

Are College Graduates Agents of Change? Education and Political Participation in China

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Abstract

Are more educated people more likely to participate in politics in authoritarian regimes? Studies of political behavior in American politics suggest that education provides people with more resources, which make people more capable of taking political action—the *empowerment* hypothesis. Modernization theorists claim that education teaches people democratic values, which propel people to fulfill their civic creed—the *enlightenment* hypothesis. Recent work on authoritarian regimes, however, argues that education subject people to more political mobilization, which increases political participation only in ways that are harmless to the regime—the *mobilization* hypothesis. I test these three hypotheses in China by exploiting cross-cohort variation in access to higher education arising from a major college enrollment expansion reform. I find weak to null evidence for the empowerment and enlightenment hypotheses and strong support for the mobilization hypothesis. My findings call into question an influential argument that education helps undermine authoritarian rule.

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In authoritarian regimes, citizens' political participation, though limited, matters: it signals discontent and reveals local malpractices (Lorentzen 2013), communicates constructive criticism about policy performance (Tsai 2015), and triggers government response (Chen, Pan and Xu 2016), which increases policy legitimacy and regime legitimacy (Truex 2017; Magaloni 2006). Alternatively, contentious forms of political participation, such as protest and demonstration, can lead to regime change (Beissinger 2013; Brownlee, Masoud and Reynolds 2014).

Who participates in politics in authoritarian regimes? One of the most robust findings in the political behavior literature is that more educated people are more likely to participate in politics (Almond 1963; Hillygus 2005). Education is considered "the best individual level predictor of participation" (Putnam 1995, 68). The literature further identifies two major mechanisms through which education affects participation.

First, education can *empower* citizens by providing more resources, which enable citizens to follow politics (Verba et al. 1993; Brady, Verba and Schlozman 1995; Verba, Schlozman and Brady 1995). Such resources are both material (such as employment and income) and ideational (such as political interest and knowledge). With a higher level of socioeconomic status (SES) and enhanced political interest and knowledge, citizens are more *capable* of processing political information and taking political action.

Second, education can *enlighten* citizens by teaching them democratic values. Educated people start developing critical thinking and public awareness, leading them to believe that they have the *right* to voice their opinions on key political matters (Lerner 1958). A high level of education makes people give top priority to self-expression and autonomy than to existential security and respect for authority (Inglehart and Welzel 2005). Such value change increases citizens' support for democracy.

While this consensus is developed by studying liberal democracies, it might not apply to authoritarian regimes. The extant literature implicitly assumes that the education system operates in the context of inclusive institutions and a civil culture. But education in most authoritarian countries is government run. Authoritarian governments have enormous incentives to shape the form and content of education in their favor. Wedeen (1999) shows how Syrian official

discourse provides the correct “grammar” and formula for acceptable speech, thus habituating citizens to behave “as if” they believe in official rhetoric. Lott (1999) argues that governments use public education to control the information that their citizens receive. More totalitarian governments make greater investments in publicly controlled information. Cantoni et al. (2017) demonstrate that education does not necessarily bring democratic values because authoritarian governments often use textbooks to indoctrinate official ideology. In addition, Huang (2015) argues that authoritarian states frequently use political education to signal its strength in social control.

The nascent evidence from non-democracies questions the generalizability of the empowering and enlightening effects of education and suggests an alternative mechanism. A distinguished line of research reveals that authoritarian regimes often target certain groups for political mobilization (Linz 2000, 269; Tarrow 1994, 92–93). For example, Magaloni (2006) argues that the Mexican state under the Institutional Revolutionary Party mobilizes voter turnout to show regime strength. In the same vein, Guo (2005) shows that the Chinese Communist Party (CCP) stepped up its efforts to recruit college students after 1989 to nudge their political engagement in the pro-regime direction.

This indicates that authoritarian regimes might *mobilize* educated citizens by involving them into political organizations. The regime uses political mobilization to encourage educated citizens to take certain forms of political action that are harmless to the regime and discourage them from engaging in contentious behavior that might threaten the regime.

I test the empowerment, enlightenment, and mobilization hypotheses in the world’s largest autocracy—China. A durable authoritarian regime, China’s higher education has experienced significant expansion in the last three decades. Between 1990 and 2016, the number of universities and colleges more than doubled, from 1,075 to 2,596.¹ Meanwhile, the proportion of the population who have a college education increased from 1.4% in 1990 to 3.6% in 2000, and to 8.9% in 2010.² With almost 120 million college educated people (roughly the population of

¹Please see China Yearly Macro-Economics Statistics (National) at chinadataonline.org (accessed August 16, 2017).

²Please see http://www.stats.gov.cn/tjsj/zxfb/201104/t20110428_12707.html (accessed August 16, 2017).

Mexico), we wondered what impact they have on China's political change.

In addition, China presents an unusual empirical opportunity because I can leverage a major policy reform to make a stronger causal claim. In 1999, the Chinese government implemented a college enrollment expansion reform that substantially and exogenously increased post-reform cohorts' probability of entering college. I then exploit this quasi-experiment to compare the cohorts that were just young enough to enjoy greater access to college education with those who were just too old.

My empirical analyses of a national survey show little support for the empowerment and enlightenment hypotheses but strong support for the mobilization hypothesis. While education increases the overall level of political participation in China, the results are driven by low-cost, low-risk activities. More importantly, college education does not increase the material resources that people possess, nor does it enhance people's political interest and knowledge. There is also weak to null evidence that college education brings democratic values. The primary channel through which college education increases participation is through organizational mobilization. People attending colleges are 22% and 87% more likely to become Communist Party members and Youth League members, respectively. Joining these two political organizations, in turn, makes people more likely to take more conventional and institutional forms of political action, such as attending political meetings and contacting leaders. Membership in these organizations, however, does not encourage citizens to take more contentious forms of action, such as signing petitions or joining a protest.

These findings have important theoretical and practical implications. Theoretically, the conventional wisdom that education empowers and enlightens relates to a vast literature claiming the democratizing effects of education. College students and college graduates are often considered "agents of change." For example, [Gouldner \(1978, 19\)](#) claims, "Universities have no monopoly on critical discourse, but they are the most important source of dissidents." Modernization theorists have long argued that education helps undermine authoritarian rule and promote political development by propelling citizens to take collective action to challenge the authoritarian government ([Lerner 1958](#); [Lipset 1959](#); [Deutsch 1961](#)). [Huntington \(1991\)](#) has

explicitly attributed the “Third Wave of Democratization” in the 1970s and 1980s to improved education, and [Campante and Chor \(2012\)](#) explain the onset of the “Arab Spring” by the expansion of education in the Arab world. My study, however, suggests that education can be utilized by the regime to strengthen authoritarian rule.

Practically, the positive association between education and civic engagement has inspired international agencies to promote education in developing countries ([Evans and Rose 2007](#), 904). For example, the World Bank argues that “Broad and equitable access to education is thus essential for sustained progress toward democracy, civic participation, and better governance” ([Verspoor 2001](#), 8). As a consequence, a huge emphasis among foreign aid donors has been placed on boosting student attendance and achievement in developing countries ([Gift and Wibbels 2014](#), 292). As I show, however, more education does not necessarily empower and enlighten the citizenry; it might subject them to more political co-optation.

EDUCATION AND POLITICAL PARTICIPATION

In this section, I review the general political science literature, focusing on the empowering, enlightening, and mobilizing effects of education, and derive three hypotheses. I will then introduce the Chinese context and discuss related literature on education and political participation in China.

