside in urban areas will exhibit higher levels of self-reported voter turnout than young people living in non-urban areas.

H(2): Young people who reside in rural and non-urban areas will exhibit higher levels of self-reported voter turnout than young people living in urban areas.

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Research Design, Dataset, and Sample

This study employs data from the cross-sectional Comparative Study of Electoral Systems' (CSES) combined module dataset. To form this dataset, researchers compiled approximately 230 electoral studies that took place across about 59 jurisdictions between 1996 and 2021. Using this dataset offers several advantages. For one, most election studies in the combined module follow a standard rubric of questions across countries, with a few minor exceptions. This allows for countries to easily be compared against one another, in addition to producing repeated cross-sectional data as many countries have multiple years' worth of election data in the dataset.

In creating the study sample from the CSES combined module (N= 395,797), the thesis includes all respondents who are at least 18 years of age and who have responded to all questions pertinent to the study. For the purposes of this study, 'Western democracies' is taken to mean any country that is a high-income member of the Organisation for Economic Co-operation and Development (OECD) and is rated as a 'Free' democracy in the election years in all of the respective election years covered by the CSES combined module according to Freedom House. This definition of 'Western democracy' which seeks to represent the advanced industrial world yields a sample of 22 countries. Meanwhile, those respondents with missing responses from any variables of interest are excluded from the analytic sample using listwise deletion. This restriction is mandatory for ensuring homogeneity across the sample while at the same time maintaining sufficient cross-national variation in urban/rural and turnout behaviour. In terms of filtering for age, the age of 18 is used as the lower bound for the study parameter primarily due to the fact that this is the age in which most citizens first become eligible to participate in what the CSES describes as 'main elections'. Similarly, an upper parameter is set to 106 years of age in order to filter out those respondents whose ages were coded as unknown or refused, while still

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capturing those respondents who are still living. While there are approximately 3 observations in CSES with responses to age above 106, these are likely erroneous or misreported in some way given the average human lifespan, and are thus treated as missing values and subsequently dropped from the reconstituted dataset. With these parameters in place, a new subset of the CSES data called ‘CSESWest’ (N= 169,252) is created.

Variables and Operationalization

Independent Variables

Youth

As this thesis seeks to measure the difference in voter turnout between urban and rural youth, it is imperative to first define what is meant by ‘youth’, as well as what is considered ‘urban’ and what is ‘rural’. However, there is no universally accepted definition in the literature of what age constitutes being a ‘youth’. Scholars generally consider those aged 18-35 years old are considered to be youths, although this is sometimes extended to 18-40 years old (Stockemer and Sundstrom, 2022). Aside from this, the definition of youth can also vary from country to country due to different factors. One such factor to consider includes differing political cultures that shape each country’s unique political system and laws on voting and running for office. For example, the United States sets the age to vote in federal elections at 18, which aligns with the age of majority in most of the country, while the age required to run for the House of Representatives is 25 years old and other federal offices also have similar age requirements that are higher than the voting age. This is important to consider for two reasons. First, it suggests that these societies delineate between the maturity of young people in establishing that they are mature enough to be a part of the national conversation in voting for their representatives, but not being old and mature enough to be one of these representatives (Stockemer and Sundstrom, 2022). Second, since younger voters may have a tendency to identify more with candidates their

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age (Ben-Bassat and Dahan, 2012), age exclusionary barriers to running for office not only deter young people from seeking office, but may also chill youth voter turnout as well. Moreover, it is important to note that as youth is a stage of life, when one is a youth can vary based on the average life expectancy of a country's citizenry (Stockemer and Sundstrom, 2022).

To address these variances in definition, the thesis seeks to test its hypotheses against the most common definitions in the literature: under 35 and under 40. A younger definition of youth of 25 and under is also included in the parameters of study for two primary rationales. First, this younger definition is increasingly more aligned with the membership age cut-off of prominent youth wings of Western political parties, such as the Liberal Party of Canada, New Democratic Party of Canada, among others. Aside from this, it allows us to see if different operationalizations of 'youth' change the results. In other words, it permits us to determine if there is any differentiation in turnout among the urban-rural divide between the younger and stricter definition of 'youth' and the more permissive definition that includes those 26 through 40 years of age to see if any potential urban-rural effects are concentrated in the youngest voters, or if they are consistent across the entire spectrum of youth. In order to achieve this analysis, four distinct age groups (18-25, 26-35, 36-40, 41+) are derived from the age variable and subsequently coded as dummies to represent whether a respondent is within the respective definition of youth.

Urban/Rural

Like 'youth', the issue of defining 'urban' and what is 'rural' arises. The CSES dataset currently codifies the respondent's type of community into four different possible types ranging from "Rural area or village" to "Large town or city". While most respondents self-identify their type of community, which can lead to the introduction of some degree of subjectivity in the

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classification of communities, some election studies included in the CSES combined module dataset utilize the amount of residents in a given community in order to determine the respondent's type of community. This variation in determining the type of community reflects the difference in data collection practices across countries but remains broadly comparable across cases. For the purposes of this study, "Large town or city" is coded as '1' to indicate an urban setting and all other responses are coded as '0' to indicate all other responses, meaning that the respondent does not live in an urban environment. To ensure that this does not smooth over potential significant results, the results of the main model with all the original community variables is available in the appendix in Table 8.

Control Variables

Education

Beyond the primary independent variables, the models and analysis also incorporate a series of control variables. Given its demonstrative effect on voter turnout in the literature, an education variable is included as a control. The CSES combined module dataset records the highest level of education completed by respondents, with possible responses being "No Education", "Primary/Lower Secondary Education", "Higher Secondary Education", "Post-Secondary (Non-University)", and "University". In the models and analysis, education is treated as a categorical variable. It is operationalized by creating a set of four dummy variables and utilizing 'No Education' as the baseline comparison category.

Gender

As gender is often included in quantitative studies concerning voter turnout due to the long standing interest in potential gender gaps in voter turnout, this study also includes it as a control variable. The gender variable is formatted as a dummy variable, with '0' representing

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that someone self-identified themselves to the interviewer as male, whereas '1' represents someone who self-identified to the interviewer as female. Beginning in CSES module 4, an 'Other' response was added to the gender variable. To ensure uniformity across the sample and limit model convergence issues due to the limited number of respondents opting to self-identify as 'Other', it is dropped for the purposes of analysis along with missing responses and those who refused to answer or responded "Don't know".

Feelings of Efficacy

Lack of efficacy is also known to influence individual-level voter turnout. To account for this, the thesis utilizes two variables from the CSES combined module dataset to create an efficacy index to measure a respondent's feelings towards how responsive their polity's political system is to their needs and behaviour. To create this index, the CSES variable on efficacy that asks respondents to what degree they believe that who is in power can make a difference on a scale of 1 to 5, with 1 signifying that the respondent believes that it doesn't make a difference who is in power and 5 signifying that the respondent believes that who is in power makes a big difference. The second variable integrated into the index similarly measures external efficacy in asking respondents to what degree who they vote for makes a difference on a scale of 1 to 5, with 1 representing that there is no feeling of their vote making a difference and 5 representing the sentiment that who you vote for makes a difference. To calculate the respondent's efficacy index score, the two values from the respondent's responses to the two variables are added together, then subtracted by 1, and then divided by 4 in order to produce a score out of 1. A 0 on the efficacy index indicates that the respondent has no perception of efficacy in their respective political system, while a 1 represents that the respondent has a complete perception of efficacy. The resulting index variable is treated as a continuous variable in the model and analysis.

