

Are 16-year-olds mature enough to vote? Evidence from the *Voto Joven* in Latin America

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Abstract

Latin American countries were among the earliest worldwide to lower the voting age to 16, beginning with Nicaragua in 1984 and Brazil in 1988, followed more recently by Ecuador in 2008 and Argentina in 2012. Yet scholarly research examining the impacts of this policy change has predominantly concentrated on a limited number of European cases. This paper addresses that gap by analyzing data from the five most recent waves (2014–2023) of the AmericasBarometer surveys, which include respondents aged 16–17 in the four Latin American countries with voting eligibility at 16. I estimate latent political maturity using a Bayesian factor analysis model and find substantial variability in political maturity within all age groups. I find that, on average, individuals aged 16–17 display political maturity levels comparable to those of 18–19-year-olds and most older voters, indicating no meaningful difference in their overall voting aptitude.

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1 Introduction

In 2012, Argentina passed the “Voto Joven” law (Congreso de la Nación Argentina, 2012), making it the fourth Latin American country to lower the voting age for national elections to 16. Supporters of the law argued that lowering the voting age would enhance the political representation of young people (Rodriguez, 2016). Opponents argued the decision was rushed and could undermine electoral integrity. Among other concerns, they pointed out that voters 16 and 17 years old might lack moral and cognitive maturity, a meaningful stake in the political process, and the necessary information to engage responsibly in political affairs. They also suggested that younger voters might be more susceptible to political manipulation (Pomares and Leiras, 2012; Rodriguez, 2016).

Arguments against lowering the voting age to 16 echo those raised decades ago when democracies around the world debated and eventually lowered the voting age to 18 (Beck and Jennings, 1969, p. 377). At that time, critics argued that 18-year-olds were not mature enough to make well-informed political judgments, were irresponsible and easily influenced, lacked sufficient experience and knowledge, and were generally apathetic toward politics. These concerns aligned with the prevailing scholarly paradigm, which viewed voter competence as developed through a gradual process of political socialization, primarily during the years leading up to adulthood (Campbell et al., 1960; Sigel, 1965). Despite these objections, the voting-at-18 reforms were passed, in part due to political events that swayed opinion in favor of reform. Proponents pointed out that 18-year-olds had important responsibilities, had completed twelve years of education (Beck and Jennings, 1969, p. 378), and that granting them the right to vote would help cultivate lifelong

participation habits. One particular responsibility—military service—bolstered support for lowering the voting age to 18 in the U.S. during the Vietnam War years, summarized in the widely-recognized slogan, “Old Enough to Fight, Old Enough to Vote.”

The hesitancy about further lowering the voting age to 16 stems partly from the fact that individuals aged 16 lack some of the obligations and education of those aged 18: they are typically ineligible for military service and have completed less than 12 years of schooling. Some of the arguments given in the past to justify lowering the voting age to 18 are thus less relevant in the current debate about lowering the voting age to 16. The remaining justifications primarily consist of counterarguments to opposing points of view, such as the claim that individuals aged 16 are now more interested in politics than they used to be and that they may be treated as adults under certain circumstances. Blais, Massicotte, and Yoshinaka (2001, p.43) note that individuals aged 16 “may hold a job, [...] may have to pay taxes and in some instances, [...] may be prosecuted in a court of law.”

A more contemporary reason for further reducing the voting age is that 16-year-olds have a significant stake in addressing some of the most pressing issues of the modern era (Silbaugh, 2020; Wray-Lake and Oosterhoff, 2021), such as gun violence, climate change, the rise of artificial intelligence, and public debt. These issues will have a disproportionate impact on young people’s lives, and their perspectives can provide valuable insights for effective policy-making. Granting voting rights to 16-year-olds could enhance the representativeness of the policy-making process, ensuring that the generations most impacted by these decisions have a say in shaping the direction of public policy.

Historically, the expansion of voting rights has required more than justifications for the

change. In most cases, expansions of the franchise have been the result of persistent activism by suffragist groups in alliance with political parties seeking a short-term electoral advantage (Przeworski, 2009). The four Latin American countries that adopted voting-at-16 are no exception (Sanhueza Petrarca, 2020): the reform was led by social movements supportive of a more inclusive political system (e.g., Brazil in 1988) and sponsored by governing political parties with programs advocating for the political inclusion of young people (e.g., Argentina in 2012, Ecuador in 2008, and Nicaragua in 1984).¹ In these countries, opposition to the reform came not (or not solely) from concerns about adolescents' political maturity, but from concerns that the government's support was driven by opportunism, such as seeking an immediate electoral advantage—though scholars note such advantages are often short-lived, as in Argentina (Huebner and Sanhueza Petrarca, 2024). My goal here is to evaluate whether concerns about the political maturity of adolescent voters, in particular, appear justified. Other considerations, such as the motivations of parties and actors advocating in favor of the reform, are beyond the scope of this paper.

Most of the research on voting-at-16 has focused on a few European countries and regions: Austria, the first European country to lower the voting age to 16 for all elections in 2007 (Bronner and Ifkovits, 2019; Wagner, Johann, and Kritzinger, 2012; Zeglovits and Aichholzer, 2014); Scotland, which lowered the voting age to 16 for the 2014 independence referendum and subsequently for all national and local elections (Eichhorn, 2018); selected states in Germany that allow individuals aged 16-17 to vote in statewide and local elections (Leininger, Schääfer, et al., 2024; Leininger, Sohnus, et al., 2023); and mock

¹Cuba set the voting age at 16 with the adoption of its 1976 Constitution, permitting 16- and 17-year-olds to vote in elections at all levels. However, I exclude Cuba from my analysis due to its classification as a closed authoritarian regime with no multi-party elections since the Cuban Revolution (Coppedge et al., 2025), and also for practical reasons, as the survey data I rely on does not include Cuba.

elections for adolescents in selected municipalities in Norway (Bergh, 2013), Denmark (Larsen, Levinsen, and Kjaer, 2016), and Belgium (Stiers, Hooghe, and Dassonneville, 2021).² This body of research has examined the effects of lowering the voting age on political engagement and voter turnout (Leininger, Schaafer, et al., 2024; Stiers, Hooghe, and Dassonneville, 2021; Zeglovits and Aichholzer, 2014), political maturity (Bergh, 2013; Eichhorn, 2018; Wagner, Johann, and Kritzing, 2012), and political polarization (Bronner and Ifkovits, 2019; Graf et al., 2024).

Empirical work on voting age reform in Europe frequently focuses on whether 16-17-year-olds are mature enough to vote, but the concept of political maturity is not consistently defined, with most studies considering combinations of political knowledge, civic engagement, and the quality of voter choices (e.g., consistency between preferences and choices). Among these studies, Bergh (2013) finds no significant difference in maturity levels between voters aged 16-17 and older voters in mock elections in selected Norwegian municipalities, and Wagner, Johann, and Kritzing (2012) find no significant difference in the ability of voters aged 16-17 to make quality choices compared to older voters in national elections in Austria. If the concept of political maturity is broadened to include the ability to make choices leading to moderate political outcomes, then not all findings in the European literature offer reassurance. Bronner and Ifkovits (2019), also using data from general elections from Austria, find that lowering the voting age to 16 may increase political polarization as newly enfranchised 16-17-year-olds display more extremist political attitudes. A recent reanalysis of Bronner and Ifkovits (2019)'s data, however, shows that

²In June 2024, Germany and Belgium lowered the voting age to 16 for European Parliament elections. Then, in July 2025, the UK government announced plans to lower the voting age to 16 by the next general election. Together, these steps reflect growing interest in voting-age reform across Europe.

the effect of eligibility to vote among 16-17-year-olds on ideological extremism disappears after correcting a coding error (Graf et al., 2024).

No comparable body of research exists on the experience of the four Latin American countries that have lowered the voting age to 16, beginning with Nicaragua in 1984 and Brazil in 1988, followed two decades later by Ecuador (2008), and more recently Argentina (2012). The little research that has been done includes a chapter by Sanhueza Petrarca (2020) that uses Latinobarometer data to look at the relationship between voting age and support for democracy, and reports by government offices and think tanks evaluating voting age proposals and reforms in specific countries (e.g., Ministerio del Interior 2021, CIPPEC 2012, 2016). One key reason for the lack of scholarly research on the topic is the scarcity of data on the political attitudes and behaviors of teenagers in Latin American countries.

In this paper, I examine whether teenagers are sufficiently mature to vote using data from the 2014 through 2023 waves of the AmericasBarometer project (LAPOP, 2014–2023), which included interviews with individuals aged 16-17 in the four Latin American countries with voting at 16. I first develop a model-based measure of political maturity and then use it to analyze differences between individuals aged 16–17 and older voters, more comprehensively and consistently than has been done in the past for other countries. The analysis done here sheds light on the following question: When allowed to vote, do individuals aged 16-17 display similar levels of political maturity as older voters? Results suggest that political maturity is only modestly and inconsistently associated with age, and that individuals aged 16-17 are indistinguishable from those aged 18-19 in terms of overall voter competence.

2 Voting at 16 and political maturity

A widely cited 2004 report by the UK Electoral Commission examined whether individuals aged 16-17 are mature enough to vote (Commission, 2004). The report identifies “social awareness and responsibility” as the key elements of maturity, emphasizing that these qualities determine voters’ ability to “consider the effects of [their own] actions not just on themselves, but also on wider society” (p. 23). It dismisses “physical maturity” and “intellectual development” as relevant factors for political maturity, noting that they are not considered when determining voting eligibility for older individuals (p. 23). This perspective contrasts with much of the empirical literature on political maturity and voting age, which draws on foundational studies of political belief systems (e.g., Converse, 2006) to define voter competence in terms of political knowledge and attitudinal consistency. The report further claims that sufficient maturity cannot be empirically tested, instead deferring the decision to “the views of society as a whole” (p. 25).

Chan and Clayton (2006) challenge the view presented in the UK Electoral Commission report. They define political maturity as “one’s ability and willingness to consider the effects of decisions on society at large as well as oneself” (p. 538) and argue that the competent exercise of voting rights requires the following:

“political convictions that are consistent (do not directly contradict each other), hang together (succeed in connecting relevant reasons in common among different public issues), consequentially rational (appreciate the expected consequences of a choice) and are not subject to whimsical revision.” (p. 542)

Although attitude consistency has long been considered a desirable trait in political

reasoning (Converse, 2006), Chan and Clayton (2006)'s criteria set a high bar, as no such level of intellectual development is required for voting eligibility among older, native-born individuals in any country. Even in the context of granting voting rights to immigrants, naturalization requirements do not assess voter competency in the way described by Chan and Clayton (2006). Instead, naturalization focuses on civic integration, which is typically evaluated based on factors such as length of residency, language proficiency, and knowledge of the country and its society (Goodman, 2012; Levin, 2013). While these criteria may correlate with aspects of voter competence, they do not necessarily ensure the high reasoning ability proposed by Chan and Clayton (2006).

Chan and Clayton (2006) also dispute the claim made by the UK Electoral Commission that it is not possible to test whether individuals possess sufficient political maturity to vote. Using data from a British panel survey, they compare individuals aged 16-17 with older age groups in terms of self-reported interest in politics, factual political knowledge, and the internal consistency of policy preferences, which they regard as indicators of voter competence. They conclude that "the sixteen and seventeen-year-old age group lacks sufficient political maturity to be enfranchised" (p. 555), although their evidence does not consistently point to individuals aged 16-17 being less politically mature than those aged 18-19.

One limitation of the research design used by Chan and Clayton (2006) is that it compares the attitudes of individuals aged 16-17, who are ineligible to vote, with older respondents who are eligible to vote. As Bergh (2013) points out, differences in maturity between these age groups may be influenced by the absence or presence of voting rights, rather than by age alone. Bergh (2013) tests whether enfranchisement leads to an increase

in political maturity, as defined by Chan and Clayton (2006), using data from a Norwegian trial in which the voting age was lowered to 16 in some municipalities. He finds a maturity gap between individuals aged 16-17 and those aged 18 that does not close when the former are granted voting rights. However, Bergh (2013) clarifies that, while gaps were consistently observed across the indicators used to measure political maturity, “the differences between [individuals aged 16-17 and those aged 18] are not substantially large” (p. 99). These results may have limited generalizability because individuals aged 16-17 in the Norwegian trial were only allowed to vote in municipal council elections, not in concurrent county council elections, for example. The scope of enfranchisement in the trial may not have been substantial enough to induce significant changes in political maturity. As Huebner and Sanhueza Petrarca (2024, p. 10) note about voting-at-16 trials, “young people who are allowed to vote tend to be acutely aware of their partial or temporary enfranchisement.”

A separate study by Wagner, Johann, and Kritzinger (2012) addresses a similar question using data from a nationwide election in Austria, where voting at 16 has been in place since 2007. It finds that differences between age groups (such as 16-17 vs. 18-21) are not statistically significant across several indicators of “quality of vote choice,” a concept closely related to political maturity, as defined by Chan and Clayton (2006), and measured using similar indicators. Wagner, Johann, and Kritzinger (2012, p.374) define quality of vote choice as the ability of citizens “to select accurately between political actors and make a choice that is consistent with their own views, attitudes and preferences.” They link this definition to Chan and Clayton’s (2006) concept of political maturity, by observing that if 16-17-year-olds “lack the requisite ability and motivation to participate,” then they should

also be “less inclined to think carefully [...] and therefore choose parties that do not reflect their preferences.”

McAllister (2014)’s research on the debate over lowering the voting age in Australia also engages with the concept of political maturity. While he does not offer an explicit definition, he suggests it is “most commonly measured by interest in politics and by political knowledge” (p. 77). Using data from Australian voters aged 18 and over, McAllister finds that younger adults tend to be less politically knowledgeable and less interested in politics. He concludes that these “results [...] seriously question the assertion that young people are politically more mature now than in the past” (p. 80). It is important to note, however, that the voting age in Australia—where this study was conducted—remains 18, and that McAllister’s analysis excludes 16- and 17-year-olds.

