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The Arrogant Scholar? Education and Political  
Tolerance in the Case of China

By

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## **Abstract**

This thesis investigates the relationship between education and political intolerance in China, asking whether higher education fosters greater acceptance of political difference or reinforces ideological conformity. Drawing on data from the 2019 Asian Barometer Survey (ABS) Wave 5, which includes 4,941 valid responses from Mainland China (excluding Xinjiang and Tibet), political intolerance is measured through a binary recoding of responses to a question on comfort in conversing with individuals holding different political views. Education level serves as the main independent variable, with controls for subjective social status, political interest, generational cohort, and internal political efficacy. Bivariate and multivariate linear and logistic regression models reveal a statistically significant, though modest, positive association between education and tolerance. The effect remains significant after accounting for other variables, suggesting an independent influence of education, but one that explains only a small proportion of the variation in tolerance. Mediation analysis indicates that political efficacy—while positively associated with education—slightly reduces tolerance, partially offsetting education’s net positive effect. These findings align in part with modernization and civic liberalism theories, which posit that education fosters pluralism, but also highlight a possible countervailing mechanism whereby political confidence, enhanced by education, may harden ideological boundaries. The results call for a more nuanced understanding of how education shapes civic attitudes in authoritarian contexts and suggest that similar mechanisms may operate in democratic societies experiencing polarization.

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## Section 1

### Introduction

In April 2025, U.S. President Donald Trump denounced Harvard University as a “Liberal mess,” accusing the institution of being “a threat to Democracy” (Trump, 2025). Before then, Vice President J.D. Vance (2021) had also framed universities as institutions that indoctrinate students into left-leaning ideologies. These statements reflect an ongoing tension and debate about whether education fosters democratic tolerance or deepens ideological polarization.

Political polarization, defined as the movement of political views away from the center and toward extreme ends (Stoddard and Hess, 2024), has become a rising concern in various democratic societies. One major trait identified by Schedler (2023) is a rising intolerance from the breakdown of democratic trust, leading to actors viewing their adversaries as “enemies of democracy”. In the United States, for example, studies indicate that partisan hostility has intensified, with Democrats and Republicans viewing each other in more negative terms than ever before (Geiger, 2014). While much of this research focuses on democracies where partisanship, media biases, and political rallies are obvious phenomena, scholars have also started to explore how polarization operates in authoritarian regimes as well (Apergis, 2018; Dingxin Zhao, 2019; Nugent, 2020; Nugent, 2021; Siiutkin, 2025). In these contexts, polarization usually does not present itself through partisan competition, but rather through other more subtle attitudes like civilian compliance or their attitudes towards institutions and policies.

A long-standing assumption in political science is rooted in modernization theory, which argues that education promotes democratic values through fostering tolerance to different

ideas. Classic works such as Lipset (1959) and Inglehart (1997) argue that education cultivates civic norms, rationality, and open-mindedness. However, recent research challenges this optimistic view. Piketty (2021), for instance, shows how education can divide electorates along ideological lines, especially in Western democracies, where college-educated voters have shifted leftward while less-educated voters have turned right. Others like Gibson (1992) and Sullivan et al. (1982) suggest that education may not promote general tolerance, but rather targeted acceptance toward specific groups, sometimes excluding others in the process.

These debates raise a broader question that is central to this thesis: Does education foster political tolerance, or does it reinforce ideological antagonism? This question takes on a unique dimension in the context of authoritarian regimes, where education serves not only to build skills and civic knowledge but also to promote ideological indoctrination and establish stability. In such systems, the democratizing effects of education may be cancelled or even reversed by state control over curriculum and messaging.

China offers a unique case study. As a one-party authoritarian state, it combines strong governance capacity with an extensive educational infrastructure. The Chinese Communist Party (CCP) views education not only as a development tool but also as a mechanism of ideological reinforcement. Recent reforms under Xi Jinping have emphasized "patriotic education," emphasizing ideological education in school curriculum by making "Xi Jinping Thought" a core subject at all levels of education (Shuo Zhang and Yiqiao Yan, 2021).

Empirical research supports the idea that this ideological function matters. Cantoni et al. (2017) show that exposure to a revised high school curriculum in China significantly

increased students' trust in government and belief in "socialist democracy." These changes were attitudinal, not behavioral, suggesting that education promotes cognitive alignment with state ideology more than civic participation. Similarly, Paglayan (2022) argues that in authoritarian settings, education fosters loyalty rather than deliberative pluralism. Siiutkin (2025), in a comparative study of polarization in current-day Russia, shows that even where state polarization efforts intensify, citizens often respond through depoliticization or conformity, a useful case to compare with China.

This thesis investigates the relationship between education and political intolerance in contemporary China. It asks whether higher levels of education foster greater acceptance of political difference, or whether education might, under certain conditions, reinforce ideological conformity. While education is often assumed to support liberal democratic values, its effects may differ in authoritarian regimes where state-led ideological control shapes the curriculum. Using recent survey data, I test whether more educated individuals in China are more or less politically tolerant, and whether this relationship is shaped by a sense of political efficacy.

To explore this, I evaluate three hypotheses. First, drawing on modernization and civic liberalism theory, I test whether higher education is associated with greater political tolerance (H1). Second, I consider an alternative hypothesis: that education in an authoritarian context may increase political intolerance, due to political sorting or indoctrination (H2). Third, I examine whether this relationship is mediated by individuals' sense of political efficacy—the belief that they are capable of participating in politics (H3). Through these hypotheses, this study contributes to broader debates on education, authoritarianism, and the cultural

foundations of tolerance.

The findings support H1 and H3. Educated individuals in China appear more politically tolerant, even after accounting for generational, socioeconomic, and psychological factors. However, the sense of political efficacy fostered by education may actually reduce individuals' openness to opposing viewpoints.

## **Section 2**

### **Background and Literature Review**

This section reviews existing scholarship on the relationship between education and political attitudes, with a particular focus on political tolerance and polarization. It proceeds in three parts. Section 2.1 examines major theoretical frameworks and empirical findings from democratic contexts, where education has traditionally been seen as a driver of democratic values and tolerance, but has also received some critiques for its role in reinforcing ideological rigidity and elite polarization. Section 2.2 turns to authoritarian regimes, where it examines the political role of education being oriented toward state control and ideological socialization rather than civic empowerment. This section highlights comparative insights from authoritarian settings, including how education is used to shape loyalty and suppress dissent. Finally, Section 2.3 focuses specifically on China, synthesizing recent research on the Chinese education system, ideological messaging, and political attitudes. It highlights how China's one-party state leverages education not only to build capacity but to engineer ideological consensus, providing the contextual basis for this thesis's empirical investigation into the relationship between education and political (in)tolerance.

## **2.1 Education, (In)Tolerance & Polarization in Democracies**

Education has long been considered a pillar of democratic development. Classic modernization theorists such as Seymour Martin Lipset (1959) and Ronald Inglehart (1997) argue that as societies become more educated, they also become more civically engaged, pluralistic, and democratic. Lipset (1959) contended that education broadens individuals' outlooks, fosters rationality, and reduces susceptibility to extremism, thus contributing to democratic stability. Inglehart (1997) extended this argument by positing that education plays a key role in the shift from materialist to post-materialist values—such as tolerance, freedom of expression, and participatory governance—particularly as societies move toward economic security.

Adding empirical weight to these claims, Apergis (2018) conducted a panel cointegration analysis using data from 161 countries over the period 1970–2013 to examine the relationship between education and democratic development. By breaking down the effects of primary, secondary, and tertiary education, and applying fixed effects and dynamic error-correction models, the study finds consistent evidence that higher educational attainment, especially at the tertiary level, contributes to improvements in democracy scores, measured using indices such as the Polity IV and Freedom House indicators. Crucially, these effects continue across different regime types, indicating a robust structural relationship between education and democratization. This macroscopic level study confirms that education functions not merely as a correlation factor but as a long-term driver of democratic institutionalization.