The Empowering, Enlightening, and Mobilizing Effects of Education

More educated people are more likely to participate in politics. This is one of the law-like findings in a vast literature in political science ([Wolfinger and Rosenstone 1980](#); [Rosenstone and Hansen 1993](#); [Verba, Schlozman and Brady 1995](#)). There are, however, three schools of thoughts about why education increases participation. These three schools are best summarized by [Brady, Verba and Schlozman \(1995, 271\)](#) who, when explaining why people do not participate in political life, answer, “because they can’t, because they don’t want to, or because nobody asked.”

First, educated citizens participate in politics because they can. The SES school in American political behavior, best represented by Verba et al. (1993), Brady, Verba and Schlozman (1995), and Verba, Schlozman and Brady (1995), argues that education empowers citizens by offering them the resources that are needed to participate in politics. The resources include both material wealth and civic skills (such as political interest and knowledge). Education is arguably the best predictor of one's long-term income. Human capital theory in economics sees this as reflecting how education increases skills, thereby increasing productivity, and empirical studies often find robust income returns to education (Card 1999). Education also equips citizens with civic skills. Brady, Verba and Schlozman (1995, 273) show that those with higher levels of education are more likely to speak English at home, to have better vocabulary skills, and to have taken part in high school government. Civic skills acquired as an adult at work, in organizations, and in church are also stratified by education. In turn, citizens are more capable of participating in politics when they possess more resources. People with higher income, for example, are more likely to make campaign contributions (Brady, Verba and Schlozman 1995, 271). Civic skills, reflected in one's level of interest in and knowledge about politics, help people understand political procedures, process political information, and lower the cognitive costs of political participation.

Second, education can also enlighten citizens to teach them the value of participating in public affairs. The modernization theorists are the strongest advocates of this argument (Lerner 1958; Lipset 1959; Deutsch 1961; Inkeles 1983; Inglehart 1997; Inglehart and Welzel 2005). Classic modernization theorists, such as Lerner (1958) and Inkeles (1983), believe that education drives the modernization process: the most educated tend to have modern worldviews. More recently, Inglehart (1997) contends that education brings citizens prodemocratic values and civic culture, which encourage citizens to participate in politics to fulfill their civic creed. In a further development, Inglehart and Welzel (2005, 37) argue that "A high level of education is an indicator that an individual grew up with a sufficiently high level of existential security to take survival for granted—and therefore gives top priority to autonomy, individual choice, and self-expression." The pivotal role of education in modernization features in an influential litera-

ture that attributes democratization waves to improved education (Huntington 1991; Campante and Chor 2012) and is corroborated by an expansive empirical literature that documents a positive correlation between aggregate education and autocratic regimes' transitions to democracy (Przeworski et al. 2000; Boix and Stokes 2003; Glaeser et al. 2004).

While these two schools have emphasized individual agency, they have largely overlooked the role played by political parties, leaders, and organizations. In democracies, as Rosenstone and Hansen (1993) argue, the competitive pressures of the democratic system encourage political leaders to mobilize their fellow citizens. And Gerber and Green (2000) estimate a substantial effect of political mobilization on voter turnout. Political mobilization is used more frequently by authoritarian states to manage political activism, because the number of people who publicly support the regime is critical for regime legitimacy (Magaloni 2006).

So, the third mechanism is political mobilization. While in many new democracies and electoral authoritarian regimes less educated voters are disproportionately the targets of turnout mobilization (Stokes et al. 2013), in closed authoritarian regimes the more educated are considered more dangerous and hence the targets of co-optation. In imperial China, the only noble option after receiving an education was to work in the government as a civil servant (Ho 1962). The Soviet Union did its best to incorporate the intellectual community into the policy-making apparatus (Goldman, Cheek and Hamrin 1987, 153). In Mubarak's Egypt, many of the most significant financial awards of prestige for intellectuals and artists came from the state (Blaydes 2013). In contemporary China, the CCP deliberately targets college students for recruitment (Guo 2005). In turn, political mobilization facilitates participation in three ways. First, mobilization solves collective action problems, because a centralized organization can detect and punish free riders (Olson 1965). Second, mobilization solves coordination problems by providing a focal point (Chwe 2001). Last, mobilization through political organizations also reduces costs of political participation. In an organization, each person bears the cost of collecting only a fraction of the political information he or she receives. In addition, political organizations, like political parties, grant access for ordinary citizens to political leaders (Rosenstone and Hansen 1993).

The mobilization mechanism, however, yields different implications. While the empowerment and enlightenment mechanisms will produce political participation manifested as the embodiment of free will (Rousseau 1997), mobilization will to a large extent constrain the scope and impact of political participation. Because political actions are mobilized by political organizations, individuals usually have little discretion in choosing the timing, content, and goal of their participation. Given authoritarian governments' distaste for contentious collective action (King, Pan and Roberts 2013), citizens are discouraged from engaging in "sustained interaction of collective actors and authorities that is the hallmark of social movements" (Tarrow 1994, 92–93).

I summarize the discussions into four hypotheses:

Hypothesis 1: More educated people are more likely to participate in politics, *ceteris paribus*.

Hypothesis 2 (The Empowerment Hypothesis): More educated people are more likely to participate in politics because they have more resources, including material wealth, political interest, and political knowledge, *ceteris paribus*.

Hypothesis 3 (The Enlightenment Hypothesis): More educated people are more likely to participate in politics because they are more supportive of democratic values, *ceteris paribus*.

Hypothesis 4 (The Mobilization Hypothesis): More educated people are more likely to participate in politics because they are more likely to be mobilized by political organizations, *ceteris paribus*.

Education and Political Participation in China

Thanks to the flourishing survey research opportunities, empirical research on political participation in China has proliferated in the last two decades (Manion 1994). In a pioneering work, Shi (1997) identifies 28 participatory acts and shows that Beijing urban citizens (his sample) actively engage in various voluntary participatory acts to articulate their interests. Jennings (1997), studying political participation in the Chinese countryside, also finds a variety of participation modes, such as cooperative actions, voicing opinions to cadres, and contacting representatives. More recently, one line of research has been focused on institutionalized channels, such as voting in local people's congress elections and village elections (Shi 1999;

Zhong and Chen 2002; Chen and Zhong 2002), while others study more contentious forms of behavior, such as protests and petitions (O'Brien and Li 2006; Hurst 2009; Chen 2012; Fu 2017).

Although the regression tables have consistently shown a positive effect of education on participation, we know less about the mechanisms. And the empirical literature on the relationships between education, resources, democratic values, and political mobilization in China casts doubt on the conventional wisdom developed from studying liberal democracies.

First, despite a robust finding of economic returns to education in market economies (Card 1999), the relationship between education and wealth is less straightforward in transition economies. A large literature, contributed mainly by sociologists, argues that there were low earnings returns to education in pre-reform China, attributed to the absence of markets (Walder 1990; Whyte and Parish 1984; Xie and Hannum 1996). After the market reform, while some scholars predict higher returns to education (Nee 1996; Zhou 2000), others observe that economic resources are still allocated according to bureaucratic principles under a partial market economy, in which political loyalty and connections rather than economic productivity are the basis of reward (Bian 1994; Bian and Logan 1996). Specifically, Bian (1994) contends that interpersonal connections (*guanxi*) have become more important in the allocation of jobs in the reform era, and Wu and Xie (2003) estimate that the higher returns of education in the reform era are primarily caused by self selection rather than marketization. The empirical evidence brings into question whether education will bring more resources to make people more capable of participating in politics in China.