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Table 1. Operationalization Table

Variable	Definition	Indicator(s)	Measurement	Scale / Type
Age	Respondent's age	CSES' age variable (IMD2001_1)	Measured in years.	Interval-Ratio
Age Groups (Youth)	18-25 years old; 26-35 years old; 36-40 years old; 41+ years old	Derived from the age variable and follows definitions of 'youth' with one non-youth reference category (41+ years old)	'1' = respondent within respective age cohort '0' = respondent is not within respective age cohort	Dummies
Urban Residence	Whether or not the respondent lives in an urban area	Derived from CSES community type variable (IMD2007)	'1' indicates that the respondent lives in an urban area, '0' indicates that they live in a non-urban community	Dummy

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Education	Highest level of education completed	CSES education variable (IMD2003)	Scale from 1 to 5 with the following labels: "No Education", "Primary/Lower Secondary Education", "Higher Secondary Education", "Post-Secondary (Non-University)", "University"	Categorical
Gender	Self-identified gender identity	CSES gender variable (IMD2002)	'0' indicates self-identification as male, '1' indicates self-indication as female.	Nominal
Feelings of Efficacy	Respondent's perception of effectiveness and responsiveness of political system	Index derived from CSES political efficacy variables (IMD3011 and IMD 3012)	Scale from '0' to '1', with '0' indicating complete absence of feelings of efficacy, whereas '1' indicates complete feeling of efficacy.	Interval-Ratio

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Turnout (dependent variable)	Whether respondent turned out to vote in previous main election	CSES voter turnout variable (IMD3001)	'0' indicates that the respondent did not turn out to vote in the previous main election, whereas '1' indicates that they did.	Dummy
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Dependent Variable

Turnout in 'Main Election'

The CSES combined module dataset includes a turnout variable that indicates whether or not a respondent has voted in the previous main election, which the CSES defines in accordance with the type of political system employed. For example, a parliamentary system's main election according to the CSES would be its election for the lower house of the legislature, given that in most parliamentary systems, the government is composed of members of the lower house and usually must maintain its confidence to continue governing. Conversely, a presidential system's main election would usually be the presidential election. Although CSES notes that the combined module may include data about elections other than the main election if the election study in the combined module is specifically concerned with a specific election in that cycle. This turnout variable is coded with 1 indicating that the respondent self-reported voting in the most recent main election, and 0 representing one of the various did not vote responses offered by CSES. All other responses to this variable such as not registered on the electoral roll, as well as refusals to answers, and those who answer "don't know" are excluded from analysis.

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Table 2. Descriptive Statistics for Analytic Sample

Variable	Mean / %	Std. Dev.	Min	Max	N
Age (Years)	49.21	17.42	18	106	169,252
Feelings of Efficacy (0–1)	0.72	0.27	0	1	163,788
Voter Turnout (DV)	87.98%	—	0	1	169,252
Urban Residence	31.82%	—	0	1	169,252
Gender (Female)	51.21%	—	0	1	169,009
Education Level					165,555
No Education	2.04%	—	0	1	3,377
Primary / Lower Secondary	24.90%	—	0	1	41,215
Higher Secondary	26.55%	—	0	1	43,959
Post-Secondary (Non-University)	18.96%	—	0	1	31,392
University	27.55%	—	0	1	45,612
Note: Total unweighted analytic sample N = 169,252 (weighted N = 22,000). Missing values across control variables are listwise deleted in the full regression models.					

To better understand the baseline makeup of the sample prior to doing analysis with the model, the table above outlines the descriptive statistics for the CSESWest dataset (N=169,252). The first statistic that stands out is the 87.98 percent self-reported voter turnout rate. This is exceptionally high for the sample, especially considering that sample is solely composed of respondents from Western democracies. Given this high average, it is quite possible that social desirability biases are at play in which respondents know that voting is a civic duty and do not want to express that they did not engage in the electoral process.

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Another statistic of interest stems from the mean age of 49.21 years old, which reflects the typical aging demographics of the countries included in the dataset. Moreover, the dataset's age range is from 18 to 106 years old, which permits for the capture of a broad array of respondents in the adult life cycle.

The dataset also touts a mean efficacy index score of 0.72, which indicates that the sample on average, has a considerable degree of confidence in the political and electoral system to make a difference. In terms of urban residence within the sample, nearly one-third of respondents live in a strictly urban environment. Moreover, the dataset largely is gender balanced, with 51.21 percent of respondents identifying as female.

Table 3. Voter Turnout by Age Group

Age Group	Did Not Vote (0)	Voted (1)
18–25	21.94%	78.06%
26–35	16.48%	83.52%
36–40	12.95%	87.05%
41+ (Ref)	9.28%	90.72%

This table demonstrates the rate of self-reported voter turnout in the previous main election broken down by age group. At a first glance, the table reveals a steady increase in turnout as the age groups progress. The youngest group of 18-25 year olds registered the lowest turnout rate of 78.06 percent, compared to the turnout rate of 90.72 percent of those aged 41 years and older. This 12.66 percentage point gap between the youngest and oldest cohorts provides a first glimpse of the youth voter turnout gap that characterizes many of the Western democracies in the sample, and lends preliminary credence to the political life cycle theory discussed earlier in the thesis.

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Table 4. Voter Turnout by Age Group and Urban/Rural

Age Group	Rural Turnout (0)	Urban Turnout (1)	Difference
18–25	76.52%	80.93%	4.41 (Urban)
26–35	82.60%	85.10%	2.50 (Urban)
36–40	86.76%	87.64%	0.88 (Urban)
41+ (Ref)	90.42%	91.41%	0.99 (Urban)

The table above breaks down self-reported voter turnout by age group and urban residence. The first observation that is striking is the 4.41 percentage point difference in the voter turnout between urban (80.93 percent) and rural (76.52 percent) 18-25 year olds. As the age cohorts progress, this gap narrows, with the 26-35 year old cohort only registering an advantage of 2.50 percentage points for urban respondents (85.10 percent) compared to rural respondents (82.60 percent). This urban advantage is considerably smaller for those in the older age cohorts, with the difference between urban and rural respondents aged 36-40 years old only being 0.88 in favour of urban respondents and the 41 year old and above cohort having a slightly higher difference of 0.99.

Statistical Model, Empirical Strategy, and Robustness Checks

This thesis uses logistic regressions models with country and year fixed effects to estimate within-country differences in individual-level voter turnout among youth voters. In doing so, it uses the statistical software R and relevant packages for fixed effect estimation. While analysis of the regression model primarily focuses on individual-level determinants of voter turnout, country-level fixed effects are also employed to ensure that country-level contextual and institutional differences are accounted for. This also allows for the estimation of the effect of urban residence on voter turnout by comparing the respondents within their own respective country across urban and non-urban areas, thus ensuring that the models are only accounting for effects driven by that respective country's variation in voter turnout. Similarly,

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year fixed effects are added to the model to ensure that the longitudinal nature of the dataset is controlled for. Additionally, the model utilized in this study reports standard errors clustered by country and the number of clusters are reported alongside each model and its results to account for within-country correlation in error terms. Moreover, the CSES dataset provides variables for post-stratification weighting. In this particular case, survey weights are favourable due to their ability to help correct sampling and post-stratification imbalances, which in turn helps make the sample more representative. Accordingly, the thesis utilizes the demographic weights provided by CSES as a component in applying country equal weighting, as applying just the provided demographic weighting alone in a pooled, cross-national dataset would disproportionately favour larger countries with larger sample sizes.

Additionally, alongside the fixed effect model with interaction terms, a fixed effect model without interaction terms is employed as a robustness measure to compare to the results of the model with interaction terms and ensure that individual-level estimates of voter turnout remain statistically stable.