At the microscopic level, however, the relationship between education and political tolerance is more ambiguous. In a 1981 study, John L. Sullivan, George E. Marcus, Stanley

Feldman, and James E. Piereson address problems in previous political tolerance studies with their reliance on content-biased measures of tolerance, especially the left, and their failure to utilize well-specified multivariate models. The authors developed a content-controlled measure of tolerance where respondents first identify their least-liked group from a list, and then indicated their willingness to grant that group civil liberties—such as being allowed to teach in public schools or hold public rallies. Based on a national U.S. sample, their findings challenge previous conclusions, indicating that social and demographic factors (such as education, age, and social status) have no direct effect and minimal indirect influence on political tolerance. Instead, the study reveals that political tolerance is primarily determined by two political variables—the perceived threat posed by the group and the individual's commitment to general democratic norms, along with psychological factors (conceptualized as “psychological security”). In another study, Sullivan, Piereson, and Marcus (1982) conducted survey research in the U.S. to investigate whether education correlates with greater tolerance of unpopular or dissenting groups. They found that although education is positively correlated with general political tolerance, educated respondents often rationalize the exclusion of certain groups by appealing to democratic norms, such as protecting democracy from perceived threats. This suggests that while education may support psychological confidence and shape political beliefs, its effect on promoting political tolerance is weaker than expected. Education might help people think more critically and explain their views better, but it does not always lead to greater acceptance of opposing opinions.

James L. Gibson (1992) refined the measurement of tolerance in American surveys by challenging the exclusive use of "least-liked group" indicators. Using alternative models and

national survey data, he showed that tolerance is often group-specific and context-dependent, and that measures relying solely on abstract support for civil liberties tend to overestimate actual tolerance levels. Gibson's findings suggest that while education can promote tolerance in the abstract, its effects are dependent on perceived threats, group identities, and situational factors.

Bobo and Licari (1989) provided further nuance through a study of racial tolerance in the United States. Using General Social Survey (GSS) data and focusing specifically on support for civil liberties for Black militants, communists, and Ku Klux Klan members, the authors showed that education increases tolerance but primarily among individuals who already hold liberal racial attitudes. Among white Americans with high racial resentment, education had little or no effect on increasing tolerance. Their interaction models revealed that the effect of education on tolerance is moderated by racial threat perceptions, underscoring how underlying attitudes and social context shape the political implications of education.

In more recent work, Piketty (2021) shifts the focus to how education shapes ideological divisions in democratic societies. Drawing on electoral, income, and education data across multiple Western democracies, including France, the United States, and the UK, he shows the emergence of an "education-based cleavage," whereby university-educated individuals increasingly support liberal, cosmopolitan parties, while less-educated voters gravitate toward nationalist, populist movements. This phenomenon, described as the rise of the "Brahmin Left" and "Merchant Right," illustrates how education may generate ideological polarization rather than consensus, reshaping class alignments and producing a new cultural elite stratified by education rather than wealth.

The psychological mechanisms behind these patterns are explored by Golebiowska (2019), who conducted a mediation analysis using American National Election Studies (ANES) data to test how education affects tolerance. Her study shows that education's impact is mediated by variables such as cognitive sophistication, authoritarian predisposition, political interest, and social trust. Notably, her structural equation modeling reveals that cognitive sophistication and trust mediate positive effects, while authoritarianism mediates negative ones. This implies that education alone does not directly produce tolerance—it works through a complex web of intervening dispositions and political orientations.

In summary, while education is generally associated with democratic values and higher political engagement, its impact on tolerance and polarization is conditional and multifaceted. Macro-level analyses, such as Aperia's affirm education's long-term contribution to democratic development. However, micro-level studies complicate the narrative by showing that education can also foster ideological sorting, selective tolerance, and even affective polarization, depending on context, group identity, and underlying attitudes. These insights are especially important when examining non-democratic or hybrid regimes, where the state may not only shape the formal curriculum but also use education to cultivate politically compliant, rather than pluralistic, citizens. In such contexts, the civic function of education is redirected, not toward encouraging open-minded engagement with dissent, but toward reinforcing dominant ideologies and political hierarchies. This study contributes to this emerging body of literature by demonstrating that education may increase political confidence without necessarily fostering greater tolerance—an outcome that raises important questions about how educational systems, regardless of regime type, might inadvertently

reinforce political polarization. These findings suggest the need to critically examine not just what education conveys, but how it shapes individuals' openness to political difference across a range of societal contexts.

## **2.2 Education and Political Attitudes in Authoritarian Regimes**

In authoritarian regimes, the role of education in shaping political attitudes differs significantly from its function in liberal democracies. Rather than promoting civic pluralism and democratic engagement, education often becomes an instrument of political socialization and state legitimacy. In such settings, understanding the political consequences of education requires attention to the motivations and institutional contexts in which it is delivered.

Two studies by Ana Paglayan (2021; 2022) offer a historical and comparative perspective on the origins and functions of mass education in non-democratic contexts. In her 2021 article, Paglayan examines two centuries of data across Latin America and Europe and finds that autocracies were no less likely than democracies to expand public education. Using panel data and country fixed effects models, she argues that educational expansion often followed episodes of political unrest and functioned primarily to foster order and state authority, not democratization. Her 2022 article further supports this claim through qualitative analysis of state-building episodes in countries such as Prussia and Chile, showing how early public education systems were often introduced in tandem with efforts to curb dissent and reinforce hierarchical norms. These findings suggest that under authoritarian rule, mass education could be better understood as a tool of political containment rather than citizen empowerment.

Dahlum and Wig (2017) explore these dynamics in a more recent context by analyzing protest activity across 90 countries in Africa from 1990 to 2010. Their quantitative study combines protest event data with regime classifications and educational indicators. Using interaction terms in a multivariate regression framework, they find that higher levels of education correlate more strongly with anti-regime protest in autocracies than in democracies. Notably, their findings indicate that education heightens citizens' critical awareness of political institutions, which can lead to mobilization in restrictive environments. At the same time, the study finds no increase in protest when education is combined with high unemployment, suggesting that economic grievances alone do not trigger political action; people's expectations that could be shaped through education might also play a key role. My study extends this by shifting from overt political behavior to underlying attitudes, suggesting that education may cultivate political confidence but also reduce tolerance, highlighting its complex role in shaping civic dispositions.

Tony Huiquan Zhang and Brym (2019) challenge the long-held consensus that education universally fosters political tolerance, contending that prior research often relies on samples from affluent, Western, democratic nations, thus suffering from selection and confirmation bias, leading to an incomplete understanding of education's true impact. They use a heterogeneous sample of 88 countries from the World Values Survey (1981–2014), focusing on tolerance of homosexuality as a key indicator of liberal attitudes and employing robust multilevel modeling. Their finding is that the relationship between education and tolerance is moderated by the political context. While education is indeed associated with greater tolerance in relatively free countries, it has no effect, and in some cases, even encourages

intolerance in relatively unfree countries. This occurs because illiberal political agendas can guide educational curricula, and upward mobility may be linked to political conformity in such regimes. The study shows that education fosters tolerance primarily when regimes promote liberal-democratic values. Political freedom strongly predicts tolerance and moderates education's effect, even after controlling for economic and cultural factors. As global democracy declines, the article warns that education is not inherently liberalizing and may reflect illiberal agendas. Though based on cross-sectional data, historical evidence also supports a top-down dynamic in which political regimes shape civic values through education.

For China, Andrew J. Nathan and Tianjian Shi's 1993 study challenged prior interpretive studies' characterizations of Chinese political culture as intolerant and employed a survey approach to empirically examine the relationship between education and political tolerance in China. To assess political tolerance, the authors adapted items from the International Social Survey Program (ISSP) 1985 survey and asked respondents if "ideologically problematic" individuals should be allowed to express their views in public and educational occasions. Their findings revealed that Chinese citizens were the least tolerant among the seven nations compared. While education in China showed a strong positive impact on political tolerance, mirroring general trends elsewhere, Chinese citizens were less tolerant than their counterparts in other democratic nations at every comparable level of educational attainment. The authors anticipated that average tolerance levels in China would likely increase as older, less-educated generations are replaced by younger, better-educated citizens; however, they cautioned that even better-educated Chinese exhibited lower tolerance than similarly

educated individuals elsewhere. The study also noted that educated Chinese, despite greater political speech tolerance, were “less likely to hold democratic orientations than people of the same educational levels elsewhere.”

Cantoni et al. (2017) provide one of the most detailed studies on how authoritarian education policies influence political attitudes. Focusing on the 2001 curriculum reform of China’s high school history textbooks, the authors compare cohorts before and after the reform to estimate its impact using a difference-in-differences statistical approach. They take advantage of the staggered rollout of the revised curriculum across provinces to measure its impact on political beliefs among university students. Survey and behavioral data reveal that exposure to the revised curriculum increased trust in government institutions and support for nationalist narratives, while reducing preference for democratic alternatives. These effects were more significant among students with longer exposure to the curriculum. The study demonstrates how state-directed curriculum content can influence students' political orientations in a measurable way, particularly when delivered through a centralized and standardized education system.