Second, as for education and democratic values, scholars find that the Chinese government often uses school curriculum to shape students' attitudes to make them more pro-government and deter them from contentious behavior (Zhao 1998; Huang 2015; Cantoni et al. 2017). The ideological indoctrination was accelerated after 1989, when thousands of students showed up in Tiananmen Square asking for more freedom. After 1989, Deng Xiaoping regretted that "in the past 10 years our biggest mistake was in the aspect of education; ideological and political education of the youth was not adequately grasped" (quoted in Guo (2005, 376–377)). Political

education through curriculum is largely successful in shaping attitudes. Exploiting a curriculum change as a natural experiment, [Cantoni et al. \(2017\)](#) show that studying the new curriculum led to more positive views of China's governance, changed views on democracy, and increased skepticism toward free markets. The emerging evidence challenges the association between education and democratic values discovered in cross-national studies.

Last, recent studies have emphasized the regime's strategy to mobilize and co-opt the more educated. In addition to strengthening ideological and behavioral control on university campuses ([Perry 2015](#); [Yan 2014](#)), the CCP—the “proletariat vanguard”—stepped up its efforts to recruit college students. Based on [Guo's \(2005\)](#) calculation, in 1990, 16,000 students (or 0.81% of all undergraduates) were CCP members. By 2000, this number had grown to 209,000 (or 3.83% of all undergraduate students). In 2010, over a quarter of all undergraduates in some elite universities were CCP members.³ As a consequence, CCP members are disproportionately college educated. In 2010, among the newly recruited CCP members, over 40% were college students.⁴ [Guo \(2005\)](#) argues that Party recruitment is largely determined by Party mobilization, not by self-initiated actions undertaken by individual students. He shows that the whole recruitment process begins with the local Party organization's obtaining a quota and/or guidelines for recruiting new members from the upper level. The number of new Party members recruited from the student body each year is set by Party committees at various levels in their five-year plans. The same mobilization dynamics is shown in the Youth League—CCP's prep school for people between the age of 14 and 28 years. [Guo \(2007, 464\)](#) shows that, in 2002, the CCP recruited 2.1 million new members, and 1.3 million of them were Youth League members, 1 million of whom were specifically recommended to join the CCP by the grassroots organizations of the League. Active recruitment of college students and graduates is an important and regular work by the grassroots branches of the CCP and the Youth League, as they strive to co-opt the “advanced elements” into their ranks ([Guo 2007, 464](#)).

Once a member of the CCP or the Youth League, people become more politically active.

³Please see <http://www.chinanews.com/gn/2011/06-28/3142241.shtml> (accessed August 14, 2017).

⁴Please see <http://www.chinanews.com/gn/2011/06-28/3142241.shtml> (accessed August 14, 2017).

This is because members have vertical or horizontal connections with local decision makers within and outside of the Party organization (Guo 2007, 466). Tsai and Xu (2017) demonstrate that political connections can constitute a critical resource for autonomous participation in non-democratic and transitional systems because people in one's networks can help one know how to participate, access the people one wants to influence, and ensure that one's action does not result in reprisal. But political mobilization also constrains political participation. Guo (2007, 468–469) claims the CCP and the Youth League exert strong constraint on political participation by their members, especially participation through unconventional means. CCP members are required and compelled by strict Party discipline to “maintain a high-degree alignment with the Party Center in ideology and action.” The core content of the Party discipline is the so-called four obeys: individual Party members obey Party organizations, the minority obeys the majority, the lower levels obey the upper levels, and all Party organizations and members obey the Party Center. Party members, for example, cannot take part in collective visits to higher authorities (集体上访). To assure Party members' compliance, as Mertha (2017, 70) argues, the CCP makes “recurring rectification efforts” seeking to temper the rank and file into greater complacency, and occasionally to “wear them down” to “emasculate them in full view of the Party.” So although education can increase participation by subjecting the more educated to political mobilization, the implications are different from the empowering and enlightening effects observed in democracies.

In the next section, I will discuss my research design, which uses a national survey and leverages a policy reform to exploit exogenous variation in access to higher education.

RESEARCH DESIGN

Establishing a causal relationship between educational attainment and political participation inevitably encounters the empirical challenge of differentiating between “education as cause” and “education as proxy.” As Kam and Palmer (2008, 612–613) point out, “The likelihood that an individual will pursue higher education is systematically determined by a number of factors, including parental characteristics, individual abilities, and predispositions. The same factors

that propel individuals into pursuing higher education may also propel them into participating in politics.”

Exploiting a massive college enrollment expansion reform that the Chinese government implemented in 1999, and analyzing a nationally representative survey that interviewed over 4,000 adult Chinese citizens in 2008, I am able to make a stronger causal claim about the effect of college education on political participation. In what follows I will discuss the background of the 1999 college enrollment expansion reform, introduce the data, and discuss my identification strategy.

China’s 1999 College Enrollment Expansion Reform

In 1977, the post-Mao leadership rehabilitated the college entrance exam that was abolished during the Mao era (Hannum et al. 2008). From 1978 to 1998 the number of colleges in China increased from 598 to 1,022, and the number of college students increased from 0.86 million to 3.41 million (Li, Whalley and Xing 2014, 568). However, the growth in colleges and college students before the 1999 reform was much slower than afterward.

In June 1999, the Chinese central government and the Ministry of Education announced a college enrollment expansion reform that increased the number of new college students by 520,000. The resulting 48% growth rate was the highest since 1978. Adjusting for population growth, high school graduates’ probability of entering college increased from 34% in 1998 to 56% in 1999, and the rate kept growing (see Figure 1).⁵

[INSERT FIGURE 1 HERE]

Many features of the 1999 reform make it a valid natural experiment that assigns “subjects” into “control” and “treatment” groups at random (or at least as if random). First, the reform was not expected by high school graduates or their families. Given that the college entrance exams

⁵The reasons for the college enrollment expansion are manifold. In 1997, the Chinese government initiated a massive privatization plan in which more than 20 million former state-owned enterprise employees were laid off. Meanwhile, the Asian Financial Crisis of 1997 significantly deteriorated China’s employment situation. The higher education expansion was initiated to alleviate the unemployment problem and to stimulate consumption. Please see Li, Whalley and Xing (2014, 568).

were held in early July, the announcement made in June was too late to significantly change the behavior of high school graduates (Li, Whalley and Xing 2014, 568). The cohort that was slightly too old to benefit from the expansion was not able to anticipate the reform and sort itself into the “treatment” group. I also compare the three cohorts that were born right after 1981 (i.e., the group that reached college age when the reform occurred) with the three cohorts that were born in or right before 1981 (so that they were slightly too old to be “treated” by the reform).⁶ All of the subjects in my comparisons were born after China started its reforms in 1978, and they were exposed to similar socioeconomic conditions when they grew up. I will later show that many of their pretreatment characteristics, such as sex, growing up in urban/rural areas, and ethnicity, are balanced. The only difference that distinguishes the post-1981 cohorts is that they were far more likely to get into college than the pre-1981 cohorts. Some recent studies have started to use the same event as a natural experiment to study the effect of the expansion (Li, Whalley and Xing 2014).