Model Design

The model aims to capture the average difference in the log-odds of voter turnout between urban and non-urban respondents, while adding individual-level control variables for, education, the efficacy index, gender, and age-derived dummy variables to capture the different definitions of youth. The model also includes interaction terms between urban residence and each of the defined youth cohorts as represented through their respective dummy variables. Country-level and year-level fixed effects are added to ensure that the estimated effects come from within country differences and that the longitudinal nature of the dataset is fully accounted for.

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Limitations

As is the case with most quantitative political science studies, this study has a few limitations that must be kept in mind. First, the data used in this study comes from a cross-sectional survey, which limits causal inference. Despite this, cross-sectional data is often used in the turnout literature and extra care is taken in the analysis in the form of relevant controls to ensure that meaningful interpretation of the results can take place.

Another limitation to consider is the truthfulness of the respondents due to the social desirability bias. Given that turning out to vote is often valued as a civic duty in many, if not all, of the countries included in the study, many respondents may feel the need to be deceptive in stating that they did indeed vote but in fact did not. As a result, turnout may be overreported. However, this is a limitation that is well known and often encountered in the voter turnout literature.

Similarly, most respondents are asked to self-identify the type of community in which they reside. As the average person is likely able to distinguish their type of community and accurately communicate it to someone, it may be difficult for someone to do so in cases where the community is on the edge of an urban centre or suburb. Additionally, in some countries, the method of determining the type of community was not self-identification. Rather, data collectors employed the use of population size to determine the type of community for the respondent. Nonetheless, the categories provided by CSES remain broadly comparable and acceptable for analysis.

Another minor limitation is found in the completeness of the data, particularly with the income variable, as one country (Belgium) in the CSESWest dataset was missing income values for all of its respondents (N=1,648). Due to this exclusion and approximately 40 percent of the

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CSESWest dataset having missing or incomplete income data, the income variable is not used in analysis. Finally, another limitation in the data to consider concerns younger respondents. Given that there are some respondents who likely turned 18 and became freshly eligible to vote, they likely did not have the opportunity to vote in the previous election. On a similar note, when it comes to variables like education, those in the younger range of youth such as 18-25 years old may not have yet completed a post-secondary credential as they may currently be working towards completing it.

Chapter 4: Results

Introduction

The objective of this thesis is to determine the effect, if any, of urban residence on youth voter turnout across established Western democracies. To achieve this, the research adopts a comparative and cross-national framework, aggregating CSES data from 22 Western democracies. All the standard errors in the models utilized are clustered by country in order to account for each respective national context, ensuring that the standard errors are not artificially lowered. Additionally, to ensure that results are accurate, the model employs the use of weights to ensure that the sample remains representative of the broader electorate by correcting for oversampled or undersampled countries by standardizing the number of the weight of each country to be the same. Cleaning the dataset in accordance with these parameters results in 160,317 observations that are incorporated into the model.

Prior to examining the results of the model, it is vital to examine the descriptive differences across the 22 Western democracies included in the study. As detailed in Table 9 in the appendix, baseline youth voter turnout (18-40) ranges from highs of 90+ percent in countries such as Australia, Denmark, and Sweden, to lows of 60 percent in Switzerland and Great Britain. Additionally, the descriptive gap in youth voter turnout in countries varies considerably, with some countries such as Israel and Norway reporting a slight urban edge in turnout, while other countries such as Italy and New Zealand report the opposite. This macro-level heterogeneity ultimately underscores the need for country fixed effects in the models to ensure unobserved institutional and cultural differences are accounted for.

To determine whether the baseline observed differences in voter turnout by urbanity are statistically significant, a series of Pearson's chi-square tests evaluates the raw, bivariate relationship between these two variables. These tests reveal statistically significant relationships

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for almost all age cohorts. In particular, the 18-25 year old cohort achieves significance with a p-value of less than 0.05, whereas the 26-35 year old cohort shows significance with a p-value of less than 0.01. While the relationship is only marginally significant for those aged 36-40 with a p-value of less than 0.1, it is extremely significant for those aged 41 and older, with a p-value of less than 0.001. While these baseline analyses suggest that urbanity influences voter turnout, they are unable to account for confounding individual-level or macro-level considerations, which makes multivariate analysis essential.

Table 5. Results of Models

Variables	Model 1 (Baseline)	Model 2 (Age Interaction)	Model 3 (Full Controls)	Model 4 (Full Interaction Model)
Urban Residence	-0.062 (0.049)	0.006 (0.063)	-0.097 . (0.053)	-0.051 (0.063)
Age Cohorts (Ref: 41+)				
18–25 Years	—	-1.016*** (0.125)	-1.161*** (0.096)	-1.142*** (0.121)
26–35 Years	—	-0.633*** (0.115)	-0.809*** (0.086)	-0.776*** (0.114)
36–40 Years	—	-0.307** (0.109)	-0.451*** (0.081)	-0.427*** (0.102)
Interaction Terms				
Urban × 18–25	—	-0.047 (0.131)	—	-0.067 (0.136)
Urban × 26–35	—	-0.039 (0.112)	—	-0.107 (0.115)
Urban × 36–40	—	-0.044 (0.134)	—	-0.086 (0.138)
Educational Attainment (Ref: No Education)				
Primary / Lower Secondary	—	—	0.342** (0.110)	0.340** (0.110)
Higher Secondary	—	—	0.664*** (0.111)	0.662*** (0.110)

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Post-Secondary (Non-University)	—	—	0.830*** (0.128)	0.829*** (0.128)
University Degree	—	—	1.188*** (0.134)	1.187*** (0.134)
Political Efficacy Index	—	—	1.836*** (0.123)	1.836*** (0.123)
Gender (Female)	—	—	-0.083 . (0.042)	-0.083 . (0.042)
Fixed Effects				
Country Fixed Effects	Yes	Yes	Yes	Yes
Election Year Fixed Effects	Yes	Yes	Yes	Yes
Model Diagnostics				
Observations	169,108	169,108	160,317	160,317
Pseudo R ²	0.8	0.8	0.81	0.81
BIC	3,999.40	4,025.80	3,663.90	3,698.00

The above table demonstrates the output of the main model, as well as the main robustness check. As described in earlier sections, the main model of this thesis is a country and year fixed-effect model that employs interaction terms between the urban variable to directly test the main hypothesis and ascertain whether or not residing in an urban area as a youth provides an advantage to voter turnout. The secondary models displayed above serve as the primary robustness check and are similar to the main model, with the exception that one excludes the interaction terms from its analysis and the others that show only a baseline and interaction model that only includes urban and turnout variables without the other control variables.

In examining the table of results with respect to the main model, a few immediate observations can be made. Firstly, the results confirm that age is a significant predictor of voter

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turnout, as all three definitions of youth exhibit negative coefficients that are statistically significant relative ($p\text{-value} < 0.001$) to those respondents who are 41 years old or older. This, along with the fact that negative coefficients decrease as the age groups get older provides credence to the notion that life cycle effects are present within this sample, given that as the age cohorts progress, they likely obtain the social capital, community ties, and economic roots that induce them to participate in the electoral system.

Considering demographic variables, the model also controls for the gender of the respondents and finds a negative coefficient of -0.083 with a $p\text{-value}$ of less than 0.1 . In other words, female respondents are slightly less likely to have reported voting in the last main election compared to male respondents. However, it does not meet the traditional level of statistical significance and thus does not appear to be a primary driver of voter turnout in this model.

With respect to the other control variables, the main model demonstrates a strong effect (1.836 , $p\text{-value}$ of less than 0.001) of the efficacy index on voter turnout, which measures perceptions of external political efficacy. This finding underscores the power of perception of political responsiveness. In other words, when an individual perceives that who people vote for makes a difference and who is in power makes a difference, they are much more likely to participate in elections as they view their efforts to cast a vote as meaningful and that it outweighs any costs to turning out.