The findings from this body of literature are highly mixed and inconclusive. One reason for this is the variation in electoral contexts across studies, with few focusing on real-world elections that span large geographical areas. Another reason is that political maturity is a multidimensional concept, and all studies to date have examined its individual dimensions separately, making it difficult to draw clear conclusions about overall differences in political maturity between age groups.

A central contribution of this paper is its conceptualization of political maturity as a latent trait that positively influences people’s willingness and ability to make political choices, analyzed in a cross-national comparative framework. In doing so, I focus on three related hypotheses: (1) that older individuals exhibit greater political maturity than younger individuals; (2) that there is a substantial and consistent gap in political maturity between 16–17 and 18–19-year-olds; and (3) that this age pattern in political maturity

is more pronounced in countries with a history of high population literacy—such as Argentina—than in countries with more recent expansions of mass literacy, such as Brazil, Ecuador, and especially Nicaragua. These expectations reflect the conventional wisdom about age and civic competence and theoretical considerations regarding the development of civic competence and the institutional contexts that support it.

3 Comparative Political and Economic Context

The voting-at-16 reforms were implemented under distinct political circumstances across the four Latin American countries considered in this study. In Nicaragua and Brazil, these reforms emerged during political transitions in the 1980s. Nicaragua introduced the reform in 1984, shortly after the Sandinista Revolution overthrew the Somoza dictatorship. This was perceived as a strategic effort by the Sandinistas to convert their popularity among youth into future electoral support. Brazil, in turn, enacted its reform in 1988, soon after the collapse of its military dictatorship in 1985. This was driven by pressure from pro-democracy movements and as part of the adoption of a new constitution aimed at expanding political rights after decades of authoritarian rule. Two decades later, Ecuador (2008) and Argentina (2012) followed suit, both as part of broader efforts to expand democratic participation. Argentina's reform, however, was also seen as a strategy to broaden electoral support for Kirchnerismo. While voting is voluntary in Nicaragua, it is compulsory in Argentina, Brazil, and Ecuador—though optional for 16- and 17-year-olds in those countries (Huebner and Sanhueza Petrarca, 2024; Katz and Levin, 2018a).

Despite the similarities in their voting-at-16 reforms, the political contexts in these

Table 1: Country-Level Contextual Differences

Contextual Factor	Argentina	Brazil	Ecuador	Nicaragua
Voting Age	16 (since 2012)	16 (since 1988)	16 (since 2008)	16 (since 1984)
Compulsory Voting	Yes (18+)	Yes (18+)	Yes (18+)	No
Democracy Score (V-Dem and Freedom House)	0.79 F (2014-2023)	0.76 F (2014-2023)	0.60 PF (2014-2021) F (2022-2023)	0.24 PF (2014-2018) NF (2019-2023)
Literacy Rate (Age 15 and Older)	98%	93%	94%	83%
% Completing Primary Education	96%	90%	97%	73%
Compulsory Education (Duration in Years)	14	14	15	7
Weekly Workload of Course Closest to Human Rights (Hours at 14 Years Old)	4	3	5	2
GDP per capita (constant 2015 US\$)	\$12,975	\$8,850	\$5,960	\$2,110
Poverty Rate (headcount ratio at \$6.85 a day, 2017 PPP)	11%	25%	30%	42%
Income Inequality (% held by highest 10%)	31%	41%	35%	37%

countries vary considerably. Three of these countries—Argentina, Brazil, and Ecuador—are considered electoral democracies, while Nicaragua has evolved into an electoral autocracy. According to data from V-Dem’s polyarchy scores (see Table 1), which range between 0 and 1, with a threshold of 0.5 for identifying electoral democracies (Coppedge et al., 2025),

both Argentina and Brazil score in the high .70s, Ecuador scores just above the threshold by 0.10 points, and Nicaragua falls well below, placing it firmly on the authoritarian side of the scale. In its assessment of political rights and civil liberties, Freedom House classifies Argentina and Brazil as ‘free’ throughout the period under consideration, Ecuador as ‘partially free’ for most of this period, and Nicaragua as ‘not free’ starting in 2019.³

The political realities in these countries have been marked by distinct challenges. Argentina’s 2001 economic crisis led to significant social unrest and the resignation of President Fernando de la Rúa, followed by two decades of Kirchnerismo, characterized by political polarization and economic instability, which culminated in the election of the libertarian outsider Javier Milei in 2023. Brazil’s recent political history has been defined by the impeachment of President Dilma Rousseff in 2016, Jair Bolsonaro’s polarizing presidency, and the Operation Car Wash corruption scandal, which temporarily implicated Luiz Inácio Lula da Silva before his successful defeat of Bolsonaro in 2022. Ecuador has faced numerous political crises, including the ousting of three presidents in the late 1990s and early 2000s, and more recently, violent protests against austerity measures (2019-2022) and President Guillermo Lasso’s dissolution of the National Assembly and call for early elections in 2023. Nicaragua’s democratic backsliding accelerated under Daniel Ortega, whose return to power in 2006 was followed by the removal of presidential term limits in 2014, the prosecution of opposition candidates in 2021, and increasing repression of political dissenters.

³The contextual information shown in Table 1 covers different periods for some variables and countries, depending on availability. For literacy, Argentina’s figures cover 2014–15, Brazil and Ecuador’s figures cover 2014–22, and Nicaragua’s value corresponds to 2015. For poverty and inequality, Argentina’s and Brazil’s figures cover 2014–22, while Nicaragua’s value corresponds to 2014. Lastly, the weekly workload of the course closest to human rights is based on a report published in 2006 that reflects documents from 2005 at the latest. All other figures, unless specified otherwise in the table, cover 2014–23.

These political differences are accompanied by significant economic and educational disparities (see Table 1). In Argentina, the average GDP per capita for the period under consideration stood at \$12,975 in 2015 US\$, six times higher than Nicaragua (\$2,110), twice as much as Ecuador (\$5,960), and 50% more than Brazil (\$8,850). Despite these differences, all countries exhibit high levels of income inequality and a substantial share of the population living below the poverty line. Access to quality education also varies significantly. Argentina, Brazil, and Ecuador maintain relatively high rates of literacy and primary education completion (above 90%) and offer at least 14 years of compulsory education. In contrast, Nicaragua only requires 7 years of compulsory education, with literacy and primary education completion rates of only 83% and 73%, respectively.

These economic and educational differences are particularly relevant for 16- and 17-year-old voters, whose exercise of voting rights could be influenced by exposure to citizenship education (Eichhorn and Bergh, 2021). Unfortunately, no comprehensive database exists covering the content of educational curricula in the four Latin American countries included in this study. The most comprehensive database of this kind is the International Civic and Citizenship Education Study (ICCS) by the International Association for the Evaluation of Educational Achievement. However, among Latin American countries, recent releases of the database include only Brazil, Chile, Colombia, the Dominican Republic, Guatemala, Mexico, Paraguay, and Peru. A report published by the Instituto Interamericano de Derechos Humanos (2009) suggests that educational programs in these four countries include topics related to human rights, encompassing subjects such as civics, democratic values, and political participation. The number of hours dedicated to the instruction of these subjects varies considerably, from 5 hours per week in Ecuador to only 2

hours per week in Nicaragua.

These contextual differences imply that voters in Argentina, Brazil, Ecuador, and Nicaragua exercise their voting rights under vastly different political, economic, and educational circumstances. Previous literature suggests that the relationship between voting-at-16 reforms and the civic orientations of 16-year-olds depends significantly on the context in which the reform is introduced (Eichhorn and Bergh, 2021). Therefore, I expect to see differences in the political maturity of 16-year-old voters in these four countries, as well as differences compared to older voters. In countries with stronger democratic traditions and high levels of adult literacy and education—such as Argentina—the view that political maturity increases with age is more likely to hold true, as accumulated life experience may enhance civic responsibility and informed political decision-making. This is less likely to be the case in countries with weak or absent democratic traditions and relatively low levels of adult literacy and education—such as Nicaragua—where there is little reason to expect older individuals to have been consistently socialized into democratic norms or exposed to meaningful civic education throughout their lives.

4 Indicators of Political Maturity

The AmericasBarometer project considers 16- and 17-year-olds to be “voting age adults” in countries where the voting age has been lowered to 16, and therefore routinely includes voters aged 16 and 17 in its surveys of the four countries in this analysis. This offers a unique opportunity to test the conventional wisdom about the political maturity of individuals aged 16-17 compared to older respondents. Table 2 provides information on

sample size by country.⁴ For each country, I collected data from the last five waves of the AmericasBarometer, covering from 2014 to 2023. This timeframe ensures that all countries are included in the analysis for the entire period under consideration, as Argentina, the last of these countries to lower the voting age to 16, did so in 2012. The resulting total sample size is 38,021 respondents—more than 9,000 per country. Of these, 1,577 are aged 16-17 and 2,015 are aged 18-19.⁵

Table 2: Sample Size by Country

Country	Total sample size	16-17 years old	18-19 years old
Argentina	9,119	279	379
Brazil	9,072	405	439
Ecuador	9,176	516	620
Nicaragua	10,654	377	577
Total	38,021	1,577	2,015

The table gives sample size by country, for all respondents and for the two youngest age groups.

I measure political maturity using indicators consistent with those used in previous studies.⁶ The first two indicators evaluate respondents' level of political interest and knowledge. Political interest is measured based on responses to the question “How much interest do you have in politics: a lot, some, little or not at all?” using a four-point scale. For political knowledge, while previous studies focused on factual knowledge (such as respondents' ability to accurately sort political parties by ideological position), I rely on interviewer

⁴Table A2 in the Appendix breaks down the sample size by country and survey wave.

⁵I imputed missing values in all variables included in the analysis using a model-based approach implemented via the R package *mice* (Buuren and Groothuis-Oudshoorn, 2011). The imputation procedure included indicators of political maturity along with contextual factors (country, survey year, election year indicator), demographic variables (age, gender, education, income, employment status), and attitudinal measures (government approval, congressional trust, ideological positioning, and perceptions of electoral integrity).

⁶Table A3 in the Appendix contains information on question-wording and availability for every indicator of political maturity used in the analysis.

ratings of respondents' political knowledge due to data availability constraints.⁷ While limited, these two indicators provide insight into respondents' attentiveness to politics and their basic understanding of political issues.

The third and fourth indicators assess respondents' political efficacy. One measures external political efficacy based on the question: "Those who run the country are interested in what people like you think. To what extent do you agree or disagree with this statement?" The other measures internal political efficacy based on the question: "You feel that you have a good understanding of the country's most important political issues. To what extent do you agree or disagree with this statement?" These two indicators, taken together, offer a good indication of respondents' confidence in their ability to participate effectively in the political process.

In light of the history of political instability in the four Latin American countries under consideration, the next two indicators in the analysis concern support for the political system. To learn about respondents' diffuse support, which refers to "the core values and procedures embodied in the political regime" (Katz and Levin, 2018b, p. 55), I consider responses to a question that asks: "Democracy may have problems, but it is better than any other form of government. Up to what point do you agree or disagree with this

⁷A Methodological Note from the LAPOP Lab explains that, beginning in 2016/17, factual indicators of political knowledge were replaced with interviewer assessments (Cohen and Zechmeister, 2018). The note reports that these assessments display high validity: they correlate in expected ways with other respondent characteristics (such as education and political interest) and yield similar results to factual knowledge measures when included in regression analyses. A potential limitation of this indicator is that interviewer ratings may be biased against certain demographic groups (Enders and Thornton, 2022). In my analysis of 2014–2023 AmericasBarometer data across the four countries, I found statistically significant but substantively small differences in ratings between White and Non-White respondents after controlling for education, gender, income, and other political maturity indicators. These differences were inconsistent in direction—two countries showed differences favoring White respondents and two showed differences favoring Non-White respondents—indicating no systematic racial bias. However, the same analysis suggests that women are consistently rated as less knowledgeable than men across all countries (see Figure A1 in the Appendix).