Data

I analyze the Chinese Citizens’ Awareness Survey (CCAS), which was conducted by the Research Center for Contemporary China (RCCC) at Peking University in 2008. The CCAS interviewed 4,004 adults who lived in mainland China’s 31 provinces. This survey used spatial sampling techniques to include both residents and migrants, and a stratified sampling design to draw a nationally representative sample (Landry and Shen 2005). Peking University students (along with their local collaborators) conducted face-to-face interviews under strict quality control from the Beijing headquarters, and RCCC is often considered “the most competent academic survey research agency on the mainland” (Manion 2010, 190). Section I in the Web Appendix provides more information about the survey.

Political participation, the principal dependent variable, is operationalized using eight ordinal variables. All variables have three levels: 2 means “did it last year,” 1 “did it earlier,” and 0 “never.” I will later show that a dichotomous coding (collapsing 1 and 2) of these activities

⁶I later show that the results are not sensitive to the choice of bandwidths.

yields similar results. The eight activities are as follows:

1. *Attend Political Meetings* indicates whether the respondent has ever attended political meetings of any sort;
2. *Contact Leaders* indicates whether the respondent has ever contacted a government official to voice her opinion;
3. *Contact Media* indicates whether the respondent has ever voiced her opinion through the media;
4. *Contact Social Organizations* indicates whether the respondent has ever voiced her opinion through social organizations;
5. *Discuss Politics on the Internet* indicates whether the respondent has ever voiced her opinion in political forums or discussion groups on the Internet;
6. *Collect Donations* indicates whether the respondent has ever collected donations for a social activity or organization;
7. *Sign Petitions* indicates whether the respondent has ever signed a petition; and
8. *Protest* indicates whether the respondent has ever joined a protest, sit-in, or demonstration.

Table A2.1 in the Web Appendix presents the original wordings and summary statistics of these eight variables. Following other practices in the literature (e.g., [Croke et al. \(2016\)](#)), I then transform these eight variables, which are positively correlated with a Cronbach's alpha of 0.66, into a summary index (*Participation Scale*).⁷ I will use this index and each individual behavior as dependent variables to examine both the overall level of political participation and the individual activities.⁸

I appreciate the concern that Chinese respondents might underreport their involvement in politically sensitive activities, such as protests, because of political desirability bias ([Jiang and Yang 2016](#)). However, I show several pieces of evidence below that political desirability bias

⁷All summary indices are constructed using the `alpha` command in Stata, which does not use casewise deletion and therefore maximizes the available information from the constituent variables.

⁸Figure A2.1 in the Web Appendix shows the distribution of the eight variables and the index. The most common activities were *Attend Political Meetings*, *Contact Leaders*, and *Collect Donations*. This is consistent with earlier work, such as [Shi's \(1997\)](#) finding that people in China participate in politics in order to persuade the leaders of their own organization. *Protest* has the lowest frequency: 0.32% of respondents had engaged in such actions in the year before the survey and 1.32% had done so earlier; the vast majority (98.36%) had never taken part. Despite the low percentage, considering the size of the Chinese population, this still suggests that over 21 million people in China had participated in a protest at some point in their lives. This is consistent with the skyrocketing number of "mass incidents" in China ([Lorentzen 2013](#); [Wang and Minzner 2015](#)).

does not contaminate my findings in any significant way. First, the survey was conducted by a university rather than a governmental organization. RCCC, experienced in conducting political surveys in China, took several measures to ease respondents' concerns about political sensitivity. For example, in the preface of the survey that was read to every respondent prior to the survey, respondents were guaranteed the confidentiality of their identifying information, including their names, addresses, and contact information. In addition, every respondent was informed of the right to skip a question if he/she did not feel like answering it. Second, respondents could avoid a sensitive question by selecting "Don't Know" or "No Response" (Presser et al. 2004). A close look at the response rate of each question shows that *Protest* does not solicit the highest number of item non-responses: its non-response rate is 5.32%, but *Discuss Politics on the Internet*, which is a relatively safe activity (King, Pan and Roberts 2013), has a non-response rate of 5.57%. Third, simply admitting to have participated in a protest in the past would not lead to repression, because only protest leaders are arrested or harassed (Li and O'Brien 2008). Last, recent experimental evidence finds that political desirability bias is very small among Chinese respondents (Tang 2016, 134–151).

Education is my key (endogenous) explanatory variable. The CCAS asked the respondents their highest degree. *College* indicates whether the respondent has received a college degree;⁹ 7.64% reported having a college degree, which is very close to the 8.93% reported in the 2010 census.¹⁰ Later, I will show that my results are not sensitive to this particular coding of education. The results remain similar when using an ordinal measure of education (*Level of Education*), which uses a five-point scale: incomplete primary, complete primary, complete junior high, complete senior high, and complete college and above, or a continuous variable (*Years of Education*), which is simply the total years of schooling. Section II in the Web Appendix presents the summary statistics and measurements of all of the variables used in the analysis.

⁹Here, college degrees include degrees from a three-year college (大专) and a four-year university (大本), as both were included in the college enrollment expansion reform.

¹⁰Please see http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/qgrkpcgb/201104/t20110428_30327.html (accessed August 11, 2015).

Estimation Strategies

To identify education's causal effect, similar to the strategies used in [Duflo \(2001\)](#) and [Croke et al. \(2016\)](#), I exploit the cross-cohort variation in access to higher education created by the 1999 college enrollment expansion reform. In particular, I compare the respondents who were just young enough to be “treated” by the reform with those who were just too old to benefit from it. I define those born after 1981, who were 18 or younger when the expansion was implemented, as “treated” ($Post1981=1$). Those born in 1981 or earlier, and thus just old enough to miss out on the expansion, are defined as the control group that was not “treated” by the reform ($Post1981=0$).

[INSERT FIGURE 2 HERE]

Figure 2 provides preliminary evidence that the expansion increased average educational attainment across cohorts. The upper-left panel reveals that the cohorts born after 1981 exhibit a substantially higher probability (coeff.=0.26, s.e.=0.07) of having a college degree than do the cohorts born earlier. We see a similar increase for *Level of Education* and *Years of Education*. Table 1 further confirms the impact of the expansion on educational attainment using regressions. Using a “bandwidth” of three cohorts on either side of the cutoff and provincial fixed effects to account for provincial variation in college recruitment, $Post1981$ has a consistently significantly positive effect on *College*, *Level of Education*, and *Years of Education*. On average, the cohorts born right after 1981 enjoy one more year of schooling than their immediate older counterparts do. $Post1981$ therefore provides a good source of exogenous variation.

[INSERT TABLE 1 HERE]

My identification strategy relies on the assumption that the cohorts on both sides of the reform cutoff are effectively identical, with the exception that only the post-1981 cohorts were eligible for greater access to higher education. But people who were born many years apart were exposed to different socioeconomic conditions and socialization processes. I therefore compare only respondents who were born in the same era. My main analysis uses a “bandwidth” of three cohorts on either side of the reform cutoff ([1979, 1981] vs. [1982, 1984]).

This is a powerful design because neighboring cohorts were exposed to almost identical economic, social, and political environments, as they all grew up in China’s post-Mao era. They differ only on educational attainment due to an unexpected college expansion reform. I will later show that my results are robust to using either wider or narrower bandwidths.

There are good reasons to believe that important *pretreatment* covariates are balanced across the cutoff. Figure 2 shows that respondents on either side of the cutoff do not differ on sex, ethnicity, or growing up in urban areas. It also shows that there is no discontinuity in *Age* in my sample, indicating a balance of fertility rates on either side of the cutoff.