Another control variable that shows considerable effect on voter turnout is education, which is in line with the literature on resource-based models of voting and other socio-economic models of voting. As expected, the main model expresses a strong relationship between voter turnout and education, with each level of education attaining statistical significance and having progressively

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increasing positive coefficients as levels of education increased. This is explicitly seen in the positive coefficient (0.662) of those who have only completed a higher secondary education, compared to those who have obtained a university degree (1.187). In other words, completing higher secondary education nearly doubles one's odds of turning out to vote and completing a university degree more than triples it. Furthermore, the results of the interaction terms between the respective age cohort and urban variables reveal that all interaction terms between these variables are statistically insignificant. In other words, there is no evidence that supports the notion that any relationship between urbanity and voter turnout varies across the different age cohorts in the life cycle.

Table 6. Education by Urban/Rural

Residence	No Education	Primary/Lower Secondary	Higher Secondary	Post-Secondary (Non-Uni)	University
Rural (0)	2.27%	26.77%	27.42%	19.30%	24.23%
Urban (1)	1.54%	20.87%	24.69%	18.23%	34.67%

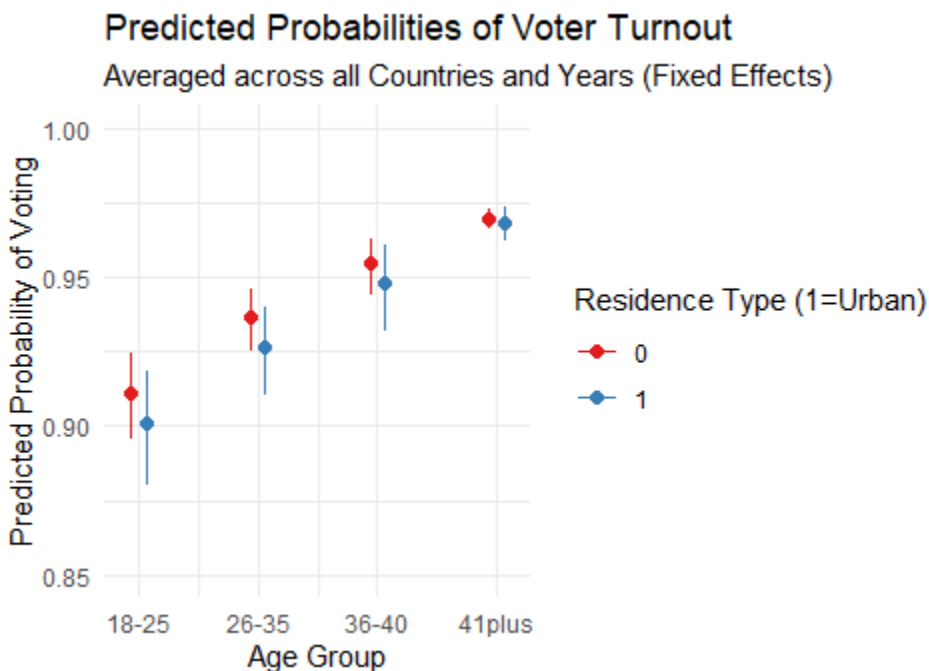
Taking the level of education completed into consideration is imperative in a study concerning voter turnout and the urban/rural divide, considering that descriptive statistics of the CSESWest dataset indicates that 34.67 percent of urban respondents have completed a university degree, compared to only 24.23 percent of non-urban respondents. Furthermore, when looking at the breakdown in education completed by age group within the sample, a paradox emerges. This is due to the fact that those in the 26-35 year old age range have an approximate 11 percentage point advantage in university completion compared to the 41 years and older reference group.

In terms of the effect of urban residence, the main model yields a negative coefficient of -0.051, but fails to reach a traditional level of statistical significance given its p-value of 0.321.

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Perhaps more importantly, the results for the interaction terms between urban residence and all the respective age groups also do not reach traditional levels of statistical significance. In other words, there is no evidence to support the hypothesis that living in urban environments provide a voter turnout advantage to young voters and that the theorized resource density of urban places does not appear to directly translate into a higher probability of voter turnout in young people. However, it is worth noting that in the robustness check model, a similarly negative coefficient of -0.097 is marginally significant with a p-value of 0.068. This is suggestive of a latent, downward pressure by urban environments on voter turnout when all other factors are accounted for. While this potential relationship is tenuous in the aggregated pooled data, it nonetheless suggests that any potential urban penalty in voter turnout may be contingent on country-specific contexts.

Figure 1. Adjusted Predicted Probabilities of Voting Chart (Averaged Across All Countries and Years)



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The above chart displays the predicted probabilities of urban residence on the likelihood of turning out to vote across the three definitions of youth, as well as those who are 41 years old and above, averaged across all countries and years when efficacy and education are held constant at their mean value. Upon first glance, it is immediately apparent that the confidence intervals of urban and rural turnout overlap with each other in each age group, which is indicative of results not reaching traditional levels of statistical significance. This suggests that, when holding other factors constant, that the null hypothesis that urban and rural youth voters vote at the same rate cannot be rejected. Moreover, it is important to note that the graph shows turnout rates for all the age cohorts are at or above 90 percent. While at first glance this may appear like an error, it is vital to keep in mind that the baseline voter turnout rates for the 18-25 year old cohort registers at approximately 78 percent prior to controlling for other variables. Since this baseline turnout rate is considerably higher than the average youth turnout rate and even the overall turnout rate in most of the study countries, one must consider two potential reasons. First, one must consider that sample or social desirability bias is at play, as survey respondents overreport their civic behaviour to fall in line with societal norms. As well, given the high baseline turnout rate for 18-25 years old, it is also possible that when holding powerful individual-level variables such as political efficacy and education at mean values removes the sway of young, low-education and low-efficacy voters and subsequently produces an over-optimized average voter profile.

Chapter 5: Discussion

Introduction

As a reminder, this thesis utilized a logistic regression with country and year fixed effects across 22 Western democracies using the CSES combined module dataset with standard errors clustered by country to determine whether or not a uniform voter turnout advantage existed for youth voters living in urban environments. The results of the model are rather clear on this question: there is no evidence of a consistent and positive voter turnout advantage for urban youth in Western democracies. This holds true for all definitions of youth, no matter the cutoff age.

Urban Effect (or Lack Thereof)

In examining the results of the main model, a few key analyses can be made. First, the urban variable's coefficient in the model is only slightly negative and not statistically significant. In other words, urban residence alone does not play a structural role in voter turnout across the sample. When taking into consideration the different definitions of youth and their representative dummy variables in the model, a similar story unfolds for the sample's youngest voters. For the 18-25 age cohort, a fascinating paradox emerges given the 4.41 percentage point urban advantage in turnout in the descriptive statistics, as in the model once considerations such as education and efficacy are taken into account, this advantage largely evaporates. This finding seemingly validates Maxwell (2019)'s framework of compositional sorting over contextual socialization. This means that rather than an urban environment inherently altering an individual's propensity to vote, the raw descriptive urban advantage is likely a product of cities having a larger number of higher-educated young citizens who are either from there or those who moved from more rural areas for better opportunities and contributed to the brain drain as posed by Rodríguez-Pose. Subsequently, when controlling for individual-level variables such as

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education and political efficacy, urban spaces do not inherently grant a direct advantage. Rather, they serve as a place where citizens with the prerequisite resources that independently drive voter turnout such as a higher education and socio-economic status aggregate.