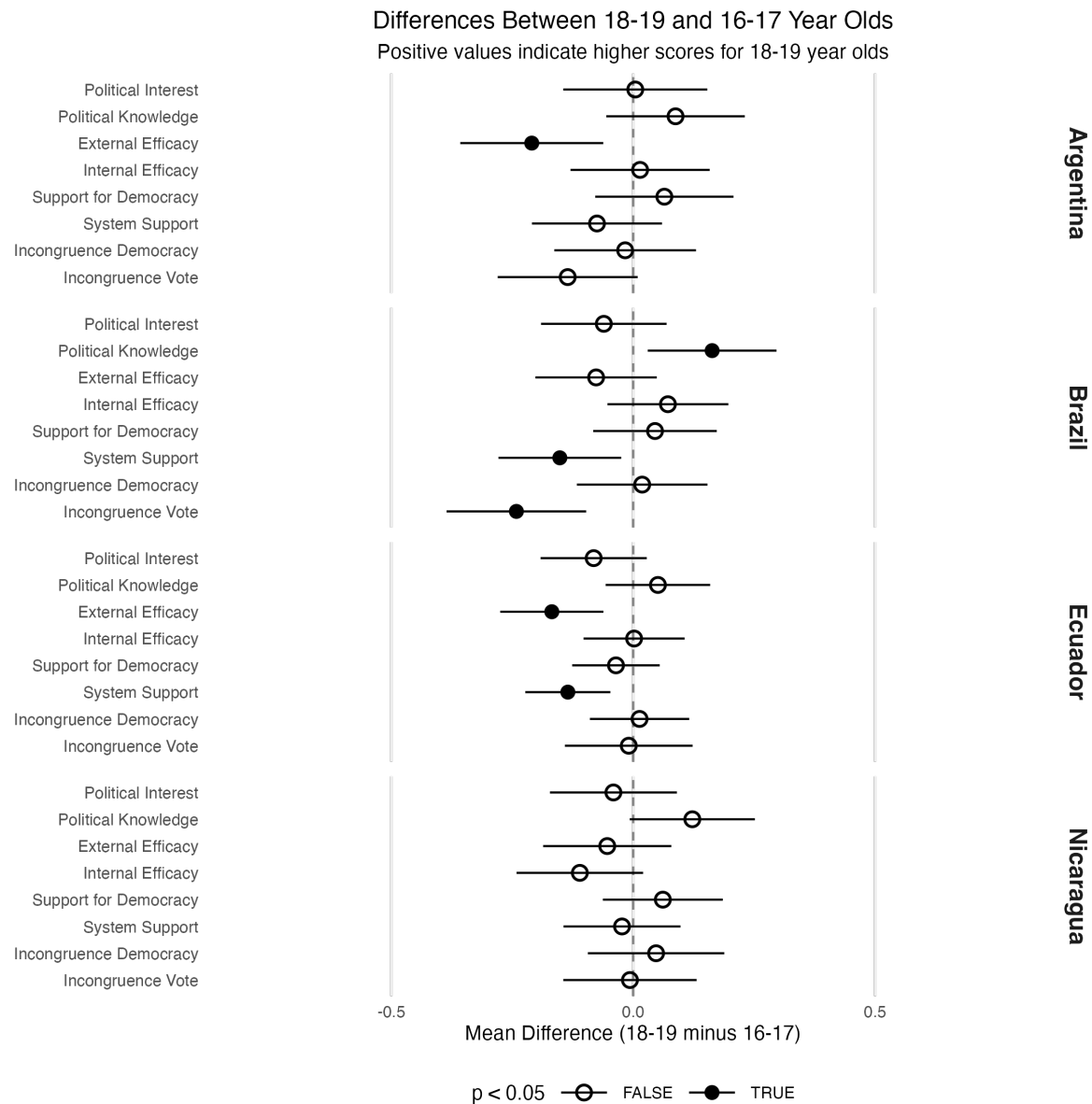
statement?” Additionally, I consider respondents’ thoughts on the extent to which the democratic political system in each country should be supported. These two indicators help evaluate whether including 16-17-year-olds in the electorate might undermine political support and potentially exacerbate political instability.

One last dimension of political maturity considered in previous studies is the congruence between political attitudes, such as ideological consistency across different issues or alignment between policy preferences and voter choice. Here, I evaluate attitudinal congruence with two indicators. The first captures agreement between responses to six survey questions on regime support. The second measures consistency between intention to vote for the president’s party and four variables that should correlate positively with incumbent support: trust in the president, presidential approval, positive perceptions of the national economy, and positive perceptions of personal finances.⁸ To create these congruence indicators, I estimated two linear regression models: one for support for democracy and another for voter choice. For the democracy model, I used the absolute value of residuals as an individual-level indicator of attitude congruence, where smaller discrepancies between reported and predicted values indicate greater consistency in responses. For voter choice, I created a binary indicator that measures whether an individual’s actual vote for the president’s party matched their predicted preference, serving as an indicator of their ability to vote for their preferred party.

These eight indicators collectively reflect cognitive and affective orientations toward

⁸Appendix Table A3 presents the question wording and data availability for all predictors included in the regression models measuring attitudinal consistency. In the democracy support model, the predictors are: system support, satisfaction with democracy, tolerance of military coup, tolerance of autoup, elections precedence, and freedom precedence. In the voting intention model, the predictors are: trust in the president, presidential approval, evaluations of the national economy, and evaluation of personal finances.

Figure 1: Differences Between Age Groups by Indicator of Political Maturity



The plot shows the estimated difference in means between indicator values for respondents aged 18-19 and 16-17, for each indicator of political maturity and country. All indicators are standardized, so differences should be interpreted in terms of standard deviations. Positive values indicate higher scores for 18-19-year-olds. Filled circles indicate differences that are statistically significant at a 95% confidence level.

the political system—dimensions long regarded as foundational to voter competence (Almond and Verba, 1963). To facilitate comparison, I standardized all eight indicators to

have a mean of zero and a standard deviation of one (summary statistics in the original scales are provided in Table A4 in the Appendix). For each indicator and country, I tested whether differences were statistically significant between responses from 16-17- and 18-19-year-old respondents. Figure 1 displays the estimated mean differences between these age groups across all indicators of political maturity for each country (indicator means and differences in the original scales are provided in Table A5 in the Appendix). This preliminary analysis helps determine whether statistically significant differences exist between 16-17- and 18-19-year-olds on each dimension of political maturity, and enables comparison with findings from previous studies that examined selected indicators.

The analysis reveals minimal age-based differences in political maturity indicators across all four countries. Political interest shows no statistically significant difference between 16-17- and 18-19-year-olds in any country. While interviewers rated 18-19-year-olds as slightly more politically knowledgeable in Brazil, this difference was modest, representing a difference of less than 0.2 standard deviations. Regarding internal political efficacy, both age groups demonstrated comparable levels of confidence in their ability to understand political issues across all countries. External efficacy displays moderate differences in Argentina and Ecuador, with 16-17-year-olds showing higher confidence in government responsiveness than their older counterparts. Similarly, regime support patterns contradict concerns about younger voters: in no country did 16-17-year-olds exhibit less support than 18-19-year-olds. In fact, in Brazil and Ecuador, younger respondents showed significantly higher system support. Finally, the analysis of attitudinal congruence revealed one significant difference: in Brazil, 16-17-year-olds showed higher levels of incongruence in their vote choice. Even where these differences are statistically significant, their

magnitude is consistently small, with differences typically below 0.2 standard deviations. Taken together, these findings suggest that 16-17-year-olds demonstrate political maturity comparable to that of 18-19-year-olds across multiple dimensions.

5 Political Maturity as a Latent Variable

I estimate respondents' overall political maturity using a Bayesian latent variable model, which treats political maturity as a continuous, unobservable trait that influences measurable indicators of voter competence. The model draws on eight indicators of political maturity, each providing insight into a latent trait presumed to influence survey responses. Similar measurement strategies have been applied to other latent concepts, such as the degree of democracy (Treier and Jackman, 2008) and political support (Katz and Levin, 2018b). This study is the first to use such an approach to derive a comprehensive measure of political maturity.

Suppose that y_{ij} represents the value taken by a standardized indicator of political maturity j for individual i , with $j = 1 \dots 8$. The factor analytical model assumes that y_{ij} can be written as a linear combination of a latent level of political maturity m_i for individual i and an error term ϵ_{ij} : $y_{ij} = l_j m_i + \epsilon_{ij}$.⁹ The key assumption underlying the model is that indicator values y_{ij} are independent conditional on the level of political maturity m_i (Jackman, 2009, p. 438). The parameter l_j is a factor loading that encapsulates the amount of information about y_{ij} that can be learned simply by looking at individual maturity scores m_i . I imposed cross-country equality constraints on factor loadings to establish measure-

⁹The model does not include intercept parameters because indicators of political maturity y_{ij} have been standardized to have mean zero and unit standard deviation.

ment invariance (Davidov, 2009). Without these constraints, estimated political maturity scores might not be comparable between countries, which would compromise the accurate interpretation of results.

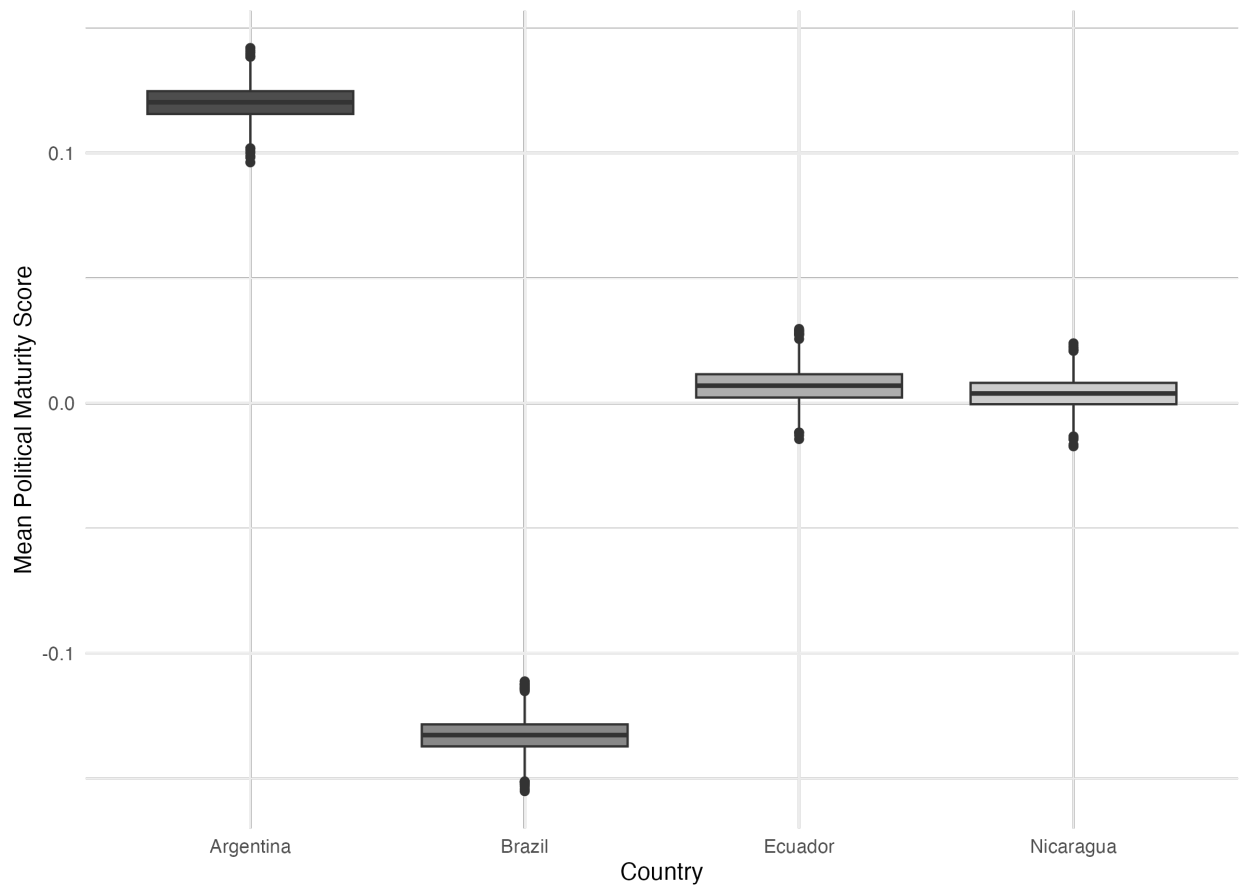
The model, as specified in the previous paragraph, is not identified because different combinations of l_j and m_i are consistent with similar observed values for indicators y_{ij} (Jackman, 2009, p. 440). To identify the model, I follow the common procedure of fixing the value of one of the factor loadings. I do so in a data-informed manner by setting l_1 (for political interest) to the estimated factor loading from a prior confirmatory factor analysis (CFA) on the same indicators.

I carried out the estimation on the entire sample of 38,021 respondents, covering individuals of all ages in the four countries under study, using Markov Chain Monte Carlo (MCMC) simulation implemented via Stan (Carpenter et al., 2017). I let the MCMC algorithm run for 2,000 iterations, including a warm-up phase of half of the iterations, across three parallel chains. After running the model, I evaluated convergence by looking at trace plots and calculating Gelman–Rubin potential scale reduction factors (Gelman and Rubin, 1992). According to this evaluation, all model parameters converged to their stable posterior distribution.

Figure 2 shows the distribution of mean political maturity scores (m_i) by country. Argentina displays the largest mean maturity score (0.13); Ecuador and Nicaragua come next with scores indistinguishable from zero; and Brazil is last with the lowest score (-0.13). While the means differ, the dispersion in the estimates is consistent across countries, indicating similar levels of estimation uncertainty.

Figure 3 shows estimated factor loadings (l_j). Due to the identification restriction,

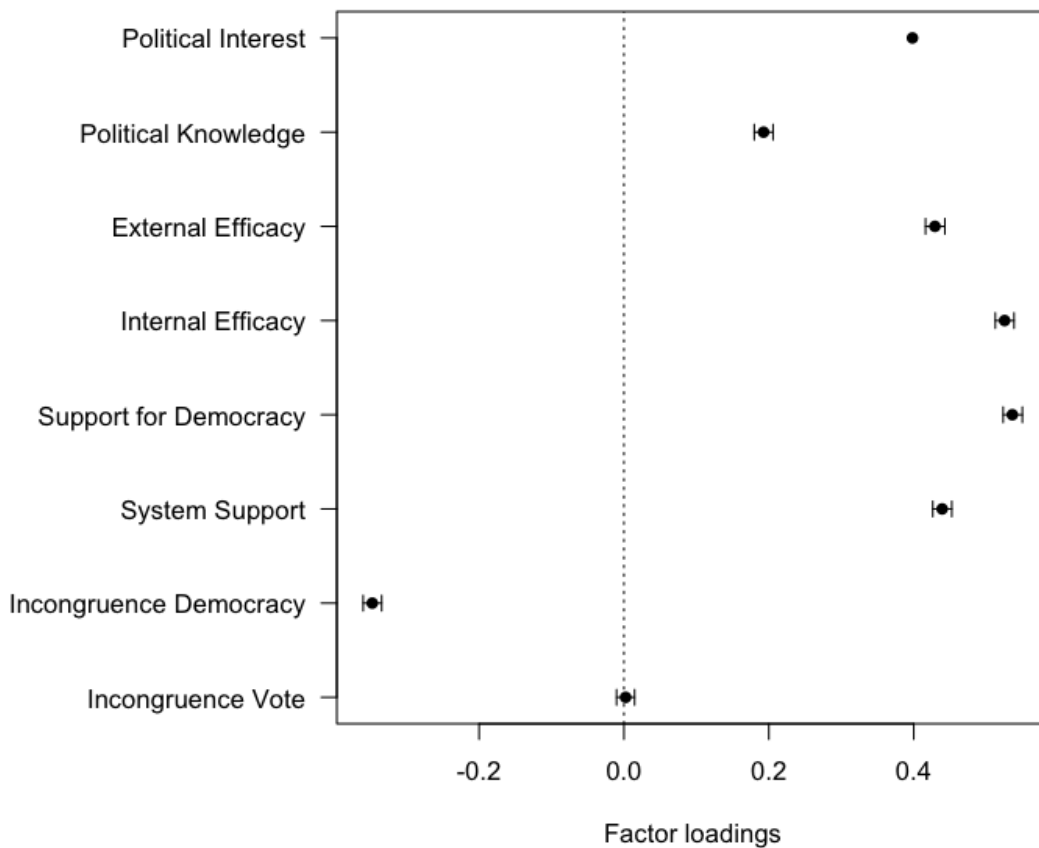
Figure 2: Average Political Maturity by Country