Collectively, these studies indicate that the relationship between education and political attitudes in authoritarian settings is context-dependent and closely linked to state objectives. While education may increase political awareness, its ideological content and institutional setting can shape that awareness toward acceptance of the political status quo. In contemporary China, where education is embedded within a broader framework of political messaging and media control, higher education may function not simply as a channel of knowledge acquisition but as part of the apparatus of ideological reproduction. These insights

are critical for interpreting whether education in China fosters political tolerance or instead contributes to reinforced alignment with dominant state narratives.

### **2.3 Education, Ideology, and Political Attitudes in Contemporary China**

While much of the literature on education and political tolerance comes from liberal democracies, a growing body of research suggests that political polarization exists—and is evolving—in contemporary China as well. However, unlike the partisan polarization widely studied in Western democracies, polarization in China takes on more subtle, fragmented, and ideologically layered forms. Understanding these distinct patterns is crucial for situating the present study within the Chinese political context.

Zhao Dingxin (2019), in his reflections on the evolution of Chinese public discourse, observes a clear trend of increasing ideological contestation since the mid-2000s. Based on his long-term observation of online debates and broader public opinion, Zhao outlines a shift from a predominantly liberal-right discourse in the early years of reform and opening, to a more balanced ideological spectrum—including statist and Marxist perspectives—around 2014, followed by a phase of heightened polarization in recent years. He expresses concern that this intensifying polarization may aggravate social tensions, particularly due to the emergence of opportunistic actors who adopt leftist rhetoric for personal or strategic gain.

Angela Xiao Wu's (2014) study of Chinese internet users between 2008 and 2011 offers a partially similar view. Through content and cluster analysis of online discourse, Wu finds that the primary axis of ideological division is not between pro- and anti-regime factions, nor along classic left-right economic lines. Instead, polarization emerges between cultural liberals, those advocating for freedom of expression, gender equality, and individual

autonomy, and nationalists, who emphasize state sovereignty, traditional values, and collective identity. These camps may both support the regime to varying degrees, but their values differ significantly. Her work demonstrates that even under authoritarian constraints, ideological contestation can flourish in forms that defy conventional dichotomies.

Building on this, Jason Y. Wu and Tianguang Meng (2023) address the complexity of political ideology in urban China by analyzing it along two key dimensions: (1) support for state intervention in the economy and (2) authoritarian-democratic orientations. Their study finds that while individuals with higher education levels are more likely to support market-oriented policies, they do not necessarily reject authoritarian governance. This challenges the assumption that education inherently fosters democratization, suggesting instead that education in China may shape economic preferences without necessarily encouraging political liberalization. These findings complicate existing theories on education's role in political development and raise questions about whether education contributes to polarization or reinforces ideological stability within the Chinese political system.

Ye Lu et al. (2016) explored how political ideologies manifest among Chinese citizens, considering the influence of mass media and new technology. Recognizing the limitations of applying Western ideological spectrums to China, they proposed a three-dimensional framework encompassing Liberalism, Cultural Conservatism, and the New Left. Their findings suggest that higher levels of education are positively associated with liberal attitudes compared to the other two ideological dimensions. While this supports the notion that education fosters democratization in China, it does not account for the extent to which these individuals are strongly opinionated, leaving open the question of whether education also increases

polarization.

These findings from existing literature point to the ideological diversity within China, showing how education, media, and generational experience shape distinct orientations toward the state and society. This thesis contributes to that conversation by demonstrating that educational attainment and internal political efficacy are linked not just to political confidence but also to varying levels of political tolerance. Unlike in democratic contexts, where ideological divisions are often structured through party systems, in China these differences are less institutionally grounded, surfacing instead in informal spheres such as media consumption and social discourse. Together, these insights highlight the need to account for nuanced, bottom-up ideological variation even within authoritarian contexts.

By investigating the relationship between education and political tolerance in China, this study contributes to a more nuanced understanding of how ideological divisions emerge and operate in authoritarian regimes. In a system where political alignment cannot be openly organized into parties or platforms, (in)tolerance becomes a useful lens for detecting subtle political orientations. Identifying whether more educated citizens are more or less tolerant—and of whom—offers insight into how education intersects with emerging forms of polarization in China.

## **Section 3**

### **Research Design**

#### **3.1 Theory, Concepts, and Hypotheses**

Building on the theoretical frameworks reviewed in Section 2, this study explores polarization through the relationship between education and political (in)tolerance within the

Chinese context. Drawing from classic modernization theory (Lipset 1959; Inglehart 1997), in which education is commonly viewed as a driver of democratic values by fostering civic-mindedness, openness, and tolerance. However, as shown by more recent scholarship (Sullivan et al. 1982; Gibson 1992; Bobo & Licari 1989), this relationship is not necessarily uniform. Education may promote generalized tolerance in some cases, but can also produce selective or ideologically bounded attitudes.

In authoritarian contexts like China, the relationship becomes more complex. Education does not merely transmit abstract cognitive skills but is also a channel for state ideological influence (Cantoni et al. 2017). Moreover, Chinese public opinion has shown increasing signs of ideological sorting and polarization (Dingxin Zhao 2019; Tianguang Meng and Jason Y. Wu, 2018; Ye Lu et al., 2016). Thus, the presumed liberalizing effects of education may be constrained or even redirected by institutional and ideological factors unique to authoritarian regimes, and their tolerating effect should also be examined.

For the purpose of this study, political intolerance is defined as the difficulty in coexisting with different political opinions. While tolerance is often assumed to rise with education, I explore whether this holds true in China, and whether the mechanism is mediated by broader variables like perceived political efficacy (e.g., belief in one's ability to participate politically) or moderated by other demographical factors like generational experience (e.g., exposure to Maoist vs. reform-era politics) or wealth.

Based on the aforementioned literature and empirical context, I propose the following testable hypotheses:

**H1:** Higher levels of education are associated with lower levels of political intolerance in

China.

**H2:** Higher levels of education are associated with higher levels of political intolerance in

China.

**H3:** The effect of education on political intolerance is mediated by an individual's perceived ability to participate in politics (political efficacy).

These hypotheses allow for a nuanced investigation into the democratizing or stabilizing effects of education on political attitudes in a non-democratic setting. They also create a basis for testing not only direct relationships but indirect (mediating) and conditional (moderating) pathways that shape how education operates in contemporary China.

### **3.2 Dataset and Variable Construction**

The data for this study comes from the fifth wave of the Asian Barometer Survey (ABS), conducted in 2019 by Academia Sinica and National Taiwan University. The Asian Barometer is a cross-national public opinion project aimed at understanding political values, civic attitudes, and democratic legitimacy across Asia. The survey covers adults in Mainland China, excluding Xinjiang and Tibet, with a total of 4,941 valid responses. Respondents were sampled using stratified multistage probability techniques to ensure geographic and demographic representation across provinces, urban-rural divides, and gender. While the dataset provides rich information on political attitudes and behaviors, potential limitations include social desirability bias and the sensitivity of responding to such political questions in an authoritarian context.

To test the hypotheses proposed in Section 3.1, a series of variables were constructed from the ABS dataset.

**Dependent Variable: Political Intolerance**

The dependent variable is drawn from Question 32 of the Asian Barometer Survey: “If you had friends or co-workers whose opinions on politics differed from yours, would you have a hard time conversing with them? [Note: If the respondent indicates that he/she does not have any friends or co-workers holding differing views, then explain: ‘Even if the person listed does not actually exist, please answer how you imagine you would feel.’]”

This question captures the respondent’s willingness to engage with people holding opposing political views, serving as a proxy for interpersonal political tolerance. Respondents were offered a Likert scale from 1 to 4, ranging from strong agreement to strong disagreement, as well as invalid options such as “Do not understand the question,” “Can’t Choose,” or “Don’t Respond.” These invalid responses make up 26.01% of the total 4,941 responses. For the main analysis, this variable is recoded into a binary indicator, with those who answered “Not too hard” (3) and “Not hard at all” (4) coded as 1 (tolerant), and those who answered “Very hard” (1) and “A bit hard” (2) coded as 0 (intolerant). While this single-item measure provides a plausible proxy for political tolerance, it may not capture the full range or complexity of the concept, particularly given the potential interpersonal and contextual nuances involved.