For both the 26-35 and 36-40 year old cohorts, a comparable story emerges due to both interaction terms between their age cohort and the urban variable being deeply statistically insignificant with p-values of 0.349 and 0.532 respectively. These results affirm the null effect of urbanity across all the youth cohorts. While the individual-level age cohort variables included in the model are particularly potent indicators of voter turnout due to their large, negative, and statistically significant coefficients such as the -1.142 (p-value <0.001) for the 18-25 year old cohort, the -0.776 value (p-value < 0.001) for the 26-35 cohort and -0.427 value (p-value < 0.001) for the 36-40 cohort, they clearly operate independently of whether the respondent lives in an urban or rural area.

In lieu of an urban advantage, socioeconomic considerations such as education, in addition to political efficacy, are more consequential to youth voter turnout than physical proximity to urban infrastructure and the amenities city life offers to young people. This finding is evident when observing that once these controls are added to the model, any positive urban effect is effectively suppressed or even reversed. This is particularly apparent in the main model as when you compare its results to the results when all control variables are removed, it reveals a downward shift in the coefficient for the urban variable from 0.006 to -0.051. As well, summing the model's urban effect coefficient with that of the 18-25 year olds interaction term yields a log-odds of -0.118. More simply put, these results are suggestive that if you take one young citizen from an urban setting and a non-urban setting, with the same exact level of education and sense of political efficacy, the urban youth's odds of turning out to vote are approximately 11.2

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percent less than those of their rural counterparts. However, as this urban effect coefficient is representative of the 41 years old and older cohort and is not statistically significant, this apparent latent penalty cannot be concluded as a universal finding and is only a null finding.

In light of these results, it becomes clear that the idea of urban centres conferring a universal, direct advantage in youth voter turnout is too simplistic on its face, while the 11.2 percent difference in voter turnout between urban and rural youth offers a basis for theoretical postulations. Due to this, the role of the urban environment in forming youth political habits must be reconceptualized from its previous presentation in this thesis. While the urban space itself does not provide a structural advantage to youth voter turnout, it can more accurately be described as being a conduit that brings together the very powerful resources, such as education and efficacy, that actually drive turnout among young people. In other words, urban spaces may operate as a factor of youth voter turnout indirectly through the increased availability of educational institutions and opportunities, socioeconomic resources such as high-paying jobs, and more readily available access to political information, which can help shape feelings of political efficacy.

However, even with this reconceptualization, when you account for individuals with high education and efficacy, a slight latent urban penalty emerges as demonstrated in the previous calculation. This suggests that higher mobility, the anonymity of living in the city, contrasted with the social monitoring in rural communities create a higher barrier to consistent voter turnout among urban young people when compared to their non-urban peers. Consequently, the direction of this coefficient cautiously lends credence to the social pressure theory presented earlier in the thesis, where the smaller, more stable networks of rural living act as a more potent motivator of

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turnout as opposed to sheer geographical proximity to a polling station or resources that come with urban living.

Revisiting the Political Life Cycle Theory

In taking stock of the results of the main model, it is imperative to consider it within the framework of the political life cycle theory. To briefly recall the theory, voter turnout is expected to increase among individuals as they age and experience the hallmark events of becoming adults, which include but are not limited to finding steady employment, buying a home, marrying a spouse, and having children. In other words, laying roots in a community. (Smets, 2016). The main model demonstrates that age is one of the strongest determinants of voter turnout, which is consistent with the basic tenets of the theory. However, the suggestion of a latent urban penalty between urban and rural youth when holding all other controls constant brings forth the opportunity to frame the theory within the urban-rural divide. Traditional interpretations of the theory dictate that individuals start with fewer political resources and less stable roles within the community, but accumulate these resources as they age and become more mature as adults. A negative estimated effect connotes that the start-up costs to voting may be higher for urban youth. In practice, this could be realized in several different ways. For example, young people in the city often lack the stability that the political life cycle theory is pinned on. This is most evident in the fact that youth are highly mobile and prone to frequent moving between dwellings (Clark, 2018). In this regard, the political life cycle resource may well partially readjust as urban youth must re-register to vote at their current address in many jurisdictions. In the same vein, they must reacclimate to their new political environment through reprising themselves of their new area's current political issues, dynamics, players, and representatives. This can be directly contrasted with the mobility patterns of rural youth, who when facing the prospect of moving, do

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not typically grapple with frequent short-haul moves, but rather with a more long-haul move (Looker, 2021). For those rural youth who do not contemplate such a move, the stability that their non-urban residence offers them is more than just an administrative advantage in avoiding the pains of reregistration after a change of address. Rather, it seemingly immerses them in a social environment in which their electoral participation, or lack thereof, is constantly visible to members of their community. With urbanity, a great deal of freedom in the form of anonymity is accorded to young people and the communal social monitoring that is found in more rural communities is more apt to disappear. In more rural communities, it is naturally plausible to posit that this social monitoring renders the act of voting as a visible civic obligation as opposed to a more private act that can be shielded from the local townspeople.

The political life cycle theory does not solely rely on age and thus it is important to consider as well the other life components it implicates as predictors of voter turnout as well. Given that cities are often viewed as rich with educational opportunity, it was initially expected that there would be a positive urban advantage for youth voter turnout. Alas, there was not and even when examining the descriptive statistics of the main model's data points, 24.23 percent of non-urban respondents reported having a university degree, compared to the 34.67 percent of urban respondents who report having one, a difference of 10.44 percentage points. Given this observation, one would expect urban youth to be insulated from the trend of declining voter turnout, especially given that every youth age cohort residing in urban areas had a higher education attainment than their rural peers in the sample. Yet, the logistic regression results are suggestive that the city setting, including its enabling of anonymity and transience, are sufficiently potent to offset this glaring educational advantage. The 14.98 percentage point gap in reported university degree attainment between urban and non-urban 26-35 year old youth is

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indicative that, at least on paper, urban youth have more educational and civic resources often associated with higher levels of electoral participation. However, this edge in educational attainment is clearly, or at least indecisively, able to account for the elevated social pressures found in non-urban environments. In non-urban areas, the social pressures of the local community, reinforced by place-based identity and consciousness described by Cramer (2016), coupled with the fact that politics are much more localized, both are mechanisms that would render the local community itself as an informal socio-political institution that lowers the costs of voting for young people through making voting a matter of reputation and communal obligation. In direct contrast to this, urban youth, despite their higher educational credentials, do not have their community watchfully gazing at them to see if they vote, and in turn benefit from relative social invisibility when it comes to whether or not they exercise their civic duty of voting. In this regard, the cost to the individual young voter of not turning out to vote is essentially zero as there exists virtually no risk of being held accountable by their community members that would serve as an effective check on vote abstention. Subsequently, the conditions of urbanity function as somewhat of a paradoxical barrier to voting: one that provides the prerequisite socio-economic resources such as educational attainment that is a known driver of voter turnout, while at the same time, removing the social pressures that often push people to turnout to vote, rendering the educational attainment advantage moot in the realm of voter turnout.

At The Intersection of Urbanity and Age

Given this thesis' interest in determining the existence of a uniform urban advantage in youth voter turnout, the main model made use of interaction terms between the urban variable and each of the respective age cohort variables to ascertain to what degree, if any, the effect of urban residence is conditional on a respondent's place in the life cycle. While traditional theories

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would lead to the prediction of the effect of urban residence moderating that of the effect of age, the interaction terms in the main model, namely their statistically insignificant p-values, reveal a uniform pattern. As the urban variable in the model employs the 41 years old and older cohort as the reference cohort, the urban coefficient only captures the effect of urbanity on the older, and likely more settled, cohort.