If *Post1981* provides a valid source of exogenous variation with reasonable bandwidths, then I can use it as an instrumental variable (IV) to estimate the causal effect of college education on political participation. As suggested by [Dunning \(2012\)](#), I use two approaches. I first estimate the effect of *Post1981* on political participation, which is equivalent to an “intention-to-treat” (ITT) analysis. The ITT analysis uses ordinary least squares (OLS) to fit the following equation to the CCAS data:

$$Political\ Participation_i = \beta Post1981_i + \gamma_j + \epsilon_{ij}, \quad (1)$$

where *Political Participation_i* is the outcome measure (either *Participation Scale* or the eight individual measures), and *Post1981* is the treatment variable. I include provincial fixed effects, γ_j , to account for different college quotas and recruitment policies across provinces, and I cluster standard errors by primary sampling units (counties). I use OLS rather than ordered logit because non-linear models like ordered logit may have the incidental parameter problem with dummy variables, which is the case here.

One caveat is noncompliance: being born before 1981 does not deprive one of a college education, and being born after 1981 does not guarantee a college degree (it only enhances the chance of getting into college).¹¹ The usual strategy to deal with noncompliance is to use an

¹¹For example, not everyone born after 1981 ended up attending high school, and even among high school graduates, only 56% of them eventually entered college. There is also a cutoff date for starting school: children born after September 1st can enter school one year earlier than those born before. In addition, the years of starting school and entering college are also variable across provinces in China. Lastly, people are allowed to take the national entrance exam multiple times, so although some took their first exam before 1999, they could still retake it in or after 1999. These complications mean that being in the treatment group (born after 1981) does not

indicator of whether a subject *should* be in the treatment group to predict whether he or she *actually* receives the treatment, and to use the predicted value from the first stage in the second stage to predict the outcome. In the first stage, I estimate the effect of *Post1981* on *College*:

$$College_i = \delta Post1981_i + \gamma_j + \eta_{ij}, \quad (2)$$

and then in the second-stage estimate the following structural equation using two-stage least squares (2SLS):

$$Political\ Participation_i = \theta \widehat{College}_i + \gamma_j + \zeta_{ij}, \quad (3)$$

The IV approach requires two additional assumptions. First, the instrument must be valid and strong. I discussed the validity of the instrument earlier in this section, and as Table 2 shows, the first stage yields large F statistics ranging from 12.1 to 14.9, which exceed the standard critical value of 10 required to avoid weak instrument bias (Staiger and Stock 1997). Second, the exclusion restriction assumption requires that *Post1981* only affect political participation through increased education. There are several reasons to believe this is the case. The primary reason is that education is highly proximate to the reform itself: most downstream behavioral responses—such as fertility, marriage, and employment—are a function of one’s education. In addition, some notable policy changes in China, such as the start of the economic reform in 1978, affected the six cohorts in my analysis equally. Below I discuss several potential confounding factors and show why they should not contaminate my results.

One potential confounding treatment is the one-child policy that was introduced in 1979 and formalized in 1981 when the Chinese government established the State Commission of Family Planning. But the timing and stringency of the one-child policy varied greatly across the country (Hesketh, Lu and Xing 2005). As a consequence, there is no sharp “discontinuity” in fertility rates around 1981 that could constitute an alternative treatment. For example, China’s fertility rate (average number of births per woman) was 2.71 in 1980, 2.67 in 1981, and 2.68 in

guarantee receipt of the treatment (attending college), and being in the control group (born before 1981) does not mean a failure to receive the treatment. This is a typical case of treatment with noncompliance.

1982.¹²

A second potential confounding treatment might be the 1997 Asian Financial Crisis that occurred two years before the college expansion, which suppressed the employment opportunities of post-crisis graduates. Given that one's socioeconomic status is the strongest predictor of political participation (Verba, Schlozman and Brady 1995), graduating into a crisis economy might depress one's participation level. In my robustness checks, I show that even when the analysis is restricted to a very narrow window that includes only the post-crisis cohorts, my results still hold.

Another confounder might be curriculum change. As Cantoni et al. (2017) show, new textbooks that emphasize patriotism and the uniqueness of the Chinese society and political system may change students' political attitudes toward the regime. If there was a substantive university-level curriculum change in 1999, then college education would have different meanings for the pre- and post-1999 college students, which violates an important assumption (SUTVA) for causal inference. I hence review information on all curriculum changes at the university level since the 1990s and find that the timing of new textbooks often lags that of new leadership: the two recent curriculum changes occurred in 2005 and 2013, respectively, following leadership changes in 2002 and 2012. Curriculum change, therefore, does not constitute a confounding treatment because there was no leadership change immediately before 1999.

The last confounder, one might argue, is the quality of education. Because of the expansion reform, many universities were unprepared for the increased number of new students, and the quality of college education decreased after 1999. If this were true, my treatment (college education) would mean differently for the two cohorts, which could violate the SUTVA assumption for causal inference. To tackle this issue, I conduct a donut regression discontinuity (RD) analysis to drop observations in the immediate vicinity of the cutoff to take advantage of the increased fiscal expenditure on education after the expansion reform (Figure A3.2 in the Web Appendix). As I show in the robustness checks, the results from the donut RD analysis are the same.

¹²Please see <https://goo.gl/i1y8PX> (accessed February 8, 2016).

UNPACKING EDUCATION AND PARTICIPATION IN CHINA

In this section, I will show that higher education increases the overall level of political participation, although the results are driven by low-cost and low-risk activities, such as contacting social organizations, discussing politics on the Internet, and collecting donations. These results are highly robust. I will then explore the three mechanisms and show that my data support only the mobilization hypothesis but not the empowerment and enlightenment hypotheses.

Effects of Education on Participation

I find that college education increases the overall level of political participation (Hypothesis 1). Column (1) in Table 2 shows that both the ITT analysis and IV estimates find that college education has a positive effect on *Participation Scale*. The IV estimates suggest that a person with a college degree is almost 0.5 points higher on a 0–2 participation scale than one who does not. This finding is consistent with existing studies that focus on developed democracies (Rosenstone and Hansen 1993; Verba, Schlozman and Brady 1995; Wolfinger and Rosenstone 1980) and democratic developing countries (Larreguy and Marshall Forthcoming).

[INSERT TABLE 2 HERE]

But the results are driven by a few individual activities. Columns (2)–(9) in Table 2 report both the ITT and IV estimates using individual activity as the dependent variable. College education increases only people’s propensity to engage in low-cost, low-risk behavior, such as voicing opinions through social organizations (*Contact Social Organizations*), participating in political forums or discussion groups on the Internet (*Discuss Politics on the Internet*), and *Collecting Donations*. Higher education has the greatest effect on increasing people’s online participation. A person who has a college degree is 1.21 points higher on a 0–2 scale than one who does not. In contrast, people with higher education do not seem to be interested in more contentious forms of participation, such as signing petitions (*Sign Petitions*) or joining a protest, sit-in, or demonstration (*Protest*).

These results are highly robust, as shown in a series of robustness checks, including using dichotomous dependent variables, varying the bandwidths, using alternative codings of education (*Level of Education* or *Years of Education*), controlling for pretreatment covariates, placebo tests with 15 hypothetical reforms, and conducting a donut RD analysis. Section III in the Web Appendix shows the details of these tests.

While these findings are consistent with prior studies that show education increases political participation, the uneven impacts of education on individual activities support the China-specific literature's focus on the regime's strategy to control collective action (King, Pan and Roberts 2013), especially for college students and graduates (Huang 2015; Perry 2015; Yan 2014). Next, I analyze the explanatory power of the three mechanisms: empowerment, enlightenment, and mobilization.