Boxplots show the median, interquartile range (IQR), and range of posterior estimates for the mean of political maturity scores by country.

the loading associated with political interest was fixed at a positive quantity previously estimated using confirmatory factor analysis. The signs of most factor loadings align with theoretical expectations: positive for political knowledge, external and internal efficacy, support for democracy and system support; and negative for democratic incongruence measures (where lower values indicate greater maturity). The only exception is the congruence indicator between presidential support and voter choice, whose loading approaches zero. This occurs because this indicator provides minimal information about

Figure 3: Estimated Loadings from Bayesian Factor Analytical Model

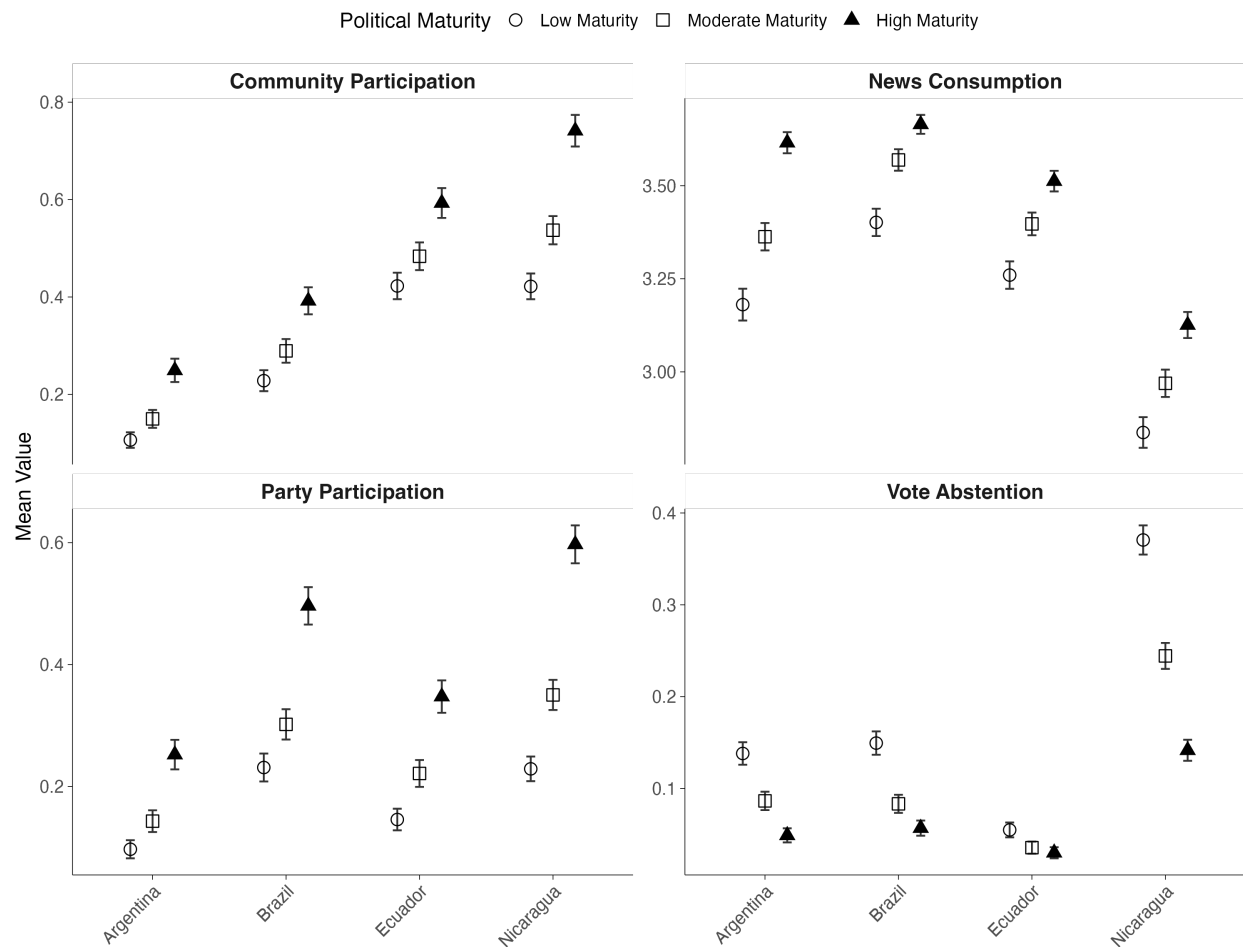


The plot shows point estimates of factor loadings (l_j). Bars represent 95% credible intervals.

political maturity, as most respondents report congruent voter choices, resulting in limited variation. Overall, the loadings indicate that the measure has high construct validity: as political maturity increases, its component dimensions shift in theoretically consistent ways—including increased political interest, knowledge, efficacy, democratic support, and attitudinal consistency.

Before evaluating the three central hypotheses concerning age and political maturity, I further evaluate the validity of the measure by examining its predictive validity (whether

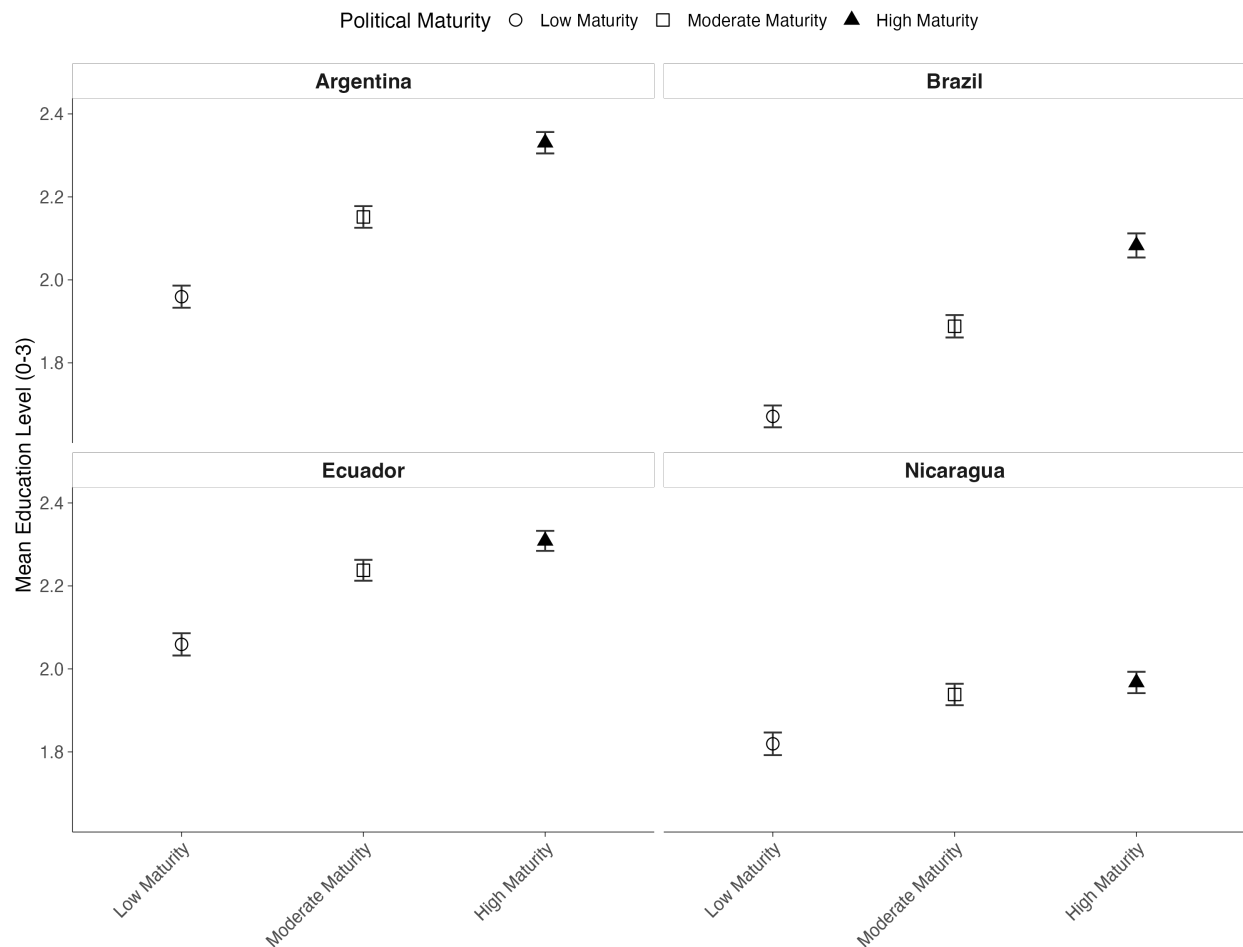
Figure 4: Validation of Maturity Measure: Predictive Validity



This plot displays mean values with 95% confidence intervals for various political engagement variables across countries. Respondents are categorized into three political maturity groups based on their maturity scores: Low Maturity (lowest third of the sample), Moderate Maturity (middle third), and High Maturity (highest third).

it predicts behaviors theoretically linked to political maturity) and known-groups validity (whether it varies as expected across socio-demographic groups theoretically associated with a greater capacity for the competent exercise of voting rights). To do so, I partitioned each country-specific sample into 'low,' 'middle,' and 'high' maturity groups, corresponding to the lower, middle, and upper terciles of mean maturity scores within each country. Figure 4 provides strong evidence of predictive validity: across all countries, individu-

Figure 5: Validation of Maturity Measure: Known-Groups Validity



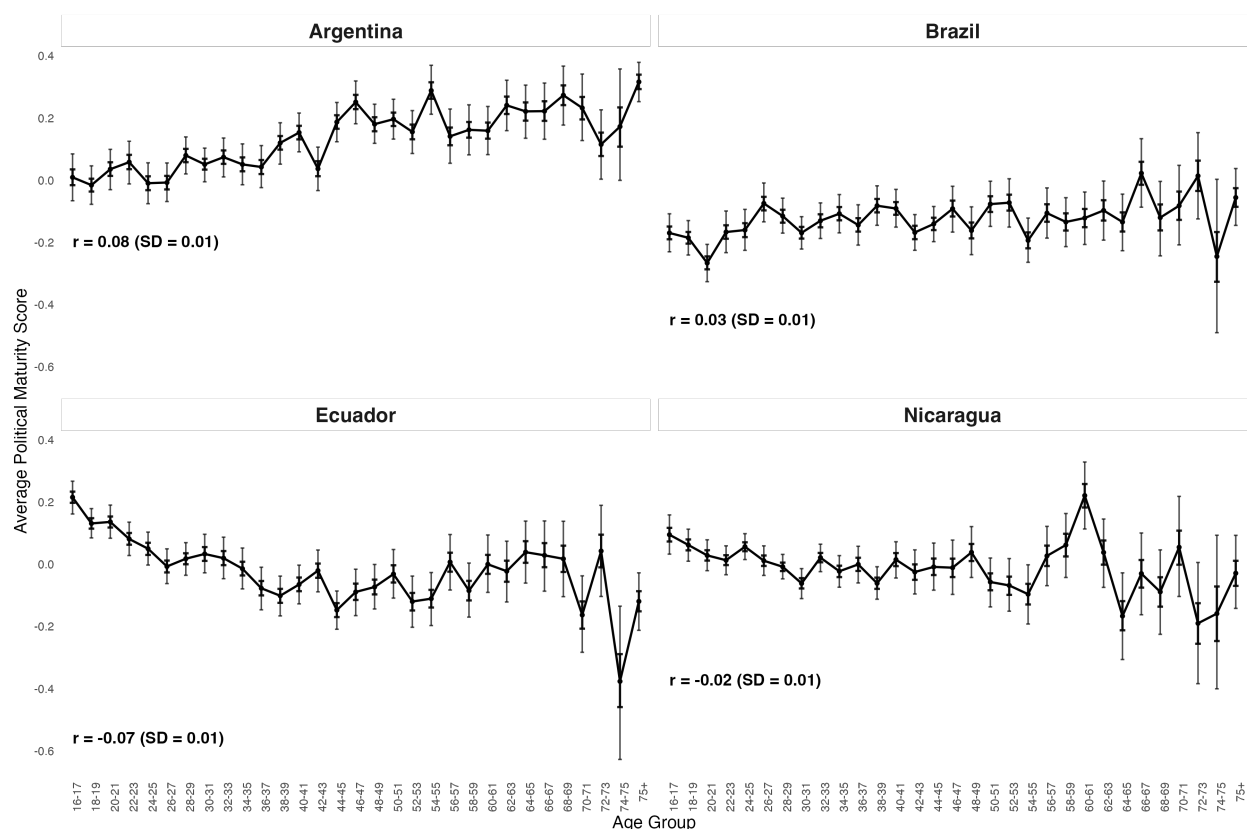
This plot displays mean values with 95% confidence intervals for educational attainment across countries. Respondents are categorized into three political maturity groups based on their maturity scores: Low Maturity (lowest third of the sample), Moderate Maturity (middle third), and High Maturity (highest third).

als in higher maturity groups consistently exhibit greater political engagement, including a greater likelihood of participating in community improvement boards, attending party meetings, regularly following the news, and expressing lower intentions to abstain from presidential elections. These positive associations are consistent with Almond and Verba 1963's expectations for participant political cultures, where people's subjective competence to act politically translates into greater civic engagement. Additionally, Figure 5 supports

the measure's known-group validity, as individuals in higher maturity groups report greater average educational attainment in every country, though the strength of this relationship varies (e.g., stronger in Argentina and Brazil than in Nicaragua).