This operationalization reflects the study’s interest in how education and other factors influence citizens’ openness to disagreeing political dialogues in an authoritarian context.

**Independent Variable: Education**

The independent variable in this analysis is educational attainment, captured by the variable SE5 from the Asian Barometer Survey. This variable records respondents’ highest

completed level of formal education on a nine-point ordinal scale, ranging from no formal education to completed university education. Although the scale includes distinctions between vocational and general tracks, as well as half steps like partial schooling, in the present analysis, it is treated as a continuous measure reflecting ascending levels of educational attainment. This approach thus models education as a linear predictor, while acknowledging that the spacing between categories may not be strictly uniform.

### **Mediator: Political Efficacy**

To test Hypothesis 3, I employ Question 141 as a proxy for internal political efficacy: “I think I have the ability to participate in politics.” Responses are in a Likert scale ranging from “strongly agree” (1) to “strongly disagree” (4), neglecting other invalid responses (“Do not understand the question,” “Can’t choose,” and “Decline to answer”). This variable captures the individual’s perceived capacity to engage in political life, which may mediate the effect of education on tolerance. These invalid responses comprise 10.77% of the total responses.

### **Control Variables**

To account for confounding influences, several covariates were included:

**Subjective Social Status** (SE12) is measured using a 10-point ladder scale, where respondents are asked to place their family’s standing in society, with 1 representing the lowest status and 10 the highest. Responses falling outside this range or otherwise invalid account for 7.08% of the total responses and are excluded from the analysis. While the subjective nature of this variable introduces a degree of interpretive flexibility, it also provides meaningful insight into personal identity and relative status. The subjective status reflects a combination of economic, cultural, and social capital as well as a self-achieving

evaluation by the respondent, which has been suggested by Sniderman (1975) and Kirchner et al. (2011) on creating a psychological proponent for tolerance. In this analysis, it is included as a control variable to account for the potential influence of status-based identity and individual well-being on tolerance.

**Income** (SE14) is operationalized using respondents' self-reported household income bracket, measured as a country-specific quintile based on official national statistics. Respondents were asked to identify the income group their household falls into, considering all pre-tax sources of income. This variable ranges from 1 (the lowest 20% income bracket) to 5 (the top 20% of income earners). In the analysis, income is included as a control variable to account for the potential influence of economic status on political tolerance, as different income groups may differ in political exposure, perceived marginalization, or social threat perceptions.

However, 43.07% of responses for this variable are missing, significantly reducing the number of valid observations. Additionally, its p-value in the regression analysis is 0.4691, indicating no statistically significant relationship with the dependent variable. Due to both its high proportion of missing data and low explanatory value, this variable is removed in the final model, though results including it are provided in Appendix A for reference.

**Political Interest** (Q46) is included as a control variable to account for individual differences in attentiveness to political matters, which may influence both tolerance and the internalization of political norms. Respondents were asked how interested they are in politics, with four effective ordered response options ranging from "very interested" (1) to "not at all interested" (4). This self-reported measure serves as a proxy for political engagement and

cognitive involvement, which may mediate the effects of education on political attitudes. For analysis, the variable is treated as ordinal, with higher values indicating lower levels of political interest. Responses coded as “do not understand” (7), “can’t choose” (8), or “decline to answer” (9) are treated as missing and comprise 1.15% of total responses.

The **Generational Cohort** variable is constructed using respondents’ self-reported year of birth from the Asian Barometer survey (SE3). Based on historical milestones in China’s political development, respondents are grouped into three generational cohorts:

**GPCR Generation** (born 1960 or earlier): Experienced political socialization during the Maoist period, particularly the Great Proletarian Cultural Revolution (1966–1976).

**Reform Generation** (born 1960–1985): Came into adulthood during the market-oriented reforms and political liberalization under Deng Xiaoping and his successors.

**Post-Reform Generation** (born 1985 or later): Grew up in a more materially stable and digitally connected China, coming into adulthood as China joined the WTO and embraced global markets, and with no direct memory of earlier ideological upheavals.

Each birth year entry was recoded into one of these three categories, and dummy variables were created accordingly for use in regression models.

The rationale for including these generational cohorts as a control lies in China’s sharply segmented political eras, each leaving distinctive traces on civic and ideological orientations. Research both in China and the West has shown that political generations, especially those formed during specific periods of unrest or transition, often carry persistent attitudinal legacies. Gibson (1988) and Davis (2004) showed unique trends of tolerance towards certain social groups for generation cohorts that experienced the McCarthy period and the Civil

Rights Movement, particularly in their young adulthood. In the Chinese case, Yuhua Wang (2021) demonstrates that exposure to political violence during the Cultural Revolution leads to long-term changes in political trust and continuing opposition to the current regime. Similarly, Tu Hang's (2025) *Sentimental Republic* highlights how affective memory shapes political identity in the post-Mao intelligentsia: many liberal intellectuals of this cohort anchor their ideological commitments not merely in abstract principle but in emotional responses to past traumas. In contrast, younger cohorts raised in a relatively economically prosperous and digitalized environment may exhibit different ideological sensitivities shaped by global exposures as well as new forms of censorship and communication.

This variable thus captures more than chronological age: it serves as a rough proxy for distinct affective, ideological, and institutional experiences that may shape how individuals interpret and respond to education, authority, and political opposition. However, as with any generational grouping, the boundaries are not completely precise: individuals may experience key historical moments differently depending on their exact age, location, or personal background. Hence, this variable should be interpreted as an approximate proxy rather than a precise measure of historical experience.

**Internal Political Efficacy** (Q141) is defined as an individual's belief in their capacity to understand and participate in politics. Respondents were asked to indicate their agreement with the statement: "I think I have the ability to participate in politics." Answers were recorded on a 4-point Likert scale ranging from "strongly agree" (1), to "strongly disagree" (4). Non-substantive responses, such as "Do not understand the question," "Can't choose," or "Decline to answer" were coded as missing and make up 10.77% of the total responses.

While this item offers a useful indicator of subjective political confidence, it captures a broad and self-interpreted notion of “ability to participate.” For some respondents, this may refer to formal participation such as voting or proposing an agenda; for others, it may signal general political awareness or confidence in expressing views. As such, the measure should be seen as a general proxy for internal efficacy rather than a precise or multidimensional assessment. In this analysis, the variable is treated as an ordinal indicator, with lower values corresponding to higher self-perceived competence and higher values indicating greater doubt or lack of confidence. In the multivariate analysis, this variable is used as a mediator to explore whether education indirectly influences political tolerance through increased political self-efficacy. The inclusion of this variable is theoretically grounded in prior research (Sullivan et al. 1982), suggesting that political efficacy may act as a channel through which education affects civic attitudes and democratic engagement.

### **3.3 Methodology**

This study employs a quantitative analytical approach to examine the relationship between education and political tolerance, drawing on data from the most recent wave of the Asian Barometer Survey (ABS). The analysis proceeds in two main stages: a series of linear and logistic regression models to estimate the direct association between education and tolerance, followed by a mediation analysis, inspired by Golebiowska (2019), to assess whether internal political efficacy serves as a potential mechanism.

In the first stage, the initial bivariate linear and logistic regression model estimates the association between respondents’ educational attainment and their expressed tolerance for divergent political views. The dependent variable is binary, with 1 indicating tolerance and 0

indicating intolerance, based on respondents' answers to whether they would have difficulty conversing with friends or coworkers whose political opinions differ from their own (Q32). The key independent variable is the respondent's highest level of education, treated as an ordinal variable ranging from no formal education to completed university education. The model would then be developed into a multivariate regression model that will include a set of control variables that could influence tolerance: household income quintile, subjective social status, interest in politics, age cohort, and gender. The analysis employs ordinary least squares (OLS) regression that estimates the relationship between variables by minimizing the difference between observed and predicted values. To ensure that the results are reliable even if the variability of responses differs across observations, robust standard errors are used.

$$\text{Tolerance}_i = \beta_0 + \beta_1 \text{Education}_i + \beta_2 \mathbf{X}_i + \epsilon_i$$

Here  $\mathbf{X}_i$  represents the set of control variables. The coefficient  $\beta_1$  captures the average change in the probability of being tolerant associated with a one-unit increase in education level.