Does Education Empower?

I first examine whether higher education empowers citizens by providing them with more resources, such as economic welfare, political interest, and political knowledge (Hypothesis 2). The SES school contends that people with more resources are more capable of participating in politics (Verba et al. 1993; Brady, Verba and Schlozman 1995; Verba, Schlozman and Brady 1995).

I measure respondents' *material* resources using both objective and subjective indicators from the survey. I examine their objective well-being in terms of *Personal Monthly Income* (in *yuan*) and an indicator for employment status (*Employed*). I also measure their subjective resources using their *Satisfaction with Family Income*, *Satisfaction with Job*, and *Subjective Social Status*. These subjective measures are on a 0–10 scale.

I measure respondents' *ideational* resources in terms of their political interest and political knowledge. For their political interest, I examine their *Interest in National Affairs*, *Interest in City Affairs*, and *Interest in Community Affairs*. I also combine these three measures to produce a *Political Interest Scale*. The Cronbach's alpha for this scale is 0.80. All of these political interest variables are on a 1–4 scale. For political knowledge, I construct a *Political Knowledge*

Scale, which measures whether they can correctly name the General Secretary of the CCP, the Prime Minister, the Chairperson of the National People’s Congress, and the Vice President. The Cronbach’s alpha for this scale is 0.71. Table A2.1 in the Web Appendix presents the wordings and summary statistics of these variables.

Using the same estimation strategies, I explore whether higher education increases people’s resources. As I discussed previously, the sociology literature is inconclusive as to whether there are significant returns to education in China.

[INSERT TABLE 3 HERE]

Table 3 presents the ITT and IV estimates of the effects of access to higher education on economic outcomes. Although all of the coefficients are positive, none is statistically significant, indicating limited economic returns to education. Table 4 presents the effects of access to higher education on political interest and political knowledge. While there is weak evidence that college graduates are more interested in city affairs, they do not exhibit a higher overall level of political interest. There is even a negative coefficient on *Interest in Community Affairs*, although its magnitude is small. There is also no evidence that higher education increases people’s political knowledge. In sum, I do not find strong support for the empowerment hypothesis.

[INSERT TABLE 4 HERE]

Does Education Enlighten?

Modernization theorists argue that education enlightens citizens by teaching them democratic values, making them believe they have the right to participate in politics (Inglehart 1997; Inglehart and Welzel 2005). I measure respondents’ democratic values in terms of their demand for political rights, including the right to be informed about politics (*Informed About Politics*), the right to join associations (*Freedom of Association*), survival rights (*Survival*), *Freedom of Expression*, *Voting Rights*, and the right to criticize the government (*Criticize the Government*). I also combine these six variables into a *Democratic Value Scale*, which has a Cronbach’s alpha of 0.82. All of these variables are on a 1–4 scale.

[INSERT TABLE 5 HERE]

Table 5 presents the results. While there is weak evidence that access to higher education increases people's demand for survival rights, other coefficients are small, and the signs are mixed. Overall, I do not find strong evidence that education brings people democratic values in China (Hypothesis 3).

Does Education Subject People to Political Mobilization?

Last, I investigate whether more educated people are more likely to be mobilized by political organizations. The authoritarian politics literature demonstrates that people with education will be co-opted by the regime, which then controls their modes of participation (Guo 2007). I measure political mobilization using respondents' membership in two of the most important political organizations in China—the Communist Party and the Youth League. As I discussed previously, these two organizations deliberately target college students for recruitment and also constrain their members' political behavior.

[INSERT TABLE 6 HERE]

Table 6 presents the estimates. Although the ITT results are weaker, the IV estimates show that college education significantly increases people's likelihood of joining the Communist Party and the Youth League. It is estimated that people with a college degree are 22% and 87% more likely to be Communist Party members or Youth League members, respectively. The evidence provides support for Hypothesis 4.

Joining these political organizations, in turn, increases *certain forms of* political participation by lowering costs and granting access to political leaders. Table 7 tests this implication using a conventional OLS framework, controlling for *College* and other demographic variables (*Male, Han, Urban, and Age*). As is shown, while Communist Party members are more likely to participate in politics in general, they are no more likely to participate in more contentious forms of action, such as contacting the media, signing petitions, or joining a protest. They are also less likely to discuss politics on the Internet. As for the Youth League members, while

they are essentially more likely to participate in all forms of politics, they are no more likely to join a protest. The results indicate a stronger discipline in the Communist Party than in the Youth League.

[INSERT TABLE 7 HERE]

In sum, the results support Hypothesis 4 that education increases people's probability of being mobilized by political organizations, which increase their overall level of participation but also nudge their behavior in certain directions.

DISCUSSION AND CONCLUSION

William Rainey Harper, a leading American education leader of the late 19th century and the first president of the University of Chicago, once said, "The university, I contend, is this prophet of democracy" (Harper 1905, 19). Inspiring students with cognitive abilities that facilitate critical thinking, higher education is believed to produce citizens who constitute the pillar of democracy. Bueno de Mesquita and Downs (2005) identify access to higher education as one of the most important types of public coordination goods, the supply of which they suggest poses an existential survival threat to autocratic rule. They contend, "[a]round the world, from Beijing to Moscow to Caracas, authoritarian regimes seem to be well aware of the dangers of providing coordination goods to their people, and they refrain from doing so with remarkable consistency" (Bueno de Mesquita and Downs 2005, 84). International agencies have asserted the importance of schooling for support for democracy (Evans and Rose 2007, 904). For example, the World Bank argues that "Broad and equitable access to education is thus essential for sustained progress toward democracy, civic participation, and better governance" (Verspoor 2001, 8). As a consequence, a huge emphasis among foreign aid donors has been placed on boosting student attendance and achievement in developing countries (Gift and Wibbels 2014, 292).

However, there has been very little systematic evidence to support such claims in authoritarian contexts. Following Gift and Wibbels's (2014, 292) call to pay "more attention to the

comparative politics of education,” I present, to my knowledge, the first quasi-experimental evidence on whether and why higher education affects citizens’ political participation in a non-competitive authoritarian regime.

Exploiting China’s college enrollment expansion reform in 1999 that exogenously increased high school graduates’ probability of entering college, and analyzing a nationally representative sample survey, I demonstrate that while higher education increases political participation, its mechanism is mainly through political mobilization rather than empowerment or enlightenment. Political participation through mobilization, however, manifests only in certain forms of actions that are harmless to the regime and rarely threaten the regime.

The Chinese case challenges a popular view, especially among modernization theorists, that education empowers citizens to take collective action to disrupt authoritarian rule (Lipset 1959; Huntington 1968, 1991; Campante and Chor 2012). My findings remind us that authoritarian governments can also utilize education to serve their purposes (Lott 1999; Huang 2015). The limited liberalizing effects of China’s higher education system also help inform on our understanding of the Chinese authoritarian regime’s durability.