6 Political Maturity by Age and Birth Cohort

Figure 6: Political Maturity by Age Group

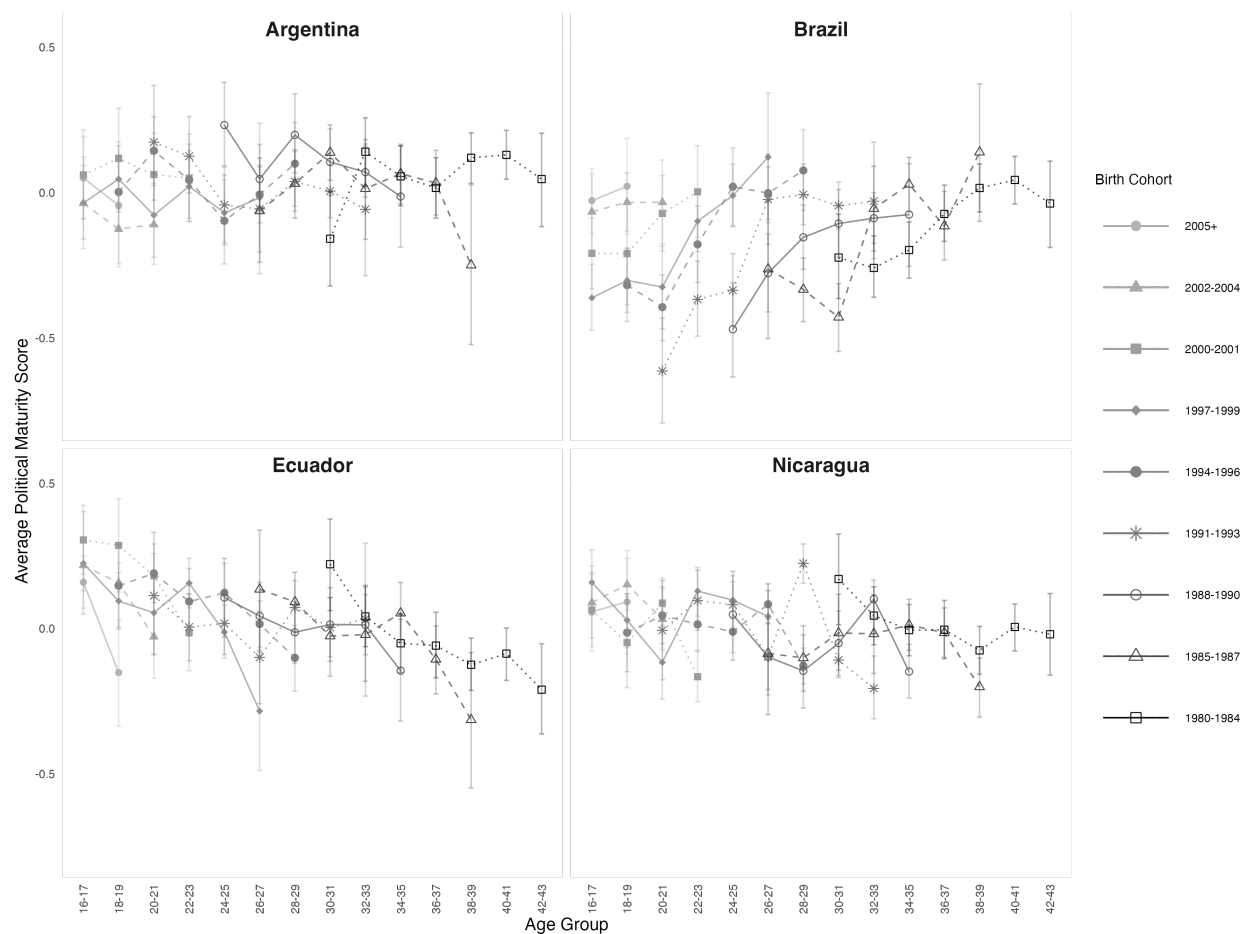


The plot shows point estimates of mean political maturity scores by age group. Bars represent 95% Bayesian credible intervals.

I begin by examining the relationship between political maturity and age across countries to evaluate the hypothesis that maturity increases with age. Figure 6 displays mean maturity scores with 95% credible intervals for two-year age groups. As expected, matu-

rity increases with age in Argentina, but only moderately (correlation: 0.08). In contrast, no clear association is observed in Brazil and Nicaragua, while Ecuador shows a modest negative relationship (correlation: -0.07).

Figure 7: Political Maturity by Birth Cohort



The plot shows point estimates of mean political maturity scores by age group and birth cohort. Bars represent 95% Bayesian credible intervals.

To assess whether the age-maturity relationship may be confounded by cohort effects, Figure 7 plots maturity scores by age group and birth cohort. This distinction allows us to separate life-cycle changes from cohort-specific patterns. In Argentina and Nicaragua, no cohort displays a consistent upward or downward trend over time. In Brazil, however,

political maturity increases with age within all cohorts, with more recent cohorts entering adulthood with higher baseline levels of maturity—helping to explain the absence of a clear age trend when cohort differences are not accounted for. In contrast, Ecuador shows a steady decline in maturity with age across cohorts, pointing to a robust negative age effect.

Overall, these findings suggest that the relationships between political maturity and both age and cohort varies across countries, and that associations tend to be modest. Beyond these general patterns, a central question remains: Are 16-year-olds mature enough to vote? I now turn to a direct comparison between 16–17-year-olds and their slightly older peers to assess whether the youngest voters stand out for having lower levels of political maturity.

7 Are 16-Year-Olds Fit to Vote?

I now compare respondents aged 16-17 with those aged 18-19 in terms of average political maturity. Given the absence of a clear threshold of political maturity that could definitively classify individuals as qualified or unqualified to vote, a relative comparison approach is valuable. By comparing teenage voters to slightly older respondents whose voting eligibility is widely accepted, we can assess relative fitness to vote. If individuals aged 16-17 cannot be meaningfully distinguished from those aged 18-19 in terms of political maturity, this would suggest they may be similarly qualified to vote.

This comparison specifically examines political maturity between 16-17-year-olds and 18-19-year-olds, with the latter representing an age group considered qualified to vote

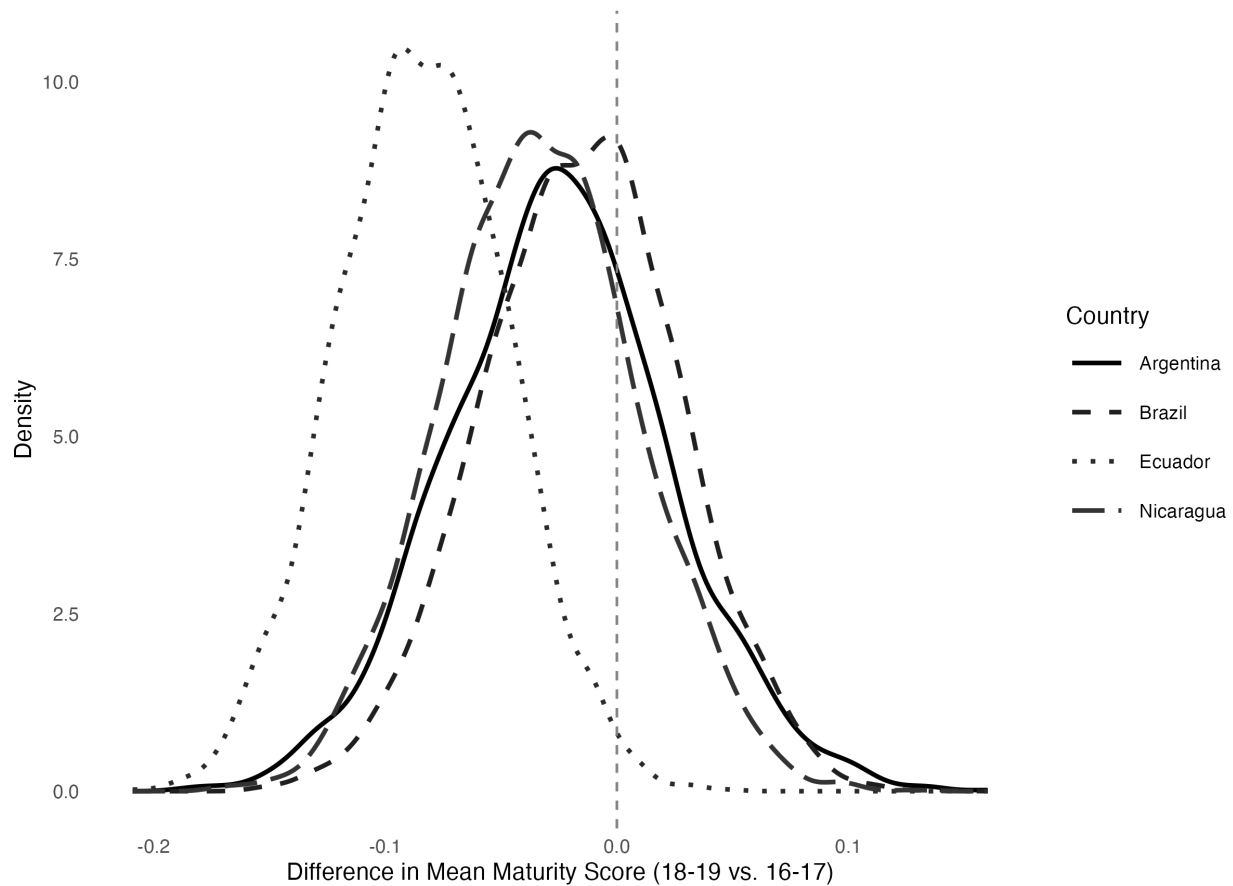
by “an overwhelming majority of democracies” (Blais, Massicotte, and Yoshinaka, 2001, p. 43). Limiting the analysis to these adjacent age groups helps ensure similarity in age-related characteristics potentially relevant for political decision-making.

Despite their proximity in age, notable demographic differences exist between these two age groups. While both groups show similar gender and racial compositions, substantial differences exist in educational attainment, occupation, country of residence, and income (see Appendix Table A6 for detailed demographic information). Respondents aged 18-19 are significantly more likely to have attended tertiary education than those aged 16-17 (26% versus 7%, respectively) and more likely to be employed (28% versus 15%). Additionally, voting is compulsory for 18-19-year-olds but not 16-17-year-olds in three of the four countries (all except Nicaragua), which could add to the sense of civic duty and political maturity compared to 16-17-year-olds.

While 18-19-year-olds demonstrate measurable differences in life experiences compared to 16-17-year-olds, which might reinforce expectations that older teens would exhibit higher political maturity, previous research has noted that their circumstances may actually hinder political participation (Huebner and Eichhorn, 2020). Many 18-19-year-olds are transitioning away from childhood homes to new locations for school or work, requiring new voter registrations and social networks. In contrast, most 16-17-year-olds benefit from ongoing political discussions with parents at home and civic education instruction in school. These contextual advantages might offset the relatively lower levels of education and work experience of voters aged 16-17 compared to those aged 18-19.

Figure 8 displays the posterior distribution of mean differences in political maturity scores between the two age groups across countries. For Argentina and Brazil, the differ-

Figure 8: Posterior Distribution of Age Differences in Political Maturity



The plot shows the posterior distribution of difference-in-means estimates of political maturity (m_i) between 18–19-year-olds and 16–17-year-olds, by country.

ence in average maturity scores between these age groups is statistically indistinguishable from zero. Nicaragua and Ecuador show a statistically significant negative difference at conventional credible interval thresholds, opposite to expectations based on age-based maturity assumptions, indicating systematically higher political maturity among 16-17-year-olds compared to their 18-19-year-old counterparts. Across all four countries examined, I found no evidence supporting the hypothesis that older voters demonstrate greater political maturity. These results challenge conventional assumptions about the relationship

between age and political decision-making capacity within this early developmental range.

Table 3: Correlates of Political Maturity for Teenage Voters, Overall Estimates

Parameter	Estimate	s.e.	2.5%	97.5%
Age 18-19	-0.04	0.08	-0.17	0.10
Female	-0.12	0.09	-0.30	0.07
Education	0.11	0.06	0.00	0.23
Income	0.03	0.04	-0.03	0.08
Non-White	-0.01	0.09	-0.19	0.17
Works	-0.06	0.10	-0.25	0.13
Election Year	0.05	0.12	-0.18	0.29

The table gives overall coefficients (for the average country), standard errors, and 95% Bayesian credible intervals from a multilevel linear regression model estimated using data from respondents aged 16-17 and 18-19. The dependent variable is the measure of political maturity.