In the second stage, mediation analysis is conducted to explore whether the effect of education on tolerance operates in part through respondents' sense of internal political efficacy. Internal efficacy is measured by agreement with the statement "I think I have the ability to participate in politics" (Q141), coded on a four-point Likert scale. The mediation procedure follows a standard two-step approach: first regressing internal efficacy on education and controls, and then regressing tolerance on both education and internal efficacy. The reduction in the education coefficient across models provides a descriptive indication of

mediation, though no formal causal inference is claimed.

All models include only respondents with valid data on the relevant variables. While the cross-sectional nature of the data precludes strong causal claims, the use of multivariate controls and mediation logic offers insight into plausible mechanisms linking education to tolerance. Results are interpreted in terms of both statistical significance and substantive magnitude.

This empirical strategy enables the study to address not only whether education is associated with political tolerance, but also how this relationship may be conditioned by psychological orientations, such as perceived political efficacy. In doing so, it aims to refine our understanding of education's democratic potential in non-Western contexts.

## **Section 4**

### **Results**

This section presents the results of both bivariate and multivariate regression models examining the relationship between educational attainment and political tolerance. As aforementioned, the dependent variable is based on respondents' answers to Q32, and the responses are coded so that 1 indicates tolerance (low difficulty conversing) and 0 indicates intolerance (high difficulty conversing). Thus, a positive coefficient on the independent variable would indicate a correlation with greater tolerance, while a negative coefficient indicates lower tolerance.

#### **4.1 Bivariate linear and logistic models**

To establish a baseline understanding of how education relates to political tolerance, a simple bivariate linear regression was established, using education as the sole predictor of

tolerance. This model serves as an initial exploration of the theorized link proposed by the aforementioned modernization theorists, such as Lipset and Inglehart, who argue that education cultivates democratic values and pluralistic attitudes. At the same time, this initial analysis would allow us to assess whether the correlation holds prior to the inclusion of potential confounding factors. As stated above, the independent variable is the level of education, and the dependent variable is political tolerance coded into binary outputs. Then, to further validate these findings, a binary logistic regression model is also conducted. This approach better suits the binary nature of the dependent variable and offers a more robust statistical estimation, helping to confirm the consistency and strength of the observed relationship.

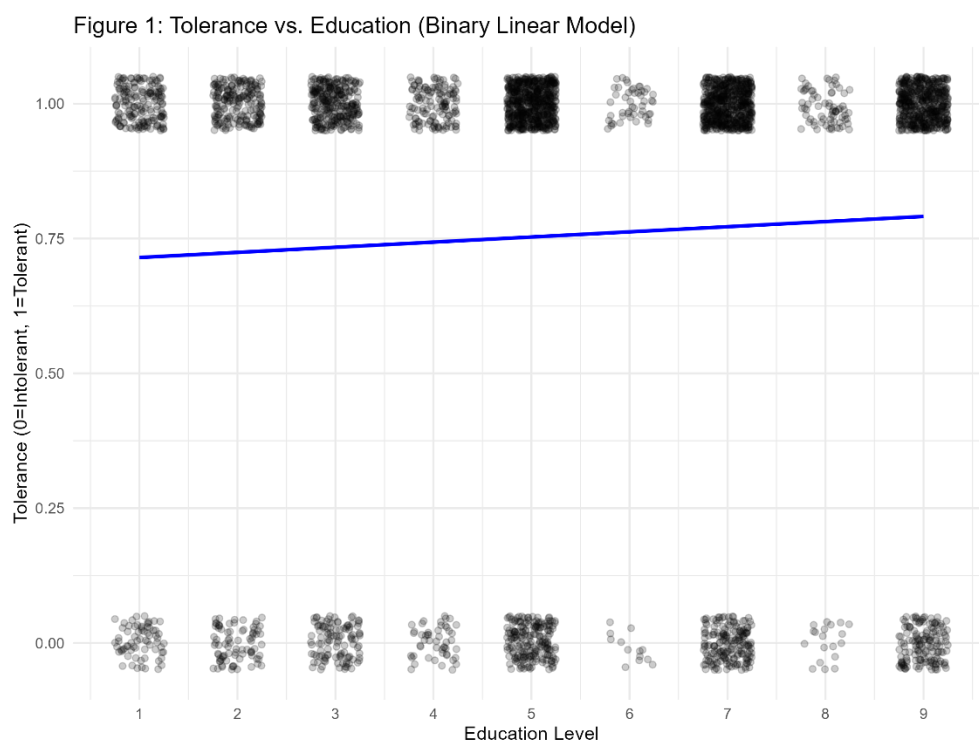


Figure 2: Predicted Probability of Tolerance by Education (Binary Logistic Model)

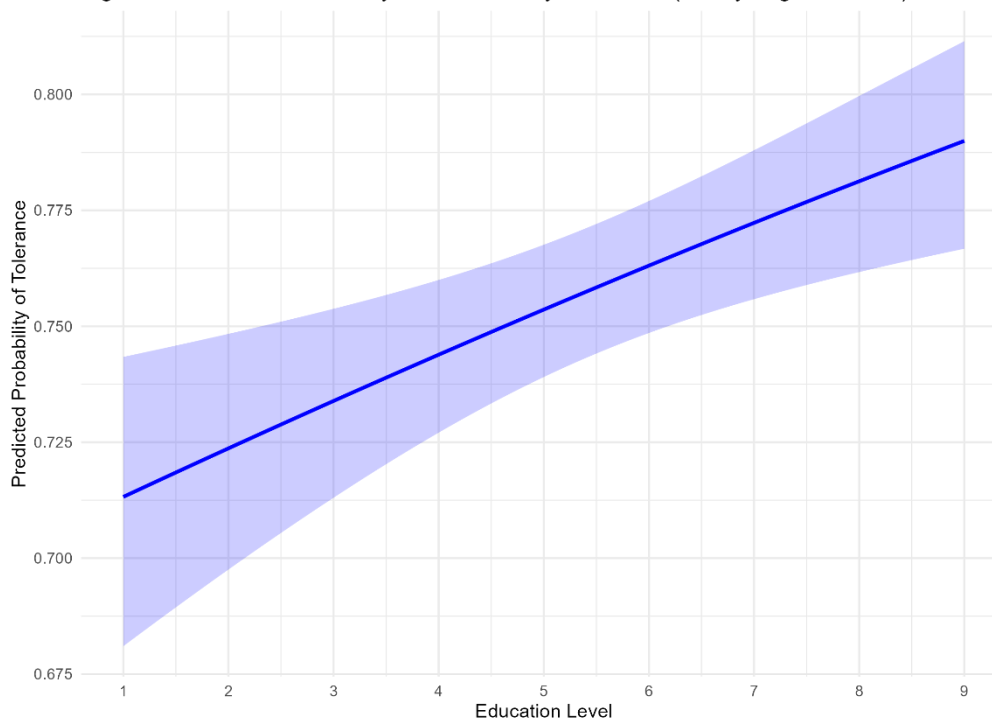


Figure 3: Bivariate Model Data

	Linear	Logistic
(Intercept)	0.705228***	0.85933***
Standard Error	(0.017253)	(0.09169)
Education	0.009519***	0.05171***
	(0.002853)	(0.01554)
Number of Objects.	3617	
R-squared	0.003068	
Adj. R-squared	0.002792	
Residual standard error: 0.428 on 3617 degrees of freedom		
F-statistic: 11.13 on 1 and 3617 DF, p-value: 0.000858		
Null deviance: 4008.1 on 3618 degrees of freedom		
Residual deviance: 3997.0 on 3617 degrees of freedom		
p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001		

The regression results, based on 3,617 valid observations from the Asian Barometer Wave 5 dataset of Mainland China, indicate a positive and statistically significant relationship

between education and political tolerance. The linear coefficient for education is 0.0095, suggesting that for each one-unit increase in education level, the predicted tolerance score increases by approximately 0.0095 points on a 0–1 scale. Hence, this model predicts that an individual with a completed university education is approximately 7.6 percentage points more likely to express tolerance to different political ideas than an individual with no formal education.

The standard error is 0.0029, which reflects the degree of uncertainty around the coefficient estimate, with relatively small values indicating a more precise estimate. The t-value tests the null hypothesis that a coefficient equals zero (i.e., no effect). A higher absolute t-value indicates that the estimated effect is more likely to be statistically distinguishable from zero. In this model, the t-value for education is 3.336, which suggests that the effect is relatively strong. The p-value corresponding to this t-value is 0.000858, well below conventional thresholds of 0.05 or 0.01. This means we can reject the null hypothesis and conclude that the relationship between education and tolerance is statistically significant at the 1% level. In other words, the probability that this result is due to random chance is less than 0.1%.