To further ascertain the impact on youth, the model relies on interaction terms to determine to what extent the relationship between urban residency and voter turnout is conditioned by one's current stage in the life cycle. Theoretically, one would expect youth in the 18-25 year old cohort in urban settings to have a considerable turnout advantage due to the concentration of educational and political infrastructure and resources in cities. However, due to factors such as being more mobile, just entering the workforce or post-secondary education, they are more likely to have fewer roots in their communities. Ultimately, the interaction term between the youngest group of voters and urbanity returns statistically insignificant results, along with the interaction terms with the other age cohorts as well. This suggests that urbanity and age operate independently of one another. While voter turnout increases as individuals age through the life cycle, there is no evidence to suggest that this increase in turnout occurs at differing rates depending on whether someone lives in an urban or rural setting.

In the context of wider micro-level turnout literature, the results of this thesis imply that individual-level and psychological considerations in turnout may not operate uniformly across different types of communities and lend credence to challenges of the traditional sociological narratives surrounding political socialization along the urban/rural divide. As individual-level determinants such as education are taken into consideration in the model, they demonstrate a sustained influence on voter turnout independent of whether the individual is in an urban or rural

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setting. Furthermore, in considering the results of the full model and country-specific results, it is clear that any turnout advantage for young voters based on urban or rural residence is dependent on country-specific contexts. This carries considerable implications for the key tenets of micro-level turnout literature, including the tenets detailed in Chapter 2. For example, when considering the tenets of traditional resource models of voter turnout, these findings suggest that living in resource-dense urban centers does not inherently lead to a lower cost of voting for youth voters. These results are also relevant to the political life cycle literature, as all youth age cohorts exhibit negative coefficients for turnout and thus demonstrate that the traditional start-up problems exist across the study countries. Yet, the statistically insignificant interaction terms between age cohort and urbanity demonstrate that the trajectory of the life cycle effects is invariant with respect to the urban/rural divide. Plainly speaking, living in an urban environment does not speed up or slow down a young person's transition to habitual voting within the life cycle.

Limitations

As previously underlined in the methods chapter, there are some limitations in the research design that emerge in the discussion chapter that must be thoroughly addressed. One of the first points that must be noted relates to the clustering of standard errors by country. Given the data's cross-national nature, it is generally considered standard practice to cluster standard error by country ($N=22$). This methodological consideration is a crucial mechanism in ensuring that intercountry correlations are properly accounted for in the models as voters in the same polity are subjected to the same political and electoral institutions, norms, and culture. Without this adjustment, the standard errors could potentially be overconfident and display a flawed

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p-value and statistical significance. Consequently, it is important to interpret the results of the models within the context of this more conservative methodological approach.

A final limitation that needs to be addressed in the discussion also stems from cross-national focus of the thesis. While the results reported in this thesis are suggestive of an urban penalty in youth voter turnout in Western democracies, this penalty would only be a generalized pattern and accordingly, it likely masks the heterogeneity between each of the countries and their unique political cultures and institutions. For example, when further subsetting the CSESWest dataset following the parameters of each youth cohort definition, to only include respondents from Germany, a statistically significant positive interaction (0.531, $p\text{-value} < 0.01$) between the urban variable and the 18-25 year old cohort appears. This effect is otherwise extinguished from the larger pooled model's interaction term results.

Why This Matters

If, as this thesis insinuates, that an urban penalty in youth voter turnout is driven primarily by youth transience, mobility, and a lack of social pressure, then it is clear what policymakers must do in order to prevent and reverse further drops in voter turnout among the youngest cohort of eligible voters. That is, addressing habitually lower youth voter turnout in adapting voting regulations to better accommodate youth mobility. A traditional approach to addressing mobility in voting are automatic voter registration laws. These laws can vary in structure, with the United States having a law dubbed the “Motor Voter Law”, which among other things, requires states to offer citizens the opportunity to register to vote when interacting with motor vehicle authorities. As another example, Canada offers citizens the option to check a box on their annual income tax return to share their information with Elections Canada for the purpose of registering to vote. Yet, these types of options only nominally reach young people,

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who may neglect changing the address on their drivers license or filing their taxes, especially if they did not earn any income or enough of it to trigger filing requirements. Given these realities, a potential solution could be to require information on voter registration to be provided with the signing of new residential leases or requiring that residents report all moves within a set timeframe to their local municipality, as is the case in Germany. While the results of this thesis suggest a potential generalized urban penalty, an outlier is revealed when examining country-specific results in the appendix as the Germany only model reports a statistically significant positive urban advantage for 18-25 year old youth in voter turnout. By tying voter registration to specific acts of mobility like moving through statutory obligations, Germany effectively removes the administrative burden on urban living by requiring all citizens, urban dwellers or not, to report their new domiciles to local authorities after moving.

Overall, the findings of this study are best interpreted with caution, considering the rather conservative methodological approach taken. While this thesis does not uncover confirmatory evidence of an uniform, urban advantage in youth voter turnout across Western democracies, it does nonetheless unveil some suggestive patterns that can guide further research into how the urban-rural divide interacts with youth voter turnout.

Chapter 6: Conclusion

Introduction

The relationship between geographic considerations and voter turnout has often been thought about in the context of feelings of anonymity in the city, which was seen as lowering the cost of electoral abstention amongst urban voters. This thesis sought to see how this conjecture held up against the youngest cohorts of eligible voters by comparing the turnout of urban and rural youth voters in 22 established Western democracies by asking in what ways, if any, does youth voter turnout differ between urban and non-urban communities.

Final Synthesis of Results

One major component covered in this study is the notion of the urban environments being rich in resources such as education and efficacy, which are integral elements in the voter turnout calculus. Logistically, one would then expect that the increased availability of these resources would translate to higher voter turnout among young people in the city. Yet, empirical results from across three distinctly defined youth cohorts cautiously lend credence to a potential urban turnout penalty, given that once individual-level resources such as education and efficacy are controlled for, the effect of urban residence is shown to continue in a negative direction across all definitions of youth. However, the lack of statistically significant coefficients makes it so that reaching any definitive conclusions in this regard is currently not possible.

Given the lack of a universal definition of what age range is considered to be ‘youth’ and to better demonstrate the robustness of this thesis’ findings, the empirical study applied its parameters to two widely utilized definitions of youth in the youth voter turnout literature: anyone at or under the age of 35 and 40. Moreover, a third definition of at or under the age of 25 was introduced in order to determine if the effect of urban residence, if any, was sustained and invariable across the transition out of youthful age into adulthood. Moreover, the inclusion of

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this younger youth cohort permitted the measure of the impact, if any, of urban residency on those who are most likely to lack previous electoral participation and community roots. In this regard, the thesis found promise of the existence of an urban penalty in youth voter turnout regardless of where youth find themselves in the aging process. However, it must be noted that due to the cross-sectional nature of the data, along with non-statistically significant p-values, this study is incapable of claiming a causal link. Notwithstanding these challenges, the consistent negative coefficients produced by the interaction term between urban residence and the respective youth age cohorts provide tentative evidence towards a latent urban penalty in youth voter turnout. Specifically, it shows a consistently negative effect of urbanity on youth voter turnout that is more potent for the youngest voters in the youth continuum. Despite the p-values of many of these estimates not reaching traditional levels of statistical significance, the consistent direction and increasing magnitude underscores the necessity for future investigation into the elements linking urban residence, mobility, and voter turnout among young people.

Implications

This thesis puts forward an assertion that voter turnout operates among youth differently across the urban-rural divide. With this in mind, it would be advisable for political actors to adapt their Get-Out-The-Vote (GOTV) plans accordingly. For example, traditional GOTV campaigns typically focus on getting information out about their candidate and their electoral platform. An adaptation of a GOTV campaign in the spirit of this thesis' assertions would look more like a targeted campaign that focuses on helping young voters overcome the administrative barriers to voting such as registration, providing information on where to find their polling place. As well, on the ground support for young voters should be offered in the places they frequent the most, such as universities, housing complexes and workplaces.