This article speaks to several strands of literature in comparative politics and political behavior. First, while consistent with prior studies that find a positive causal effect of education on political participation¹³ (Dee 2004; Sondheimer and Green 2010), this study is one of a few that unpack the links between education and participation. Second, while most existing studies on education and political participation are conducted in developed democracies, I join a scarce but growing literature that focuses on authoritarian regimes (Croke et al. 2016). Lastly, this study adds a new perspective to explaining the resilience of Chinese authoritarianism (Nathan 2003). Several recent studies have shown the legitimizing effect of public goods provision and propaganda (Lü 2014; Tang 2005; Stockmann and Gallagher 2011). I show that China’s higher education system has not produced a revolutionary generation that could threaten the regime. This helps explain what Perry terms a “striking situation” in which, despite the veritable explosion of popular protest found in virtually all other sectors of post-Tiananmen Chinese society, “China’s university campuses have been notably tranquil” (Perry 2015, 12).

¹³For a counterargument, please see Berinsky and Lenz (2011) and Kam and Palmer (2008).

Although the findings relate to almost 120 million college graduates in China, exploring whether these findings apply in other countries is an empirical question for future research. There is ample evidence that government control of education is not unique in China. During the 1920s and 1950s, the Soviet Union experimented with raising children in “communal children’s houses, dining halls, and other institutions that would decrease the importance of the individual household” (Shipler 1983, 88–89). While fighting in Afghanistan during the 1980s, the Soviet government forcibly took tens of thousands of 3- and 4-year-old Afghans to the USSR to be raised away from the influence of their families (Amstutz 1986). The hope was that when later returned to Afghanistan, they would form the core of a loyal government administration. Even in some democracies, such as Sweden, governments have gone to great lengths to instill desired values in children. When Ingvar Carlsson (who later became prime minister) was education minister, he said that “school is the spearhead of Socialism” and “pre-school training is essential ‘to eliminate the social heritage’” of undesirable parental views (quoted in Lott (1999, 128)). Swedish educational theorists even advocated for tax and government employment policies “to get both parents out of the home, so that children are forced out as well” (Lott 1999, 128). Future research can explore the relationship between education and political participation in authoritarian regimes beyond China and the specific variables that mediate this relationship.

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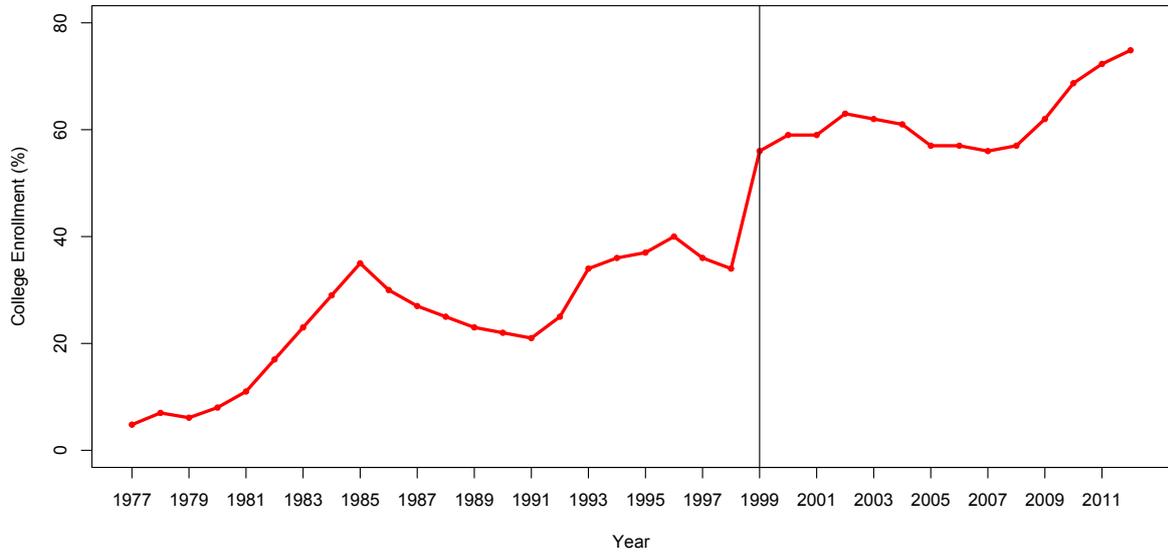


Figure 1: China's College Enrollment Rate (1977–2012)

Notes: The college enrollment rate is calculated as $\text{Number of recruited} \times 100 / \text{Number of college entrance exam takers}$. The data are from the Ministry of Education (<http://edu.people.com.cn/n/2013/0503/c116076-21359059.html> (accessed August 14, 2015)).

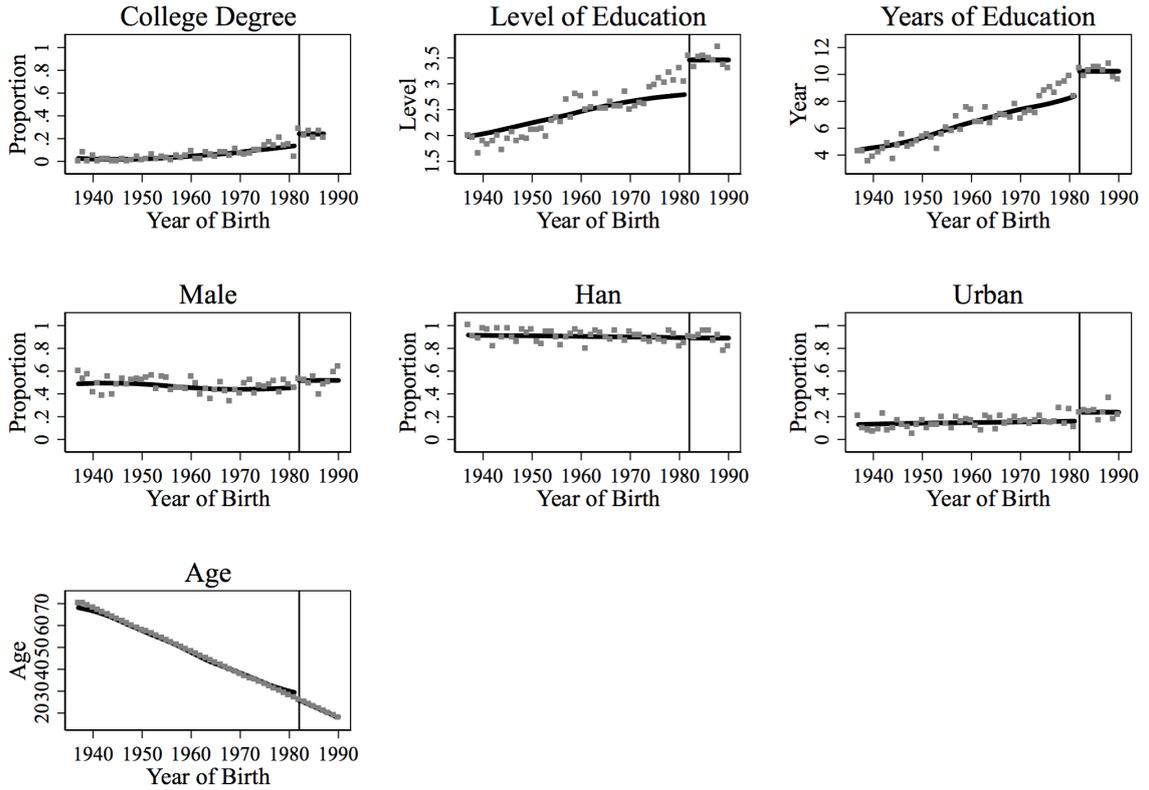


Figure 2: Trends in Key Explanatory Variables by Cohort

Notes: The figure plots the key variables in the analysis. The black lines indicate the local polynomials fitted on either side of the reform (indicated by the vertical line). The dots indicate the mean of the variable for a given birth year.