While the coefficient is statistically significant, its substantive magnitude is modest. The model reports a residual standard error of 0.428, which represents the average amount by which the predicted tolerance scores differ from the actual scores. The R-squared value is 0.0031, suggesting that only about 0.31% of the variation in tolerance is explained by education alone. Hence, education is an effective factor shaping political tolerance, though there could be other variables casting a strong effect. Additional variables will be introduced

in the multivariate model to better examine this variation.

To reinforce the findings, a bivariate logistic regression was also conducted, using the same binary tolerance measure as the dependent variable. In this model, the coefficient for education is 0.0517 ( $p < 0.001$ ), indicating that each additional unit of education is associated with a 5.3% increase in the odds of being tolerant, holding all else constant<sup>1</sup>. Assuming education ranges from 1 (no formal schooling) to 9 (university and above), this implies that an individual with a completed university education has approximately 51.2% higher odds of expressing political tolerance compared to someone with no education.<sup>2</sup> The result is statistically significant at the 1% level, reinforcing the conclusion that higher education is positively associated with greater political tolerance. While logistic coefficients are expressed in log-odds and not directly comparable to linear probability estimates, the direction and significance of the effect remain consistent. This additional model strengthens confidence in the robustness of the observed relationship and serves as a more appropriate estimator given the binary nature of the dependent variable.

#### **4.2 Multivariate linear models**

To further examine the relationship between education and political tolerance, a multivariate linear regression model was estimated, controlling for subjective social status, political interest, generational cohort, and internal political efficacy. Income was removed due to its high amount of invalid responses and low significance and would be shown in the

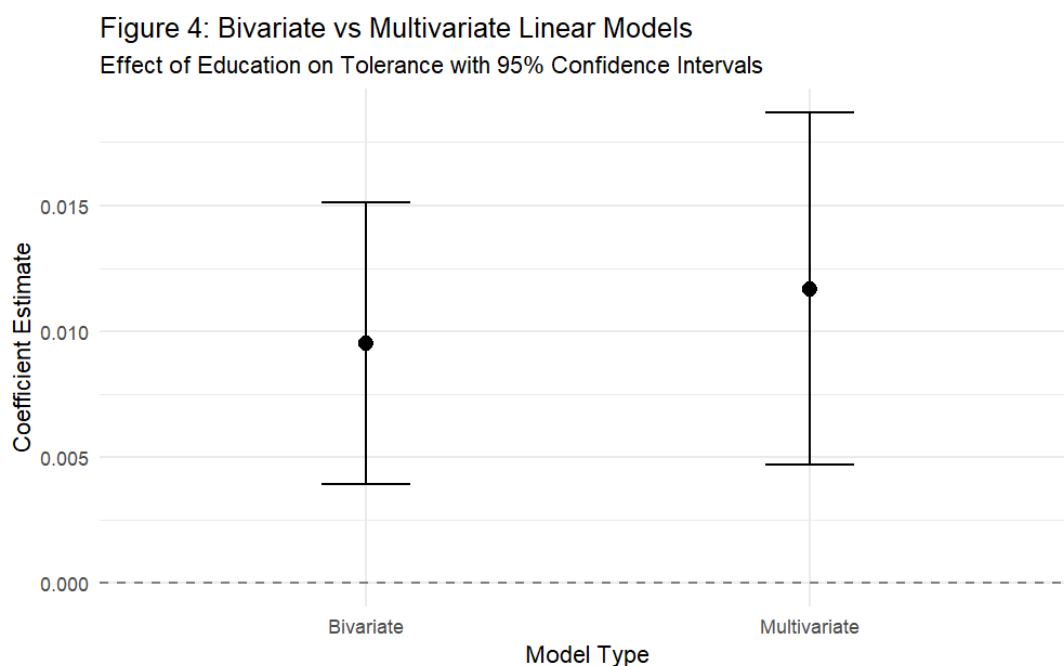
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<sup>1</sup> The odds ratio is calculated as  $\exp(0.0517) \approx 1.053$ , which corresponds to a 5.3% increase in odds.

<sup>2</sup> Over 8 educational levels (from 1 to 9), the odds ratio becomes  $\exp(8 \times 0.0517) \approx \exp(0.4136) \approx 1.512$ , indicating a 51.2% increase in the odds of being tolerant.

appendix. This multivariate model allows us to isolate the effect of education by adjusting for potential confounders that may also shape attitudes toward political disagreement. This analysis includes 3,167 valid observations, with 1,774 cases excluded due to missing data on one or more variables.

The coefficient for education remains positive ( $\beta = 0.01168$ ) and statistically significant ( $p = 0.001$ ), suggesting that higher levels of educational attainment are associated with increased political tolerance, even after accounting for other sociodemographic and attitudinal factors.



To visually illustrate the robustness of the education effect, Figure 4 compares the coefficient estimates for education in both bivariate and multivariate models. Though the standard errors for the multivariate increased to 0.003566, the coefficient also increased, suggesting a larger substantial positive effect despite slight growth in the errors.

The t-value of 3.276 reflects that this result is unlikely to have occurred by random

chance. The p-value is still below the conventional 0.01 threshold, confirming strong statistical significance.

Figure 5: Multivariate Model Data	
(Intercept)	0.4314***
Standard Error	(0.0600)
p-value	(<1e-04)
Education	0.0117** (0.0036) (0.0011)
Social Status	0.0179*** (0.0048) (0.0002)
Political Interest	-0.0076 (0.0107) (0.4783)
Generation Reform	0.0415* (0.0190) (0.0289)
Generation GPCR	0.0496* (0.0230) (0.0030)
Internal Efficacy	0.0546*** (0.0129) (<1e-04)
Number of Objects.	3167
R-squared	0.0146
Adj. R-squared	0.0127
Residual standard error: 0.4266 on 3167 degrees of freedom	
F-statistic: 7.8 on 6 and 3167 DF, p-value: 2.365e-08	
<ul style="list-style-type: none"> <li>• p &lt; 0.1, * p &lt; 0.05, ** p &lt; 0.01, *** p &lt; 0.001</li> </ul>	

Other control variables also exhibit meaningful relationships. Subjective social status is positively associated with tolerance ( $\beta = 0.018, p = 0.002$ ), indicating that individuals who

perceive themselves as higher in the social hierarchy tend to be more tolerant of differing political views. Similarly, both the Reform generation ( $\beta = 0.042, p = 0.029$ ) and Cultural Revolution generation ( $\beta = 0.050, p = 0.031$ ) display higher levels of tolerance compared to the post-reform generation, suggesting that those who experienced these eras are likely to be more tolerant. Internal efficacy also shows a significant positive effect ( $\beta = 0.055, p < 0.001$ ), indicating that individuals with lower self-perceived political efficacy tend to express higher levels of tolerance toward differing political views.

By contrast, political interest does not reach statistical significance in this model, indicating that, when adjusting for other covariates, they do not predict tolerance meaningfully.

The residual standard error is 0.427, representing the average distance between the observed and predicted values, while the R-squared value of 0.015 indicates that approximately 1.5% of the variance in political tolerance is explained by the model, a significant improvement from the previous 0.31% in the bivariate model, despite still being relatively modest, thus suggesting there still exists other potential factors that plays a role in this relationship.

### **4.3 Mediation Analysis**

To further investigate how education influences political tolerance, a mediation analysis was conducted using internal political efficacy as a potential mediating variable. This statistical approach enables the decomposition of the total effect of education on tolerance into two components: a direct effect and an indirect effect transmitted through internal efficacy. The goal is to determine whether and to what extent education shapes tolerance by

altering individuals' perceptions of their own political agency.

Figure 5: Mediation Model Data				
Effect	Estimate	95% CI Lower	95% CI Upper	p-value
ACME	-0.00168	-0.00269	-0.0008	< 2.2e-16
ADE	0.011295	0.005796	0.016972	< 2.2e-16
Total Effect	0.009614	0.004012	0.015379	< 2.2e-16
Prop. Mediated	-0.17244	-0.49076	-0.07348	< 2.2e-16

The results yield several key estimates. The Average Causal Mediation Effect (ACME), which represents the portion of the effect of education that is channeled through internal efficacy, is negative and statistically significant ( $\beta = -0.00168$ ,  $p < 0.001$ ). This indicates that education is associated with lower tolerance through its influence on internal efficacy. This result may seem counterintuitive at first, but it becomes clearer when we recall that internal efficacy is coded such that higher numerical values correspond to lower self-perceived political competence (i.e., 1 = “strongly agree” that one can participate in politics, 4 = “strongly disagree”). Thus, education appears to enhance individuals' sense of political efficacy, which in turn slightly reduces their tolerance for opposing political views.