Chapter 6: Conclusion

Aside from adapting political campaigns to meet the needs of the youngest voters in both urban and rural settings, electoral regulations and laws can be amended to lower the logistical and administrative cost of voting for young people. One iteration of such a regulatory change could be linked to youth's high instances of mobility by requiring that residential leases be tied to automatic voter registrations or that address changes be reported immediately to a central authority so that the citizen's voter registration can be automatically updated with this new information. A similar mechanism is seen in Germany's Federal Act on Registration, which requires registering yourself at your place of residence within 14 days. Interestingly enough, in running the study's parameters on the individual countries, the results of Germany were one of the few to stand apart from other polities. This is because they demonstrate a positive urban advantage with the 18-25 year old cohort (0.531, $p\text{-value} < 0.01$). In plain terms, this translates to the odds of an urban youth between the ages of 18 and 25 years old in Germany turning out to vote being 1.7 times higher than their non-urban peers. This stands as a stark contrast to the analysis of the results of the pooled data models, which is suggestive of an urban penalty. Ultimately, this thesis underlines that while urban spaces concentrate highly educated young people who by virtue of their high socio-economic drivers, such as education level, are expected to participate electorally, the reality on the ground is much more complex. This is due to country-specific contexts seemingly driving any differences found between urban and rural youth voters. As such, further research, with a particular focus on differing institutions by country and their respective effects, is needed to determine to what degree, if any, influence they exert on turnout within the context of the urban/rural divide.

Appendix

Appendix

Table 7. Country-specific Results:

Variable / Country	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Great Britain	Greece	Iceland
urban	0.188 (0.173)	-0.383* (0.231)	-0.742** (0.332)	0.286** (0.133)	-0.132 (0.238)	0.031 (0.159)	-0.429*** (0.106)	-0.063 (0.101)	-0.457* (0.192)	0.002 (0.131)	-0.073 (0.147)
age_groups18–25	-1.159*** (0.220)	-1.188*** (0.196)	0.052 (0.316)	-1.267*** (0.246)	-1.486*** (0.215)	-1.488*** (0.104)	-1.154*** (0.124)	-1.422*** (0.101)	-1.809* (0.177)	-0.789*** (0.204)	-1.423*** (0.129)
age_groups26–35	-0.675*** (0.247)	-0.756*** (0.194)	0.473 (0.328)	-0.787*** (0.197)	-0.557** (0.219)	-1.135*** (0.106)	-0.763*** (0.115)	-0.797*** (0.098)	-1.476* (0.177)	-0.215 (0.211)	-0.839*** (0.146)
age_groups36–40	1.275** (0.605)	-0.179 (0.256)	-0.075 (0.388)	-0.578*** (0.225)	-0.286 (0.271)	-0.695*** (0.142)	-0.338** (0.153)	-0.572*** (0.129)	-1.078* (0.200)	-0.084 (0.247)	0.198 (0.244)
Primary/Lower Sec. Educ.	1.653*** (0.456)	-13.920 (327.300)	-12.480 (390.000)	-0.327 (0.439)	0.123 (0.302)	-13.690 (241.200)	0.339** (0.133)	1.014*** (0.266)	-10.910 (295.500)	0.825*** (0.183)	0.637** (0.270)
Higher Sec. Educ.	1.644*** (0.535)	-13.700 (327.300)	-12.270 (390.000)	0.164 (0.435)	0.613** (0.309)	-13.200 (241.200)	0.565*** (0.141)	1.586*** (0.273)	-10.810 (295.500)	1.036*** (0.199)	1.176*** (0.290)
Post-Sec. Educ.	1.567*** (0.443)	-13.800 (327.300)	-12.260 (390.000)	0.315 (0.437)	0.402 (0.270)	-12.740 (241.200)	0.954*** (0.183)	2.335*** (0.320)	-10.430 (295.500)	1.276*** (0.216)	1.177*** (0.294)
University Degree	1.253*** (0.424)	-13.530 (327.300)	-12.220 (390.000)	0.776* (0.441)	0.509* (0.300)	-12.200 (241.200)	1.180*** (0.165)	2.433*** (0.287)	-10.170 (295.500)	1.284*** (0.203)	1.554*** (0.291)
efficacyindex	3.384*** (0.210)	3.113*** (0.208)	1.296*** (0.341)	2.143*** (0.187)	2.273*** (0.256)	2.349*** (0.147)	1.432*** (0.123)	2.575*** (0.101)	2.223* (0.195)	1.316*** (0.130)	1.693*** (0.146)
genderF	0.094	-0.21	-0.16	-0.00	0.022	-0.01	0.18	-0.24	0.060	-0.15	0.04

Appendix

emale	(0.12 3)	8* (0.13 2)	7 (0.18 2)	6 (0.09 3)	(0.13 8)	1 (0.07 3)	1*** (0.07 0)	2*** (0.06 2)	(0.109)	5* (0.09 1)	6 (0.08 7)
urban × 18–25	0.977 *** (0.37 1)	0.885 * (0.46 5)	-0.00 6 (0.99 2)	-0.30 2 (0.30 0)	0.824 ** (0.39 7)	0.461 * (0.26 8)	0.05 7 (0.19 4)	0.531 *** (0.20 0)	0.403 (0.334)	-0.71 2*** (0.25 0)	0.11 2 (0.21 3)
urban × 26–35	-0.29 0 (0.31 4)	0.431 (0.46 8)	-0.09 3 (0.83 6)	-0.32 6 (0.24 7)	0.204 (0.41 1)	0.106 (0.29 3)	0.05 6 (0.19 6)	-0.06 5 (0.18 2)	0.594* (0.304)	-0.81 5*** (0.25 7)	-0.14 1 (0.23 0)
urban × 36–40	-2.04 5*** (0.66 1)	-0.09 1 (0.58 0)	-0.45 2 (0.82 0)	-0.26 4 (0.28 8)	0.374 (0.63 9)	-1.01 4*** (0.35 0)	0.30 4 (0.31 8)	-0.19 6 (0.23 0)	0.951* (0.510)	0.53 8 (0.36 3)	-0.71 0* (0.36 3)
Observat ions	7,927 .00	3,301 .00	1,642 .00	6,24 2.00	6,541 .00	6,730 .00	6,74 4.00	14,55 5.00	2,338. 00	5,05 7.00	9,93 0.00
Squared Cor.	0.02	0.14	0.01	0.08	0.02	0.14	0.06	0.17	0.18	0.06	0.06