Table 1: Effect of Being Born After 1981 on Educational Attainment

DV	College	Level of Education	Years of Education
	Coefficient	Coefficient	Coefficient
	(Clustered S.E.)	(Clustered S.E.)	(Clustered S.E.)
Post1981	0.16*** (0.05)	0.35*** (0.11)	1.03** (0.40)
Provincial F.E.	✓	✓	✓
Intercept	✓	✓	✓
<i>N</i>	355	355	349

Notes: All specifications include provincial fixed effects. Standard errors clustered at the county level are presented in the parentheses. *p*-values are based on a two-tailed test: **p* < 10%, ***p* < 5%, ****p* < 1%.

Table 2: Effects of College Education on Political Participation

DV	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Participation Scale	Political Meetings	Contact Leaders	Contact Media	Contact Soc Org	Disc Pol on Internet	Collect Donations	Sign Petitions	Protest	
Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)
Panel A: Reduced Form									
Post1981	0.076*** (0.026)	-0.005 (0.050)	0.019 (0.057)	0.039 (0.036)	0.094** (0.039)	0.213*** (0.066)	0.188*** (0.068)	0.072 (0.046)	-0.003 (0.016)
<i>N</i>	350	347	347	348	344	339	341	344	338
Panel B: Instrumental Variable									
College	0.458*** (0.171)	-0.080 (0.292)	0.073 (0.329)	0.246 (0.216)	0.581** (0.251)	1.210*** (0.320)	1.181*** (0.453)	0.447 (0.275)	-0.019 (0.090)
<i>N</i>	348	345	345	346	342	337	339	342	336
First Stage <i>F</i> Statistic	12.5	12.2	12.4	12.2	12.5	14.9	12.1	12.1	12.7

Notes: All specifications include provincial fixed effects. Standard errors clustered at the county level are presented in the parentheses. *p*-values are based on a two-tailed test: **p* < 10%, ***p* < 5%, ****p* < 1%.

Table 3: Effects of College Education on Economic Outcomes

DV	(1) Personal Monthly Income	(2) Employed	(3) Satisfaction with Family Income	(4) Satisfaction with Job	(5) Subjective Social Status
	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)
Panel A: Reduced Form					
Post1981	128.083 (146.119)	0.010 (0.028)	0.084 (0.272)	0.301 (0.314)	0.153 (0.196)
<i>N</i>	358	358	351	321	348
Panel B: Instrumental Variable					
College	839.786 (882.500)	0.089 (0.171)	0.554 (1.734)	1.899 (2.068)	0.959 (1.143)
<i>N</i>	355	355	349	320	346
First Stage <i>F</i> Statistic	12.2	12.2	10.6	8.7	12.4

Notes: All specifications include provincial fixed effects. Standard errors clustered at the county level are presented in the parentheses. *p*-values are based on a two-tailed test: **p* < 10%, ***p* < 5%, ****p* < 1%.

Table 4: Effects of College Education on Political Interest and Knowledge

DV	(1)		(2)		(3)		(4)		(5)	
	Political Interest Scale	Coeff. (C.S.E.)	Interest in National Affairs	Coeff. (C.S.E.)	Interest in City Affairs	Coeff. (C.S.E.)	Interest in Community Affairs	Coeff. (C.S.E.)	Political Knowledge Scale	Coeff. (C.S.E.)
Panel A: Reduced Form										
Post1981	0.070	(0.070)	0.084	(0.074)	0.160*	(0.092)	-0.026	(0.085)	-0.002	(0.033)
<i>N</i>	357		353		344		351		358	
Panel B: Instrumental Variable										
College	0.490	(0.437)	0.559	(0.461)	1.095*	(0.642)	-0.090	(0.505)	0.014	(0.202)
<i>N</i>	354		350		342		349		355	
First Stage <i>F</i> Statistic	12.2		12.4		11.5		12.6		12.2	

Notes: All specifications include provincial fixed effects. Standard errors clustered at the county level are presented in the parentheses. *p*-values are based on a two-tailed test: **p* < 10%, ***p* < 5%, ****p* < 1%.

Table 5: Effects of College Education on Democratic Values

DV	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Democratic Value Scale	Informed About Politics	Freedom of Association	Survival	Freedom of Expression	Voting Rights	Criticize the Government	
Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)
Panel A: Reduced Form							
Post1981	0.037 (0.055)	-0.028 (0.080)	0.022 (0.067)	0.132* (0.073)	0.084 (0.071)	0.022 (0.080)	-0.046 (0.090)
<i>N</i>	332	286	270	319	317	309	280
Panel B: Instrumental Variable							
College	0.246 (0.362)	-0.158 (0.475)	0.123 (0.428)	0.890 (0.594)	0.574 (0.556)	0.123 (0.509)	-0.304 (0.582)
<i>N</i>	331	285	269	318	316	308	279
First Stage <i>F</i> Statistic	10.4	10.4	6.6	9.0	8.7	9.0	7.7

Notes: All specifications include provincial fixed effects. Standard errors clustered at the county level are presented in the parentheses. *p*-values are based on a two-tailed test: **p* < 10%, ***p* < 5%, ****p* < 1%.

Table 6: Effects of College Education on Political Membership

DV	(1)	(2)
	Communist Party Member	Youth League Member
	Coeff. (C.S.E.)	Coeff. (C.S.E.)
Panel A: Reduced Form		
Post1981	0.031 (0.023)	0.137*** (0.050)
<i>N</i>	348	358
Panel B: Instrumental Variable		
College	0.219* (0.125)	0.872** (0.356)
<i>N</i>	345	355
First Stage <i>F</i> Statistic	9.9	12.2

Notes: All specifications include provincial fixed effects. Standard errors clustered at the county level are presented in the parentheses. *p*-values are based on a two-tailed test: **p* < 10%, ***p* < 5%, ****p* < 1%.

Table 7: Effects of Mobilization on Political Participation

DV	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Participation Scale	Participation Scale	Political Meetings	Contact Leaders	Contact Media	Contact Soc Org	Disc Pol on Internet	Collect Donations	Sign Petitions	Protest
	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)	Coeff. (C.S.E.)					
Panel A: Effect of Communist Party Membership on Participation									
Communist Party Member	0.196*** (0.020)	0.593*** (0.066)	0.481*** (0.055)	0.038 (0.024)	0.143*** (0.038)	-0.016 (0.034)	0.271*** (0.056)	0.031 (0.036)	-0.004 (0.013)
College and Demographic Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Provincial F.E.	✓	✓	✓	✓	✓	✓	✓	✓	✓
Intercept	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	2,689	2,667	2,654	2,654	2,655	2,619	2,641	2,626	2,640
Panel B: Effect of Youth League Membership on Participation									
Youth League Member	0.114*** (0.013)	0.225*** (0.038)	0.169*** (0.027)	0.036*** (0.011)	0.074*** (0.018)	0.077*** (0.017)	0.248*** (0.034)	0.083*** (0.019)	0.009 (0.009)
College and Demographic Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Provincial F.E.	✓	✓	✓	✓	✓	✓	✓	✓	✓
Intercept	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	2,738	2,716	2,703	2,703	2,704	2,668	2,690	2,675	2,689

Notes: All specifications include provincial fixed effects. Standard errors clustered at the county level are presented in the parentheses. p -values are based on a two-tailed test: * $p < 10%$, ** $p < 5%$, *** $p < 1%$.