Table 4: Correlates of Political Maturity for Teenage Voters, by Country

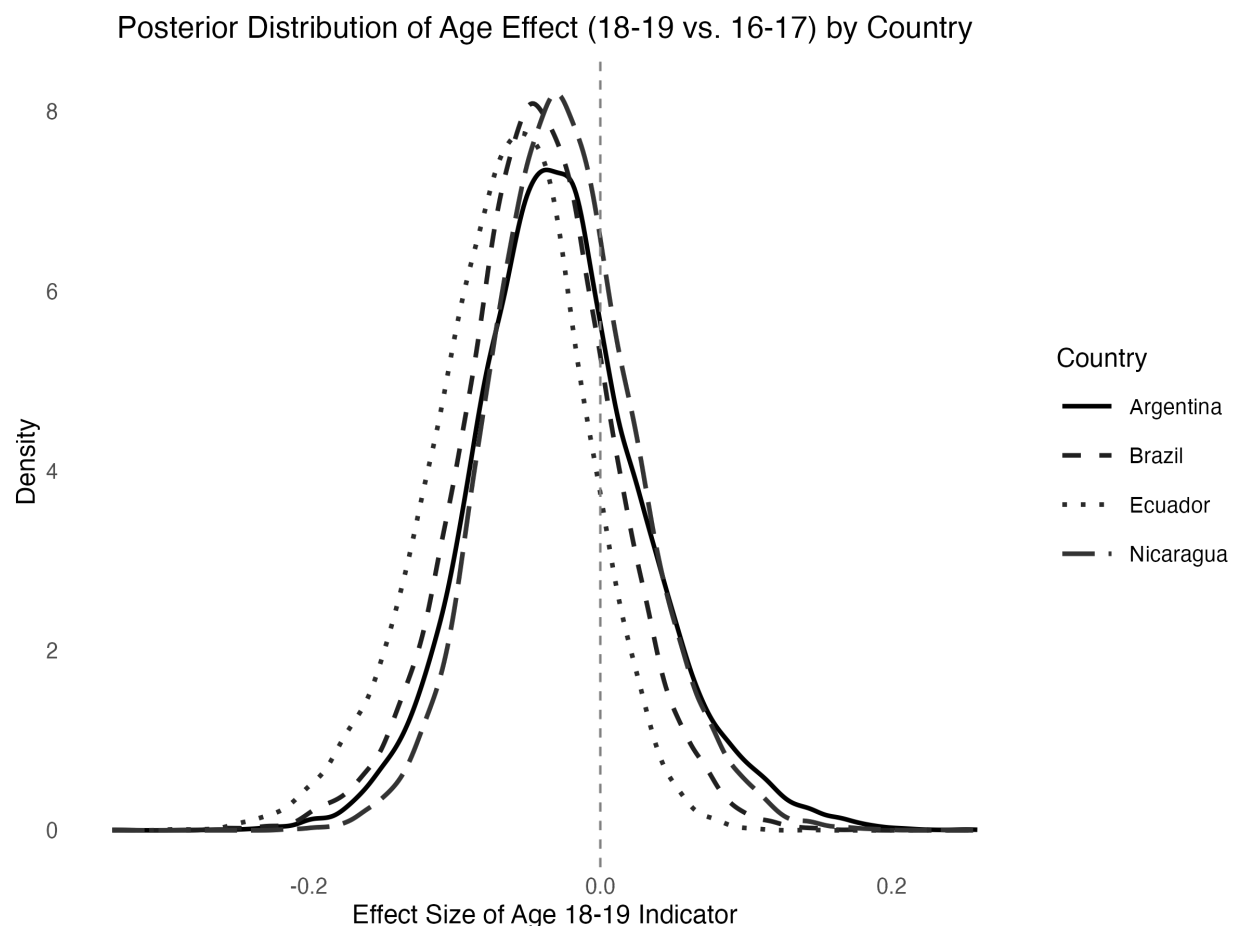
Parameter	Argentina	Brazil	Ecuador	Nicaragua
Age 18-19	-0.03 (0.06)	-0.04 (0.05)	-0.07 (0.05)	-0.03 (0.05)
Female	-0.11 (0.07)	-0.18 (0.06)	-0.06 (0.06)	-0.12 (0.06)
Education	0.12 (0.06)	0.11 (0.05)	0.12 (0.05)	0.09 (0.05)
Income	0.02 (0.02)	0.02 (0.02)	0.03 (0.02)	0.04 (0.02)
Non-White	-0.02 (0.07)	-0.04 (0.09)	0.01 (0.09)	-0.01 (0.07)
Works	0.00 (0.09)	-0.08 (0.07)	-0.08 (0.07)	-0.10 (0.07)
Election Year	0.08 (0.07)	-0.06 (0.07)	0.07 (0.06)	0.11 (0.07)

The table gives the country-level coefficients and their standard errors from a multilevel linear regression model estimated using data from respondents aged 16-17 and 18-19. The dependent variable is the measure of political maturity.

To evaluate whether the relationship between age and political maturity persists after controlling for demographic differences, I implemented a multilevel linear regression model using data from respondents aged 16–19. The estimation was conducted via Markov Chain Monte Carlo (MCMC) methods in R using Stan. To allow uncertainty from the la-

tent measurement model to propagate into the regression stage, I ran the regression five times, each using a different draw from the posterior distribution of maturity scores as the dependent variable. I then pooled the resulting parameter chains across these iterations. This approach ensures that coefficient estimates and their associated uncertainty reflect both measurement error (from the maturity model) and estimation uncertainty (from the regression), yielding more statistically valid inferences about age-group differences while accounting for demographic covariates.

Figure 9: Posterior Distribution of Age 18-19 Coefficient in Regression Model



The plot shows the posterior distribution of the coefficient corresponding to a binary indicator of age 18-19 (1) instead of 16-17 (0), by country.

The model included a binary indicator for the 18-19 age group to assess differences in political maturity between age groups after controlling for demographics. Overall, educational attainment was the only demographic variable with a statistically significant positive relationship with political maturity (Table 3). At the country level, this relationship was significant in most cases, and the coefficient for being female was also significant in Brazil (Table 4). The coefficient for the 18-19 age group indicator was statistically indistinguishable from zero in all four countries. Figure 9 displays the posterior distributions of this coefficient, demonstrating no statistically meaningful difference in political maturity between the two groups. After accounting for demographic differences, older teenagers demonstrate no detectable maturity advantage over their younger counterparts. Other demographic variables similarly showed no statistically significant relationship with political maturity.

8 Conclusion

Overall, results suggest that: (1) the association between age and political maturity is either very modest or nonexistent; (2) individuals aged 16-17 demonstrate political maturity comparable to that of 18-19-year-olds; and (3) this pattern of minimal age-related differences holds across all countries studied, regardless of their histories of literacy, education levels, and experience with democratic institutions. While this study addressed only one specific aspect of the debate on lowering the voting age—whether 16-17-year-olds possess sufficient political maturity to vote—these findings should help alleviate concerns that extending voting rights to younger citizens would negatively impact voter competence in the

electorate.

Beyond these group-level findings, exploring individual-level variation offers further insight into the voting age debate. Variability in individual maturity scores *within* age groups is substantially greater than the differences in average maturity scores *between* age groups. Every age group includes individuals with both very low and very high levels of political maturity (see Figure A2 in the Appendix), and the distributions of maturity scores across age groups overlap considerably. Because the variability within age groups far exceeds the average differences between them, age is a poor proxy for political maturity. The wide variation in maturity—present even among older age groups with undisputed voting rights—suggests that concerns about younger voters’ political immaturity offer a weak basis for restricting their electoral participation.

As countries around the world consider the possibility of further lowering the voting age—with Germany and Belgium lowering the voting age to 16 for European parliamentary elections in June 2024, and the UK announcing plans to do the same for its next general election as recently as July 2025—the question of whether individuals aged 16 are mature enough to vote has become a crucial part of the political debate. The research presented in this paper contributes to advancing our understanding of this question by providing the first systematic analysis of the political maturity of young voters in the four Latin American countries that allow voting at 16 for national elections.

A limitation of this study is the relatively small sample of 16-17-year-old voters in each country and survey wave, which introduces considerable sampling uncertainty that may conceal meaningful differences in political maturity between demographic groups (see Table A2 in the Appendix). Another limitation is that by narrowly focusing on political

maturity to maintain methodological rigor, this research necessarily excludes other relevant considerations in the voting age debate, such as attitude stability and prevalence of ideological extremism among voting-age teenagers compared to older voters. As more data become available, future research should explore these related questions, particularly in the context of struggling democracies vulnerable to backsliding.

Disclosure Statement

The author has no financial or non-financial competing interests to report.

References

- Almond, Gabriel A. and Sidney Verba. 1963. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton, NJ: Princeton University Press.
- Beck, Paul Allen and M. Kent Jennings. 1969. "Lowering the Voting Age: The Case of the Reluctant Electorate." *Public Opinion Quarterly* 33 (3): 370–379.
- Bergh, Johannes. 2013. "Does Voting Rights Affect the Political Maturity of 16-and 17-Year-Olds? Findings from the 2011 Norwegian Voting-Age Trial." *Electoral Studies* 32 (1): 90–100.
- Blais, André, Louis Massicotte, and Antoine Yoshinaka. 2001. "Deciding Who Has the Right to Vote: A Comparative Analysis of Election Laws." *Electoral Studies* 20 (1): 41–62.
- Bronner, Laura and David Ifkovits. 2019. "Voting at 16: Intended and Unintended Consequences of Austria's Electoral Reform." *Electoral Studies* 61: 102064.
- Buuren, Stef van and Karin Groothuis-Oudshoorn. 2011. "mice: Multivariate Imputation by Chained Equations in R." *Journal of Statistical Software* 45 (3): 1–67.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Carpenter, Bob, Andrew Gelman, Matthew D. Hoffman, Daniel Lee, Ben Goodrich, Michael Betancourt, Marcus A. Brubaker, et al. 2017. "Stan: A Probabilistic Programming Language." *Journal of Statistical Software* 76: (1): 1–32.
- Chan, Tak Wing and Matthew Clayton. 2006. "Should the Voting Age Be Lowered to Sixteen? Normative and Empirical Considerations." *Political Studies* 54 (3): 533–558.
- Cohen, Mollie J. and Elizabeth J. Zechmeister. 2018. *Measuring Political Knowledge in the AmericasBarometer*. Tech. rep. Nashville, TN: LAPOP, Vanderbilt University.

- Commission, Electoral. 2004. *Age of Electoral Majority*. Tech. rep. London: Electoral Commission.
- Congreso de la Nación Argentina. 2012. *Ley 26.774 de Ciudadanía Argentina*. Boletín Oficial. Published November 2, 2012. Buenos Aires.
- Converse, Philip E. 2006. “The Nature of Belief Systems in Mass Publics.” *Critical Review* 18: 1–74. Originally Published 1964.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Fabio Angiolillo, et al. 2025. *V-Dem Country-Year Dataset v15*.
- Davidov, Eldad. 2009. “Measurement Equivalence of Nationalism and Constructive Patriotism in the ISSP: 34 Countries in a Comparative Perspective.” *Political Analysis* 17 (1): 64–82.
- Eichhorn, Jan. 2018. “Votes at 16: New Insights from Scotland on Enfranchisement.” *Parliamentary Affairs* 71 (2): 365–391.
- Eichhorn, Jan and Johannes Bergh. 2021. “Lowering the Voting Age to 16 in Practice: Processes and Outcomes Compared.” *Parliamentary Affairs* 74 (3): 507–521.
- Enders, Adam M. and Judd R. Thornton. 2022. “Biased Interviewer Assessments of Respondent Knowledge Based On Perceptions of Skin Tone.” *Journal of Race, Ethnicity, and Politics* 7 (3): 572–588.
- Gelman, Andrew and Donald B. Rubin. 1992. “Inference from Iterative Simulation Using Multiple Sequences.” *Statistical Science* 7 (4): 457–472.
- Goodman, Sara Wallace. 2012. “Fortifying Citizenship: Policy Strategies for Civic Integration in Western Europe.” *World Politics* 64 (4): 659–698.
- Graf, Elisabeth, Julia Partheymüller, Laura Bronner, and Sylvia Kritzinger. 2024. “Revisiting Eligibility Effects of Voting at 16: Insights from Austria Based On Regression Discontinuity Analyses.” *Electoral Studies* 92: 102870.
- Huebner, Christine and Jan Eichhorn. 2020. “Votes at 16 in Scotland: Political Experiences Beyond the Vote Itself”. *Lowering the Voting Age to 16: Learning from Real Experiences Worldwide*. Ed. by Jan Eichhorn and Johannes Bergh. Basingstoke, UK: Palgrave Macmillan, 121–142.
- Huebner, Christine and Constanza Sanhueza Petrarca. 2024. “Votes at 16? How the Rest of the World Does It.” *Political Insight* 15 (1): 8–11.
- Instituto Interamericano de Derechos Humanos. 2009. *Informe Interamericano de la Educación en Derechos Humanos: Un Estudio en 19 Países. Compendio de Cinco Informes 2002–2006*. San José, Costa Rica: Instituto Interamericano de Derechos Humanos.
- Jackman, Simon. 2009. *Bayesian Analysis for the Social Sciences*. Chichester, UK: Wiley.
- Katz, Gabriel and Ines Levin. 2018a. “A General Model of Abstention Under Compulsory Voting.” *Political Science Research and Methods* 6 (3): 489–508.
- 2018b. “Varieties of Political Support in Emerging Democracies: A Cross-National Analysis.” *Social Science Research* 70: 55–70.
- Larsen, Erik Gahner, Klaus Levinsen, and Ulrik Kjaer. 2016. “Democracy for the Youth? The Impact of Mock Elections on Voting Age Attitudes.” *Journal of Elections, Public Opinion and Parties* 26 (4): 435–451.
- Latin American Public Opinion Project (LAPOP). 2014–2023. *AmericasBarometer: Insights into Democratic Values and Behaviors in the Americas*. Vanderbilt University. URL: <https://www.vanderbilt.edu/lapop/americasbarometer/2023.php>.