The Average Direct Effect (ADE) of education, after accounting for internal efficacy, remains positive and significant ( $\beta = 0.01129$ ,  $p < 0.001$ ). This means that education still promotes political tolerance independently of its impact on internal efficacy. The Total Effect, combining both the direct and indirect pathways, is also positive and significant ( $\beta = 0.00961$ ,  $p < 0.001$ ), reaffirming the overall positive relationship between education and tolerance. Interestingly, the proportion mediated is estimated at  $-17.2\%$ , suggesting that approximately 17% of education's overall positive impact on tolerance is diminished through the pathway of

reduced internal efficacy.

Each of these estimates is accompanied by 95% confidence intervals, which reflect the range within which the true value is likely to lie with 95% certainty. For example, the ACME is bounded between  $-0.00269$  and  $-0.00080$ , reinforcing its statistical reliability. The negative sign of this mediated effect suggests that internal efficacy functions as a suppressor variable in this context: rather than transmitting a reinforcing effect, it slightly offsets the total positive influence of education.

These findings underscore a unique dynamic: while education on the whole enhances political tolerance, a portion of this effect is undermined by how education may reshape individuals' self-perceived political competence. This complexity underlines further reflection on the sociopolitical consequences of education, particularly its relation to civic empowerment.

## **Section 5**

### **Discussion and Limitations**

This section reflects on the empirical findings presented previously by interpreting their substantive meaning and broader implications. It begins by situating the results within the context of existing literature and theoretical expectations, particularly the presumed liberalizing effect of education. Next, it considers the limitations of the current study, including issues related to measurement, model specification, and generalizability, and explores directions for future research. Together, these reflections aim to clarify what the findings may or may not reveal about the relationship between education and political

tolerance in contemporary China.

### **5.1 Interpretations and Implications**

This study set out to explore the relationship between education and political tolerance in contemporary China, with a particular focus on internal political efficacy as a mediating factor. The findings offer a nuanced picture of how educational attainment correlates with openness to opposing viewpoints and shed light on the psychological mechanisms that might underlie this relationship.

The bivariate analysis confirms a statistically significant positive relationship between education and political tolerance: individuals with higher levels of formal education were more likely to report being comfortable interacting with those who held different political views. This aligns with conventional liberal-democratic assumptions that education fosters critical thinking, pluralistic values, and interpersonal openness (Sullivan et al. 1982). However, the multivariate analysis adds a layer of complexity. Even after accounting for controls such as subjective social status, political interest, generational cohort, and internal efficacy, the effect of education remains statistically significant but modest in size. To interpret this practically, a one-unit increase in education (on a 1–9 scale) corresponds to approximately a 0.012 increase in political tolerance, holding other factors constant. While seemingly small, the total difference in estimated tolerance between someone with no formal education and someone with a completed university education could amount to roughly 0.1 units, which is still meaningful in a 0 to 1 scale on a whole population level. Thus, education appears to be an independent but relatively modest determinant of political tolerance in this context, suggesting it contributes to shaping civic attitudes, but is not the only or strongest

influence.

Among the control variables, both subjective social status and generation cohort show meaningful associations as well. While the former affirms with classical political theorists how self-achieving individuals feel more secured with dissenting opinions (Stouffer, 1955; Sniderman, 1975; Kirchner et al., 2011), the latter contrasts with previous theorists arguing the younger generation would be more educated and thus more tolerant (Stouffer, 1955; Cutler and Kaufman, 1975; Nunn et al., 1978). Notably, individuals from the GPCR and Reform generations appear more tolerant than those born after the reform era, possibly due to their previous life experience of political change and social opening, or simply their older age exposed them to more different opinions. Further research could be done on whether the decreasing tolerance is a generational pattern or an age pattern by comparing the different ages within a cohort. Internal efficacy also exhibits a significant negative relationship with tolerance, suggesting that one's recognition of their incompetence in political participation would allow them to be patient and tolerant of dissenting ideas.

Interestingly, political interest did not exhibit a statistically significant relationship with political tolerance in the multivariate model, contrary to initial expectations. One might assume that individuals who are more politically interested would be better informed and more open to diverse viewpoints; alternatively, it could also be argued that greater interest in politics may lead to stronger ideological commitments and, consequently, reduced tolerance for dissent. However, the exceptionally high p-value ( $p = 0.478$ ) indicates no meaningful association between political interest and tolerance in this sample. This stands in contrast to findings such as those of Golebiowska (2019), suggesting that the conceptualization and

implications of political interest and tolerance may differ in the Chinese context. This could be due to the authoritarian setting where formal political participation is limited and expressing political interest may not reflect open engagement with diverse viewpoints, but rather alignment with state narratives or passive interest in political news. As such, political interest may not translate into higher tolerance toward dissenting views as it might in liberal democracies. This result invites further examination of how political interest is formed and expressed among Chinese citizens, and calls for broader theoretical and empirical exploration of the relationship between political interest and tolerance across different political systems and cultural contexts.

The mediation analysis offers perhaps the most thought-provoking insight: education increases individuals' sense of political efficacy, but this enhancement is associated with a decrease in political tolerance. In other words, the more people feel politically competent, possibly empowered by education, the less likely they are to be tolerant of dissenting views. One possible interpretation is that education may contribute to a sense of ideological certainty or moral superiority, which in turn narrows the space for disagreement. Rather than promoting humility and pluralism, it may embolden individuals to believe they are more qualified to judge political matters due to their educational backgrounds and are therefore less receptive to alternative perspectives.

This result opens further questions on the role of education and civic empowerment between authoritarian regimes and democracies. In liberal democracies, political efficacy is often celebrated as a civic virtue in which citizens are encouraged to participate in political events; in authoritarian settings, however, education has been theorized to function not just as

a tool for skill development but also as an instrument of ideological formation. The finding that internal efficacy, as shaped by education, is negatively associated with tolerance suggests a potential mechanism of top-down political socialization: one that fosters confident but conformist citizens. This aligns with broader concerns about how authoritarian states manage civil discourse and shape political beliefs through education.

Moreover, the generational differences observed raise important questions about political memory and historical consciousness. Citizens socialized during the Cultural Revolution and early reform era may exhibit a different kind of political understanding, possibly more tolerant due to their exposure to ideological contestation or regime transformation, as well as a more vivid understanding of political radicalism and extremism. The newer generation, having grown up in a period of economic prosperity and political homogeneity, may have had less exposure to dissenting ideas and may therefore find it harder to engage with opposing viewpoints. This generational contrast implies that tolerance may not be solely the product of one's education level, but also of individual experience.

It is also important to consider how these findings compare to those from liberal democratic settings. While many studies in Western contexts have found that education correlates with increased tolerance, the mechanism is often attributed to civic engagement and exposure to diverse viewpoints. In contrast, the Chinese case suggests that education may instead cultivate efficacy without necessarily fostering pluralism, especially if civic education emphasizes certain ideological unity or superiority rather than diversity and inclusivity. This divergence points to the role of institutional context in shaping how education operates politically.

Finally, the understanding of internal political efficacy deserves closer theoretical attention. Classical democratic theory often regards efficacy as a prerequisite for political participation and democratic maturity. Yet in this study, increased internal efficacy, when developed through education, corresponds with lower tolerance. This suggests that political confidence may not always reflect democratic empowerment; instead, it can signal a heightened belief in one's own ideological correctness or a reduced openness to opposing views. While these findings are drawn from the Chinese context, similar patterns have been observed in democratic societies experiencing growing political polarization and education alignment, where greater political engagement could be accompanied by increasing intolerance. Such dynamics challenge the normative assumption that efficacy uniformly supports democratic virtues and call for deeper examination of how political confidence may contribute to exclusionary or rigid attitudes across different systems.

Together, these findings call into question simple assumptions about the democratizing effects of education. While education may increase formal knowledge and self-perceived political competence, it does not automatically translate into democratic virtues such as tolerance and political pluralism. Instead, its effects appear conditional, mediated by psychological orientations and shaped by broader institutional and ideological environments. For both authoritarian and democratic societies, this raises critical questions about how current education systems function to foster not only capable citizens but also pluralistic and open-minded ones, thus avoiding polarization and social antagonism.