Variable / Country	Irel nd	Israe l	Italy	Nether lands	New Zealan d	Norw ay	Portu gal	Spai n	Swe den	Switze rland	USA
urban	-0.26 9** (0.13 7)	-0.31 4* (0.16 6)	-0.05 7 (0.2 69)	-0.273 ** (0.111)	0.207* (0.124)	0.20 7** (0.10 4)	-0.23 5*** (0.08 6)	0.15 5 (0.15 7)	0.02 8 (0.18 3)	0.176* * (0.072)	-0.08 7 (0.08 9)
age_gro ups18–2 5	-1.60 9*** (0.13 5)	-1.20 2*** (0.13 0)	0.12 5 (0.3 06)	-0.995 *** (0.103)	-1.219* ** (0.160)	-1.61 4*** (0.09 4)	-1.61 6*** (0.10 1)	-1.09 7*** (0.15 1)	-0.62 7*** (0.18 1)	-0.723 *** (0.084)	-1.03 4*** (0.08 9)
age_gro ups26–3 5	-1.07 6*** (0.13 1)	-1.03 4*** (0.12 6)	0.17 7 (0.2 50)	-0.836 *** (0.094)	-0.977* ** (0.154)	-0.88 6*** (0.10 3)	-1.14 5*** (0.08 6)	-0.79 2*** (0.14 5)	-0.36 2** (0.18 3)	-1.007 *** (0.074)	-0.88 7*** (0.08 6)
age_gro ups36–4 0	-0.78 4*** (0.17 7)	-0.68 1*** (0.16 6)	0.48 7 (0.3 58)	-0.497 *** (0.121)	-0.538* ** (0.202)	-0.51 6*** (0.13 1)	-0.76 4*** (0.11 2)	-0.10 4 (0.20 8)	-0.65 0*** (0.20 1)	-0.506 *** (0.090)	-0.29 9** (0.11 9)
Primary/ Lower Sec.	2.10 7*** (0.35)	0.29 8 (0.27)	0.51 6 (0.4)	-11.94 0 (206.8)	-0.299 (0.279)	0.69 4 (0.48)	0.43 3*** (0.09)	0.13 8 (0.13)	1.14 0 (0.70)	-0.076 (0.473)	-0.32 7 (0.28)

Appendix

Educ.	7)	1)	67)	00)		1)	6)	5)	1)		9)
Higher Sec. Educ.	2.21 5*** (0.36 0)	0.58 4** (0.26 9)	0.92 4* (0.4 94)	-11.31 0 (206.8 00)	0.041 (0.284)	0.98 0** (0.48 0)	0.85 7*** (0.12 1)	0.49 5*** (0.17 1)	1.49 3** (0.70 4)	0.313 (0.472)	0.64 0** (0.28 3)
Post-Sec . Educ.	2.35 9*** (0.36 4)	1.04 5*** (0.28 8)	—	-11.46 0 (206.8 00)	0.120 (0.285)	0.88 9* (0.50 3)	—	0.32 5* (0.18 5)	3.00 3*** (0.85 7)	0.548 (0.467)	0.75 1** (0.30 0)
Universit y Degree	2.52 3*** (0.37 2)	1.07 8*** (0.27 2)	1.22 4** (0.5 85)	-10.85 0 (206.8 00)	0.528* (0.290)	1.71 3*** (0.48 3)	1.44 1*** (0.13 8)	0.53 5** (0.21 4)	2.05 7*** (0.71 3)	1.213* ** (0.470)	1.54 6*** (0.28 9)
efficacyi ndex	1.15 2*** (0.12 4)	1.57 5*** (0.13 0)	1.64 5*** (0.2 60)	2.514* ** (0.123)	2.132* ** (0.142)	1.96 4*** (0.12 9)	1.14 3*** (0.09 1)	2.02 9*** (0.16 1)	1.72 7*** (0.20 3)	2.283* ** (0.086)	1.73 5*** (0.10 6)
genderF emale	-0.01 0 (0.08 0)	-0.04 3 (0.08 5)	-0.38 1** (0.1 58)	-0.102 (0.064)	-0.019 (0.080)	0.10 8* (0.06 1)	-0.22 4*** (0.05 7)	-0.01 3 (0.09 0)	0.10 9 (0.10 9)	-0.382 *** (0.045)	-0.10 4* (0.05 6)
urban × 18–25	-0.04 4 (0.20 5)	0.80 9*** (0.27 2)	-1.28 8** (0.5 24)	0.335 (0.230)	-0.234 (0.209)	0.55 2*** (0.17 0)	-0.10 9 (0.18 5)	-0.56 1** (0.24 2)	-0.03 0 (0.32 4)	-0.473 *** (0.181)	0.26 2 (0.16 9)
urban × 26–35	0.20 0 (0.20 5)	0.56 5** (0.25 6)	-1.24 1** (0.5 37)	0.380* (0.199)	-0.132 (0.208)	-0.03 9 (0.17 2)	-0.10 2 (0.16 6)	-0.20 3 (0.24 6)	-0.17 6 (0.32 1)	0.076 (0.139)	-0.00 8 (0.15 0)
urban × 36–40	0.60 1* (0.31 3)	0.32 8 (0.35 8)	-0.88 0 (0.7 17)	0.104 (0.271)	-0.391 (0.271)	0.03 1 (0.23 9)	0.10 4 (0.21 4)	-0.65 3* (0.34 6)	0.12 5 (0.39 2)	-0.152 (0.170)	-0.60 0*** (0.20 9)
Observa tions	5,89 4.00	5,44 4.00	1,25 2.00	12,428 .00	11,954. 00	11,0 83.0 0	7,696 .00	4,56 0.00	7,18 1.00	11,81 2.00	10,0 06.0 0
Squared Cor.	0.06	0.09	0.07	0.04	0.09	0.09	0.10	0.10	0.06	0.14	0.12

Appendix

Table 8. Results With All Non-urban Categories Included

Variables	Estimate	Std. Error
Community Type (Ref: Rural area or village)		
Small or Middle-sized Town	-0.064	-0.077
Town Suburb	-0.018	-0.069
Large Town or City	-0.08	-0.077
Age Cohorts (Ref: 41+ Years)		
18–25 Years	-1.083** *	-0.135
26–35 Years	-0.646** *	-0.146
36–40 Years	-0.440** *	-0.097
Interaction Terms (Community Type × Age)		
Small Town × 18–25	-0.132	-0.106
Suburb × 18–25	-0.007	-0.094
City × 18–25	-0.129	-0.163
Small Town × 26–35	-0.190 .	-0.109
Suburb × 26–35	-0.196	-0.127
City × 26–35	-0.241 .	-0.146
Small Town × 36–40	-0.089	-0.147
Suburb × 36–40	0.198	-0.136
City × 36–40	-0.074	-0.111
Educational Attainment (Ref: No Education)		
Primary / Lower Secondary	0.344**	-0.109
Higher Secondary	0.668***	-0.109
Post-Secondary (Non-University)	0.835***	-0.127
University Degree	1.194***	-0.132
Political Efficacy Index	1.835***	-0.122
Gender (Female)	-0.083 .	-0.042
Fixed Effects		
Country Fixed Effects (22 countries)	Yes	—
Election Year Fixed Effects (26 years)	Yes	—

Appendix

Model Diagnostics		
Observations	160,317	—
Adjusted Pseudo R ²	0.806	—
BIC	3,789.40	—

Table 9. Youth (18-40) Urban/rural Turnout by Country

Country	Youth (18-40) N	Urban Youth Turnout (%)	Rural Youth Turnout (%)	Urban Gap (%-pts)
Australia	2379	98.00	97.70	0.32
Austria	974	86.60	86.10	0.46
Belgium	473	87.50	92.80	-5.31
Canada	2014	84.60	84.80	-0.27
Denmark	2321	96.00	94.40	1.59
Finland	2329	78.70	73.70	4.99
France	2264	75.70	80.50	-4.82
Germany	4805	89.80	85.50	4.34
Great Britain	664	65.90	60.20	5.66
Greece	1883	84.10	89.50	-5.39
Iceland	4321	90.30	90.70	-0.36
Ireland	2467	81.80	81.90	-0.15
Israel	2816	87.80	81.60	6.28
Italy	574	68.00	83.00	-15.00
Netherlands	4109	91.10	90.80	0.27
New Zealand	4101	89.80	89.80	-0.03
Norway	4294	85.90	79.80	6.17
Portugal	2820	62.70	68.20	-5.43
Spain	2135	76.60	82.00	-5.43
Sweden	2738	91.10	91.80	-0.70
Switzerland	4778	61.10	58.70	2.39
United States	3305	79.30	78.90	0.44

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