- Leininger, Arndt, Armin Schäafer, Thorsten Faas, and Sigrid Roßteutscher. 2024. "Coming of Voting Age. Evidence from a Natural Experiment on the Effects of Electoral Eligibility." *Electoral Studies* 88: 102751.
- Leininger, Arndt, Marie-Lou Sohnus, Thorsten Faas, Sigrid Roßteutscher, and Armin Schäafer. 2023. "Temporary Disenfranchisement: Negative Side Effects of Lowering the Voting Age." *American Political Science Review* 117 (1): 355–361.
- Levin, Ines. 2013. "Political Inclusion of Latino Immigrants: Becoming a Citizen and Political Participation." *American Politics Research* 41 (4): 535–568.
- McAllister, Ian. 2014. "The Politics of Lowering the Voting Age in Australia: Evaluating the Evidence." *Australian Journal of Political Science* 49 (1): 68–83.
- Pomares, Julia and Marcelo Leiras. 2012. *¿Una Decisión Prematura? Fundamentos para el Debate Legislativo Sobre el Voto Joven*. Documento de Políticas Públicas. Buenos Aires: Centro de Implementación de Políticas Públicas para la Equidad y el Crecimiento (CIPPEC).
- Przeworski, Adam. 2009. "Conquered or Granted? A History of Suffrage Extensions." *British Journal of Political Science* 39 (2): 291–321.
- Rodriguez, Daiana. 2016. "Voto Joven: ¿Ciudadanía Plena o Mera Elección?" Tesina de Grado de la carrera de Ciencia Política. Universidad Nacional de Rosario.
- Sanhueza Petrarca, Constanza. 2020. "Does Voting at a Younger Age Have an Effect on Satisfaction with Democracy and Political Trust? Evidence from Latin America". *Lowering the Voting Age to 16: Learning from Real Experiences Worldwide*. Ed. by Jan Eichhorn and Johannes Bergh. Basingstoke, UK: Palgrave Macmillan, 103–119.
- Sigel, Roberta. 1965. "Assumptions About the Learning of Political Values." *Annals of the American Academy of Political and Social Science* 361 (1): 1–9.
- Silbaugh, Katharine. 2020. "Developmental Justice and the Voting Age." *Fordham Urban Law Journal* 47: 253–292.
- Stiers, Dieter, Marc Hooghe, and Ruth Dassonneville. 2021. "Voting at 16: Does Lowering the Voting Age Lead to More Political Engagement? Evidence from a Quasi-Experiment in the City of Ghent (Belgium)." *Political Science Research and Methods* 9 (4): 849–856.
- Treier, Shawn and Simon Jackman. 2008. "Democracy as a Latent Variable." *American Journal of Political Science* 52 (1): 201–217.
- Wagner, Markus, David Johann, and Sylvia Kritzing. 2012. "Voting at 16: Turnout and the Quality of Vote Choice." *Electoral Studies* 31 (2): 372–383.
- Wray-Lake, Laura and Benjamin Oosterhoff. 2021. "Using Developmental Science to Inform Voting Age Policy." *Rutgers University Law Review* 74: 1911–1931.
- Zeglovits, Eva and Julian Aichholzer. 2014. "Are People More Inclined to Vote at 16 Than at 18? Evidence for the First-Time Voting Boost Among 16-to 25-Year-Olds in Austria." *Journal of Elections, Public Opinion and Parties* 24 (3): 351–361.

A Appendix

Table A1: Survey Fieldwork Periods and Recent National Elections by Country and Wave

Survey Wave	Argentina	Brazil	Ecuador	Nicaragua
2014	02/28/14- 03/22/14	03/21/14- 04/27/14	01/21/14- 02/15/14	02/25/14- 03/22/14
<i>Last Election</i>	10/27/13 (leg)	10/03/10 (gen)	02/17/13 (gen)	11/06/11 (gen)
<i>Next Election</i>	10/25/15 (gen)	10/05/14 (gen)	02/19/17 (gen)	11/06/16 (gen)
2016	03/10/17- 05/28/17	04/05/17- 05/11/17	11/08/16- 01/05/17	09/13/16- 10/19/16
<i>Last Election</i>	10/25/15 (gen)	10/05/14 (gen)	02/17/13 (gen)	11/06/11 (gen)
<i>Next Election</i>	10/22/17 (leg)	10/07/18 (gen)	02/19/17 (gen)	11/06/16 (gen)
2018	02/16/19- 04/02/19	01/29/19- 03/03/19	01/22/19- 03/29/19	04/04/19- 05/04/19
<i>Last Election</i>	10/22/17 (leg)	10/07/18 (gen)	02/19/17 (gen)	11/06/16 (gen)
<i>Next Election</i>	10/27/19 (gen)	10/02/22 (gen)	02/07/21 (gen)	11/07/21 (gen)
2021	02/01/21- 04/27/21	05/25/21- 06/30/21	06/03/21- 07/20/21	06/03/21- 08/28/21
<i>Last Election</i>	10/27/19 (gen)	10/07/18 (gen)	02/07/21 (gen)	11/06/16 (gen)
<i>Next Election</i>	11/14/21 (leg)	10/02/22 (gen)	02/09/25 (gen)	11/07/21 (gen)
2023	05/31/23- 07/21/23	06/06/23- 07/04/23	02/15/23- 04/06/23	06/09/23- 07/14/23
<i>Last Election</i>	11/14/21 (leg)	10/02/22 (gen)	02/07/21 (gen)	11/07/21 (gen)
<i>Next Election</i>	10/22/23 (gen)	10/04/26 (gen)	02/09/25 (gen)*	11/07/26 (gen)

The table gives fieldwork and most recent election dates for each survey wave. Fieldwork dates highlighted in bold indicate survey waves where the data was collected in a presidential election year. “leg” and “gen” labels given between parentheses indicate legislative and general elections, respectively.

* A general election took place in Ecuador on 08/20/23 following the dissolution of the National Assembly on 05/17/23. Since these events took place after the end of the interview period the table lists the date of the scheduled general election date.

Table A2: Sample Size by Survey Wave

Country	Study Year	Total Sample size	16-17 years old	18-19 years old
Argentina	2014	1512	50	80
	2016	1528	62	75
	2018	1528	67	76
	2021	3011	35	79
	2023	1540	65	69
Brazil	2014	1500	69	94
	2016	1532	92	89
	2018	1498	93	83
	2021	3016	59	94
	2023	1526	92	79
Ecuador	2014	1489	9	69
	2016	1545	81	106
	2018	1533	124	109
	2021	3005	201	243
	2023	1604	101	93
Nicaragua	2014	1546	48	85
	2016	1560	103	122
	2018	1547	98	117
	2021	2997	85	144
	2023	3004	43	109

The table gives sample size by survey wave, for all respondents and for the two youngest age groups.

Table A3: Indicators of Political Maturity

Indicator Name	Survey Question	Response Alternatives	Availability
Political Interest	¿Qué tanto interés tiene usted en la política: mucho, algo, poco o nada?	1. Mucho, 2. Algo, 3. Poco, 4. Nada	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, EC 2018, EC 2023, NI 2014, NI 2016, NI 2018, NI 2023
Political Knowledge	Usando la escala que se presenta abajo, por favor califique su percepción sobre el nivel de conocimiento político del entrevistado	1. Muy alto, 2. Alto, 3. Ni alto ni bajo, 4. Bajo, 5. Muy bajo	AR 2016, AR 2018, AR 2021, AR 2023, BR 2016, BR 2018, BR 2021, BR 2023, EC 2016, EC 2018, EC 2021, EC 2023, NI 2016, NI 2018, NI 2021, NI 2023
External Efficacy	A los que gobiernan el país les interesa lo que piensa la gente como usted. ¿Hasta qué punto está de acuerdo o en desacuerdo con esta frase?	1. Muy en desacuerdo, 7. Muy de acuerdo	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, EC 2018, EC 2023, NI 2014, NI 2016, NI 2018
Internal Efficacy	Usted siente que entiende bien los asuntos políticos más importantes del país. ¿Hasta qué punto está de acuerdo o en desacuerdo con esta frase?	1. Muy en desacuerdo, 7. Muy de acuerdo	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, EC 2018, EC 2023, NI 2014, NI 2016, NI 2018
Support for Democracy	Puede que la democracia tenga problemas, pero es mejor que cualquier otra forma de gobierno. ¿Hasta qué punto está de acuerdo o en desacuerdo con esta frase?	1. Muy en desacuerdo, 7. Muy de acuerdo	AR 2014, AR 2016, AR 2018, AR 2021, AR 2023, BR 2014, BR 2016, BR 2018, BR 2021, BR 2023, EC 2014, EC 2016, EC 2018, EC 2021, EC 2023, NI 2014, NI 2016, NI 2018, NI 2021, NI 2023

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Table A3: Summary of Indicators Used in the Analysis (continued)

Indicator Name	Survey Question	Response Alternatives	Availability
System Support	¿Hasta qué punto piensa usted que se debe apoyar al sistema político argentino?	1. Nada, 7. Mucho	AR 2014, AR 2016, AR 2018, AR 2021, AR 2023, BR 2014, BR 2016, BR 2018, BR 2021, BR 2023, EC 2014, EC 2016, EC 2018, EC 2021, EC 2023, NI 2014, NI 2016, NI 2018, NI 2021, NI 2023
Satisfaction with Democracy	En general, ¿usted diría que está muy satisfecho(a), satisfecho(a), insatisfecho(a) o muy insatisfecho(a) con la forma en que la democracia funciona en Argentina?	1. Muy satisfecho(a), 2. Satisfecho(a), 3. Insatisfecho(a), 4. Muy insatisfecho	AR 2014, AR 2016, AR 2018, AR 2021, AR 2023, BR 2014, BR 2016, BR 2018, BR 2021, BR 2023, EC 2014, EC 2016, EC 2018, EC 2021, EC 2023, NI 2014, NI 2016, NI 2018, NI 2021, NI 2023
Tolerance of Military Coup	En su opinión se justificaría que hubiera un golpe de estado por los militares ... [frente a mucha corrupción]	1. Se justificaría, 2. No se justificaría	AR 2014, AR 2016, AR 2018, AR 2021, AR 2023, BR 2014, BR 2016, BR 2018, BR 2021, BR 2023, EC 2014, EC 2016, EC 2018, EC 2021, EC 2023, NI 2014, NI 2016, NI 2018, NI 2021, NI 2023
Tolerance of Autocoup	¿Cree usted que cuando el país enfrenta momentos muy difíciles, se justifica que el presidente del país cierre el Congreso y gobierne sin Congreso?	1. Sí se justifica, 2. No se justifica	AR 2014, AR 2016, AR 2018, AR 2021, AR 2023, BR 2014, BR 2016, BR 2018, BR 2021, BR 2023, EC 2014, EC 2016, EC 2018, EC 2021, EC 2023, NI 2014, NI 2016, NI 2018, NI 2021, NI 2023

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Table A3: Summary of Indicators Used in the Analysis (continued)

Indicator Name	Survey Question	Response Alternatives	Availability
Elections Precedence	Cuál sistema político le parece mejor para Argentina: ¿un sistema que garantice acceso a un ingreso básico y servicios para todos los ciudadanos, aunque no se pueda elegir a las autoridades, o poder votar para elegir las autoridades, aunque algunas personas no tengan acceso a un ingreso básico y servicios?	1. Ingreso y servicios básicos asegurados, aunque no haya elecciones, 2. Elecciones, aunque algunas personas no tengan acceso a un ingreso básico y servicios	AR 2021, AR 2023, BR 2021, BR 2023, EC 2021, EC 2023, NI 2021, NI 2023
Freedom Precedence	Cuál sistema político le parece mejor para Argentina: ¿un sistema que garantice acceso a un ingreso básico y servicios para todos los ciudadanos, aunque no se pueda expresar opiniones políticas sin miedo o censura, o un sistema en el que todos puedan expresar sus opiniones políticas sin miedo o censura, aunque algunas personas no tengan acceso a un ingreso básico y servicios?	1. Ingreso y servicios básicos asegurados, aunque no haya libertad para expresar opiniones políticas sin miedo o censura, 2. Libertad para expresar opiniones políticas, aunque algunas personas no tengan acceso a un ingreso básico y servicios	AR 2021, AR 2023, BR 2021, BR 2023, EC 2021, EC 2023, NI 2021, NI 2023
Voting Intention	¿Si esta semana fueran las próximas elecciones presidenciales, qué haría usted?	1. No votaría, 2. Votaría por el candidato o partido del actual presidente, 3. Votaría por algún candidato o partido diferente del actual gobierno, 4. Iría a votar pero dejaría el voto en blanco o lo anularía	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, EC 2018, EC 2023, NI 2014, NI 2016, NI 2018, NI 2021, NI 2023
Trust in the President	¿Hasta qué punto tiene confianza usted en el(la) presidente(a)?	1. Nada, 7. Mucho	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, EC 2018, EC 2023, NI 2014, NI 2016, NI 2018, NI 2023

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Table A3: Summary of Indicators Used in the Analysis (continued)

Indicator Name	Survey Question	Response Alternatives	Availability
Presidential Approval	Hablando en general acerca del gobierno actual, ¿diría usted que el trabajo que está realizando [President's Name] es...?	1. Muy bueno, 2. Bueno, 3. Ni bueno, ni malo (regular), 4. Malo, 5. Muy malo (pésimo)	AR 2014, AR 2016, AR 2018, AR 2021, AR 2023, BR 2014, BR 2016, BR 2018, BR 2021, BR 2023, EC 2014, EC 2016, EC 2018, EC 2021, EC 2023, NI 2014, NI 2016, NI 2018, NI 2023
National Economy	¿Considera usted que la situación económica del país es mejor, igual o peor que hace doce meses?	1. Mejor, 2. Igual, 3. Peor	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, EC 2018, EC 2023, NI 2014, NI 2016, NI 2018
Personal Finances	¿Cómo calificaría en general su situación económica? ¿Diría usted que es muy buena, buena, ni buena ni mala, mala o muy mala?	1. Mejor, 2. Igual, 3. Peor	AR 2014, AR 2016, AR 2018, AR 2021, AR 2023, BR 2014, BR 2016, BR 2018, BR 2021, BR 2023, EC 2014, EC 2016, EC 2018, EC 2021, EC 2023, NI 2014, NI 2016, NI 2018, NI 2021, NI 2023
News Consumption	¿Con qué frecuencia sigue las noticias, ya sea en la televisión, la radio, los periódicos o el Internet?	1. Diariamente, 2. Algunas veces a la semana, 3. Algunas veces al mes, 4. Algunas veces al año, 5. Nunca	AR 2018, AR 2021, AR 2023, BR 2018, BR 2021, BR 2023, EC 2018, EC 2021, EC 2023, NI 2018, NI 2021, NI 2023
Community Boards	Por favor, dígame si usted asiste a las reuniones de [un comité o junta de mejoras para la comunidad]: por lo menos una vez a la semana, una o dos veces al mes, una o dos veces al año, o nunca.	1. Una vez a la semana, 2. Una o dos veces al mes, 3. Una o dos veces al año, 4. Nunca	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, EC 2018, EC 2023, NI 2014, NI 2016, NI 2018, NI 2023

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Table A3: Summary of Indicators Used in the Analysis (continued)

Indicator Name	Survey Question	Response Alternatives	Availability
Party Meetings	Por favor, dígame si usted asiste a las reuniones de [un partido o movimiento político]: por lo menos una vez a la semana, una o dos veces al mes, una o dos veces al año, o nunca.	1. Una vez a la semana, 2. Una o dos veces al mes, 3. Una o dos veces al año, 4. Nunca	AR 2014, AR 2016, AR 2018, AR 2023, BR 2014, BR 2016, BR 2018, BR 2023, EC 2014, EC 2016, NI 2014, NI 2016, NI 2018, NI 2023

As indicated in the Availability column in the above table, some indicators are only available for some countries and years. For the unavailable country-years, I imputed missing values using a model-based approach, using a data set that included all indicators, as well as information on: country of residence and survey year, indicator of election year, respondents' demographics (age, gender, education, income, and employment) and several attitudes and behaviors (government approval, trust in congress, ideology, and perceptions of the integrity of the electoral process). The imputation procedure was implemented using the R package *mice* (**mice2023**).