## **5.2 Limitations and Potentials**

While the analysis offers several inspiring findings, it also has various limitations and

aspects that offer opportunities for future research. First, the data are cross-sectional as it is all surveyed in 2019, which constrains causal inference. Although mediation analysis provides some insight into potential mechanisms, it does not definitively establish causal direction. Longitudinal or panel data would provide a stronger basis for tracking how changes in education or efficacy levels affect political attitudes over time. The Asian Barometer does have survey data in four other waves in the past two decades, but the responses are randomly sampled, and many survey questions were not consistent over time, which poses a challenge for this goal.

Second, the measurement of political tolerance relies on a single survey item. While straightforward, this operationalization may oversimplify a multifaceted concept. The question was posed on a hypothetical condition of conversing with a friend who has a different political opinion, but this hypothetical “Other” could deviate widely between individuals. Furthermore, one’s previous experience with dissenters could also cause an impact, and these nuances may not be well covered in such polls. Future attempts could survey tolerance towards specific groups like Gibson (1992), thus reducing the ambiguity and refining measurements of understanding.

Third, the coding of internal political efficacy assumes a linear relationship between agreement levels and efficacy. However, psychological constructs like self-perceived political competence may be more complex, potentially requiring more advanced models or nuanced survey approaches. For instance, respondents may interpret the statement differently: some might express low efficacy out of cultural modesty or political caution rather than a genuine lack of political confidence, some might assume casual interaction while others might think

of serious policy formulation. To better capture this variation, future surveys could combine self-assessment with objective indicators of political knowledge (e.g., factual questions about institutions or current events) or use multidimensional scales that distinguish between cognitive, emotional, and behavioral aspects of efficacy. Qualitative methods, such as follow-up interviews or open-ended questions, could also help clarify the motivations behind respondents' answers. Such approaches would allow for a more nuanced understanding of how individuals perceive their political competence and how this relates to political tolerance.

Last but not least, this study does not engage in a detailed analysis of the 1,322 invalid responses excluded from the binary models or the 1,774 invalid responses omitted from the multivariate regression. While these cases were removed to maintain the validity of statistical estimation, their exclusion raises potential concerns about nonresponse bias. Future research could benefit from a closer examination of the possible demographic or attitudinal patterns among these respondents. Understanding what groups or characteristics are more likely to provide non-substantive answers and why may reveal underlying dynamics such as political disengagement, survey fatigue, distrust in the research process, or discomfort with politically sensitive topics. Investigating the generation and distribution of these invalid responses could thus offer a fuller picture of the limits of survey-based research in measuring political attitudes and ensure more robust and representative inferences.

Despite these constraints, the findings also open several promising directions for future inquiry. By building on the current analysis, subsequent studies can deepen our understanding of how education intersects with political psychology and social environments to shape

tolerance across diverse settings.

First, the findings in this study invite reflection on the ongoing debates around rising polarization and social fragmentation in liberal democracies. In Western contexts, education has often been seen as a pathway to civic virtue and political participation has always been encouraged. Yet growing evidence suggests that it may also contribute to ideological rigidity and political tribalism. The negative mediation pathway found here—that education strengthens internal efficacy but may reduce tolerance—offers a potential explanatory mechanism. Comparative work could explore whether this phenomenon is observable in democracies where political confidence and education are linked to sharper partisan divides.

Second, this study opens the door to exploring a broader array of psychological and sociological mechanisms beyond internal efficacy. For example, conditions of in-group and out-group dynamics, education environment, as well as racial/regional stereotypes, may also offer further insights into how education shapes political tolerance. A recent study by Siitkin (2025) found that in the Russian context, individuals showed reduced political polarization after discovering that members of their social in-groups held opposing views. This suggests that exposure to disagreement within trusted social circles may soften ideological rigidity. Such findings highlight the importance of social context and group identity in moderating the relationship between political awareness and tolerance. Investigation on current social exposure, as well as incorporating measures of social grouping, identity, ideology, and media influence, could perhaps help understand how different social groupings interact with educational background to shape political tolerance. Various political scientists have also noted a relation between political tolerance and perceived threat (Stouffer, 1955; Martin and

Westie, 1959; Mueller, 1988; Davis and Silver, 2003; Hutchison and Gibler, 2007). This could also be considered in the current context of Sino-US competition, surveying on one's evaluation of US hostility to see potential connections with political tolerance.

Last but not least, within the Chinese context, a useful next step would be the examination of longitudinal data. This would allow scholars to examine how individuals' political attitudes change regarding new policy changes and social issues. Tracking shifts in tolerance and efficacy over time would help disentangle causal effects and better capture civil responses towards certain policies or changes.

## **Section 6**

### **Conclusions**

This study set out to examine the relationship between education and political tolerance in contemporary China, with a particular focus on internal political efficacy as a potential mediating factor. Drawing on survey data and employing both multivariate regression and causal mediation analysis, the research explored not only whether education promotes tolerance but also how psychological mechanisms might shape this relationship.

The findings offer a nuanced picture. Consistent with liberal-democratic theories, education is positively associated with political tolerance. Individuals with higher levels of formal education are more likely to express openness toward engaging with those who hold differing political views. However, this relationship is relatively modest, and further complexity is revealed through the mediation analysis. Specifically, education appears to enhance internal political efficacy—that is, the belief in one's own ability to participate in politics—but this very sense of empowerment is correlated with a reduction in tolerance. In

short, education promotes political confidence, but that confidence may also breed political intolerance rather than open-mindedness.

Other factors, such as subjective social status and generational cohort, also contribute to the picture. Individuals from the Reform and GPCR generations display greater tolerance than those born later, suggesting that political experience and historical context play important roles. Surprisingly, political interest does not significantly predict tolerance, which challenges assumptions drawn from Western liberal contexts and calls attention to the specificity of authoritarian information environments.

Taken together, these findings contribute to a growing body of literature questioning the uniformly positive civic effects of education. In authoritarian regimes like China, education may not function solely as a vehicle for enlightenment and pluralism but also as a channel for ideological reinforcement. The mediation role of internal efficacy complicates common narratives: rather than producing tolerant, deliberative citizens, education may foster politically confident yet politically exclusive individuals. This study suggests the importance of context-sensitive models that attend to both psychological and structural mediators.

The implications extend beyond China. As democracies around the world grapple with rising polarization, these findings offer a cautionary note. If education bolsters political confidence without cultivating empathy or reaching out to a greater mass, it may inadvertently exacerbate ideological divisions. Comparative research could probe whether similar mechanisms operate in Western settings, where information silos and partisan media create fertile ground for polarization and social antagonism. Likewise, studies such as Siutkin (2025) have shown that exposure to diverse viewpoints within social in-groups may

reduce intolerance, offering promising avenues for civic interventions across political systems.

While the study is limited by its cross-sectional design and reliance on single-item measures, it opens important pathways for future research. By interrogating the assumed link between education and democratic dispositions, it invites scholars to reconsider what kind of citizens our education systems are producing—and what values those systems are truly promoting.

In the end, political tolerance is not merely a function of knowledge or confidence but of how individuals engage with difference. This study suggests that education, while necessary, is not sufficient. For tolerance to flourish, educational systems must foster not just competence, but humility; not just agency, but inclusivity. The challenge, for both authoritarian and democratic societies alike, is to design civic education that embraces the society rather than institutional elites, and that prepares individuals to live with, rather than merely against, those who think differently.

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## Appendix A:

## Multivariate Model Data with Income

(Intercept)	0.3680***
Standard Error	(0.0779)
p-value	(<1e-04)
Education	0.0115* (0.0050) (0.0214)
Social Status	0.0162** (0.0063) (0.0098)
Income	0.0064 (0.0089) (0.4691)
Political Interest	0.0082 (0.0136) (0.5481)
Generation Reform	0.0558* (0.0245) (0.0231)
Generation GPCR	0.0834** (0.0297) (0.0050)
Internal Efficacy	0.0521** (0.0165) (0.0016)
Number of Objects.	1985
R-squared	0.014901
Adj. R-squared	0.011413
Residual standard error: 0.4314 on 1977 degrees of freedom	
F-statistic: 4.272 on 7 and 1977 DF, p-value: 0.000107	
<ul style="list-style-type: none"> <li>• p &lt; 0.1, * p &lt; 0.05, ** p &lt; 0.01, *** p &lt; 0.001</li> </ul>	