Table A4: Summary Statistics by Country for Indicators of Political Maturity

Variable	Min	Max	Mean	SD
Argentina				
Political Interest	0	3	1.2	1.1
Political Knowledge	-2	2	0.3	1
External Efficacy	1	7	3.5	2
Internal Efficacy	1	7	4.3	1.8
Support for Democracy	1	7	5.4	1.8
System Support	1	7	4.6	2
Incongruence Democracy	0	5.2	1.4	0.9
Incongruence Vote	0	1	0.2	0.4
Brazil				
Political Interest	0	3	1.1	1
Political Knowledge	-2	2	0.2	1
External Efficacy	1	7	3.6	2
Internal Efficacy	1	7	4	1.8
Support for Democracy	1	7	5	1.9
System Support	1	7	3.5	2.1
Incongruence Democracy	0	5.2	1.5	1
Incongruence Vote	0	1	0.2	0.4
Ecuador				
Political Interest	0	3	1.1	1
Political Knowledge	-2	2	0.1	1
External Efficacy	1	7	3.8	1.9
Internal Efficacy	1	7	4.1	1.7
Support for Democracy	1	7	4.7	1.6
System Support	1	7	4.6	1.8
Incongruence Democracy	0	5	1.3	1
Incongruence Vote	0	1	0.2	0.4
Nicaragua				
Political Interest	0	3	1.1	1
Political Knowledge	-2	2	0.3	1
External Efficacy	1	7	3.8	2.1
Internal Efficacy	1	7	4.3	1.8
Support for Democracy	1	7	4.8	2
System Support	1	7	4.4	2.2
Incongruence Democracy	0	5.2	1.6	1.1
Incongruence Vote	0	1	0.2	0.4

Table A5: Difference between Respondents Aged 16-17 and 18-19 by Country and Indicator of Political Maturity

Variable	Mean 16-17	Mean 18-19	Difference	t Statistic
Argentina				
Political Interest	1.14	1.15	0.00	0.06
Political Knowledge	-0.07	0.02	0.09	1.20
External Efficacy	3.80	3.37	-0.43	-2.78
Internal Efficacy	3.90	3.93	0.03	0.19
Support for Democracy	5.03	5.15	0.12	0.88
System Support	4.63	4.47	-0.16	-1.09
Incongruence Democracy	1.33	1.32	-0.02	-0.22
Incongruence Vote	0.18	0.13	-0.05	-1.83
Brazil				
Political Interest	1.18	1.12	-0.06	-0.92
Political Knowledge	0.00	0.17	0.16	2.40
External Efficacy	3.66	3.50	-0.16	-1.20
Internal Efficacy	3.64	3.77	0.13	1.13
Support for Democracy	4.72	4.80	0.08	0.69
System Support	3.81	3.50	-0.32	-2.34
Incongruence Democracy	1.37	1.39	0.02	0.27
Incongruence Vote	0.27	0.18	-0.09	-3.28
Ecuador				
Political Interest	1.25	1.17	-0.08	-1.46
Political Knowledge	0.07	0.12	0.05	0.93
External Efficacy	4.28	3.94	-0.34	-3.09
Internal Efficacy	4.12	4.13	0.00	0.04
Support for Democracy	4.98	4.91	-0.07	-0.77
System Support	5.25	4.97	-0.28	-3.01
Incongruence Democracy	1.07	1.09	0.01	0.25
Incongruence Vote	0.26	0.26	-0.00	-0.14
Nicaragua				
Political Interest	1.30	1.26	-0.04	-0.61
Political Knowledge	0.07	0.19	0.12	1.85
External Efficacy	4.12	4.02	-0.11	-0.79
Internal Efficacy	4.33	4.13	-0.20	-1.65
Support for Democracy	4.62	4.74	0.11	0.97
System Support	4.85	4.80	-0.05	-0.37
Incongruence Democracy	1.40	1.44	0.05	0.66
Incongruence Vote	0.22	0.21	-0.00	-0.10

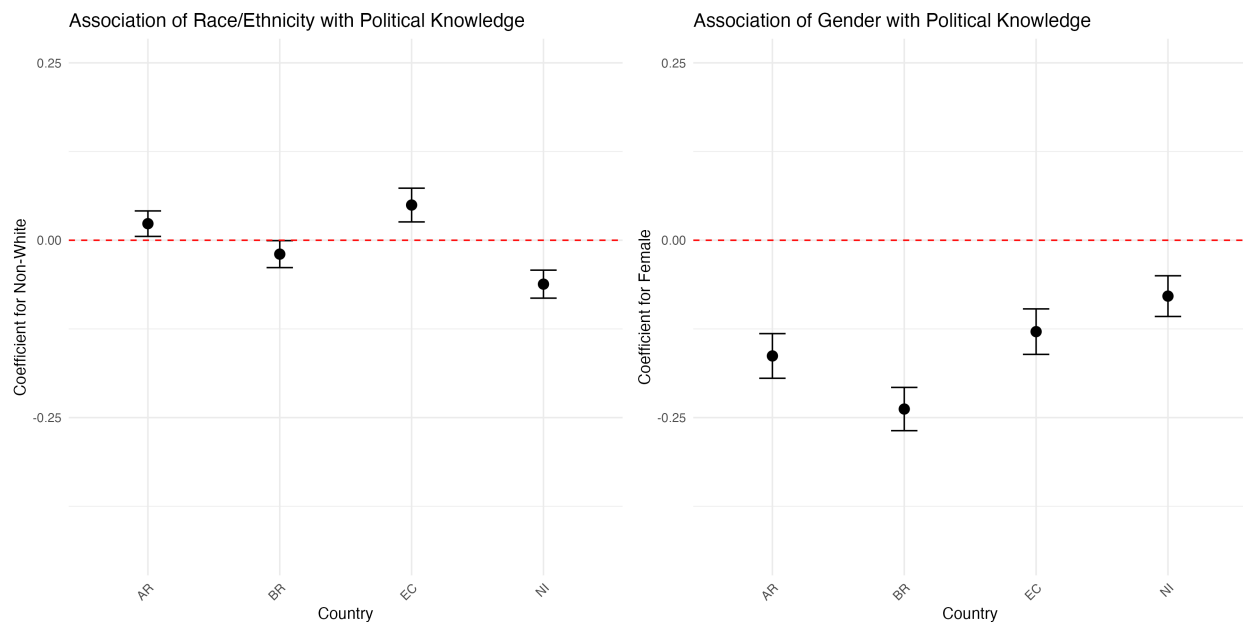
The table gives the average value of indicators of political maturity for respondents aged 16-17 and 18-19, the difference between the latter and former age groups, and t-statistics for tests of difference in means by country. Bold font indicates statistical significance at a 95% confidence level. In contrast to Figure 1, here indicator values are given in their original, non-standardized scale.

Table A6: Distribution of Covariates by Age Group

Category	16-17	18-19	Difference
Gender: Male	52.0	51.0	-1.0
Gender: Female	48.0	49.0	1.0
Education: None	0.3	0.4	0.1
Education: 1ry	12.6	8.1	-4.5
Education: 2ry	80.2	65.4	-14.8
Education: 3ry	6.9	26.2	19.3
Income Proxy: 0	4.6	4.5	-0.1
Income Proxy: 1	8.9	9.9	1.0
Income Proxy: 2	12.6	13.5	0.9
Income Proxy: 3	13.2	14.3	1.1
Income Proxy: 4	16.4	17.4	1.0
Income Proxy: 5	20.0	17.5	-2.5
Income Proxy: 6	24.3	22.8	-1.5
Race: White	26.6	25.4	-1.2
Race: Non-White	73.4	74.6	1.2
Works: Does Not	84.7	71.9	-12.8
Works: Does	15.3	28.1	12.8
Country: Argentina	17.7	18.8	1.1
Country: Brazil	25.7	21.8	-3.9
Country: Ecuador	32.7	30.8	-1.9
Country: Nicaragua	23.9	28.6	4.7

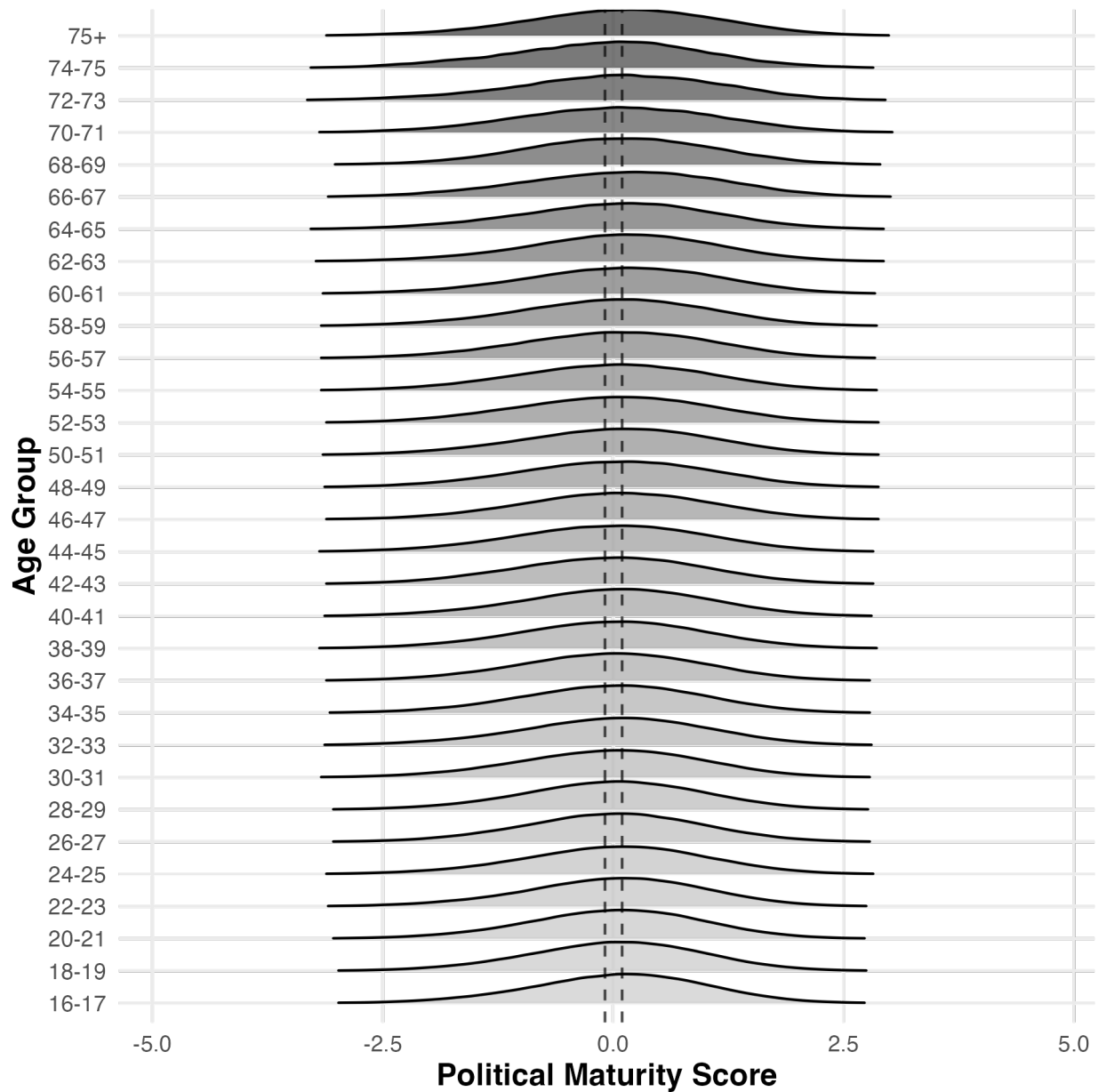
The second and third columns give the percentage of respondents aged 16-17 and 18-19, respectively, with each characteristic listed in the first column. The last column gives the difference between respondents aged 18-19 and 16-17.

Figure A1: Race, Gender, and Interviewer Assessments of Political Knowledge



This plot displays point estimates and 95% confidence intervals for the effect of race and gender on interviewer assessments of respondent's political knowledge in the four countries considered in this study. The model also included random effects by country as well as fixed effects for education, income proxy, and all other indicators of political maturity considered in my analysis.

Figure A2: Distribution of Political Maturity Within and Between Age groups



This plot displays the distribution of individual maturity scores within each age group, as well as the range of mean maturity scores across age groups (vertical dashed lines). It clearly shows that within-group variability substantially exceeds between-group differences.