Nationalist Erosion after Protest and Repression

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Abstract

The leaders of authoritarian regimes often invoke nationalist themes to garner support from their populations. However, negative experiences with the regime may effectively inoculate individuals against nationalist campaigns, reducing the ability of the regime to sway public opinion. In this paper, we study the long-term effects of mobilization and repression on nationalist attitudes. We exploit a discontinuity in exposure to a student movement, by comparing alumni who were in college and on campus during the movement with alumni who only enrolled after the movement was suppressed. We find that alumni who were in college during the movement are substantially less nationalistic than those who enrolled shortly thereafter. Our findings are consistent across a range of specifications and show that exposure to mass mobilization and state repression is associated with lower support for nationalism. These differences are observable more than twenty-five years later, despite sustained state censorship.

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Introduction

When social movements emerge in authoritarian regimes, they create dilemmas for the government. If autocrats choose to tolerate a social movement, the experience of organizing collective action could create committed opponents to authoritarian rule (Finkel 2015). Meanwhile, protests turn the level of dissatisfaction with the regime into common knowledge, which creates the risk of preference cascades and revolution (Kuran 1991). However, if autocrats repress a popular protest, they face another set of consequences. Although repression can induce compliance when the threat of government coercion is credible, if the threat of punishment diminishes over time, the citizens who were detained, surveilled, or subject to political violence are likely to distrust the government and push back, either at the ballot box or through collective action (Desposato, Wang and Wu 2021; Rozenas and Zhukov 2019; Wang 2021).

Previous research suggests that individuals who mobilized and were then repressed react by reshaping their political identities in ways that facilitate pro-social behavior. Survivors of war or repression often participate more in politics (Bellows and Miguel 2009; Blattman 2009) and show post-traumatic growth, though their increased willingness to cooperate is typically limited to the in-group (Bauer et al. 2016). Individuals tend to react to political violence by closing ranks with members of their group and becoming less welcoming to outsiders (Kupatadze and Zeitzoff N.d.; Rapp, Kijewski and Freitag 2019). These defensive adaptations frequently include an embrace of nationalist identities and stronger support for ethnic parties (Chiou and Hong 2021; Hadzic, Carlson and Tavits 2020).

We know less about what to expect in cases where these nationalist identities are contested, or where the repressive government relies on a nationalist legitimation strategy. Does the experience of mobilization and repression inoculate citizens against nationalist appeals? Do citizens who have taken part in a repressed social movement reject the idea of pride in the nation in the same way that they distrust or oppose the government?

In this paper, we study the long-term repercussions of mobilization and political violence on nationalist identity by examining the political leanings of Chinese citizens who attended college in Beijing either during or immediately after the 1989 Tiananmen Incident. Our survey

results show that individuals who were exposed to a mass protest and the state's repressive response are less likely to endorse nationalist sentiments. We show that these differences can endure for decades, even if the repressive government remains in power and prevents a public discussion of its actions.

Our study contributes to the literature on historical legacies by measuring the long-term relationship between mobilization and repression and nationalist identity. We also join a growing debate about the development of nationalism in China. Many popular accounts point to rising nationalism to explain China's new assertiveness in its foreign relations. While public opinion does appear to be growing more hawkish (Weiss 2019), survey evidence from Beijing indicates that nationalism has declined in recent years (Johnston 2017). The sources of these trends in public opinion remain mysterious. We contribute to this research by showing that exposure to Tiananmen is correlated with a rejection of the state's legitimation efforts.

In addition, this paper contributes to our growing understanding of how the Tiananmen tragedy reshaped Chinese society. Although the taboos around Tiananmen remain entrenched (Brown 2021; Lim 2014), recent work has shown that individuals who saw the student protests and the crackdown up close were also more supportive of democracy, more likely to define democracy in terms of elections and liberties rather than economic performance, and less willing to trust the government (Desposato and Wang 2020; Desposato, Wang and Wu 2021). We add to this body of evidence by showing that decades later, individuals who attended a university in Beijing during Tiananmen are less nationalistic than their counterparts who enrolled after Tiananmen.

The next section of our paper will review the literature on historical legacies and nationalism. We will then present an overview of the nationalist character of the Tiananmen protests, introduce our data and method, and present our results. We close with a discussion of the implications of our findings for students of historical legacies.

Theoretical Expectations

Why does nationalism grow in some societies and recede in others? Classic accounts emphasize larger forces related to modernization, such as the growth of print capitalism (Anderson 2006), industrialization (Gellner 1983), or the creation of a centralized state (Weber 1976; Wimmer 2018). As societies industrialize, firms rely more on an interchangeable labor force, while governments embrace mass education (Darden and Mylonas 2016; Gellner 1983) and embark on a broader nation-building project to bind together their societies (Tilly 1990; Weber 1976). Meanwhile, commercial incentives combine with the arrival of mass literacy to produce imagined communities that are, as Anderson (2006) explains, both limited and sovereign. Over time, these communities develop the political principle that the boundaries of a state and a people should coincide.

Nationalism often grows in conjunction with a security crisis (Posen 1993; Van Evera 1994). Leaders who are facing a threatening external environment are more willing to pursue nation-building strategies (Tilly 1990; Wimmer 2012), and the advent of mass politics is particularly likely to prompt leaders to challenge foreign powers to bolster national prestige (Mansfield and Snyder 1995). When nationalism is the product of political entrepreneurs, certain chosen traumas and triumphs transform into the myths that power the national project (Canetti et al. 2018; Wang 2012). These traumas are typically the product of conflict with an out-group or a foreign challenger and increase in-group solidarity (Coser 1956; Lupu and Peisakhin 2017).

Accounts of nationalist erosion have also tended to point to broader forces such as globalization (Ariely 2012) and the rise of supranational organizations (Hobsbawm 1992). Cross-national survey evidence shows that cosmopolitan societies produce citizens who are less likely to conceive of their identities in nationalist terms (Norris and Inglehart 2009).

At the individual level, nationalist identities are forged through education (Cantoni et al. 2017) and formative experiences like military service (Fize and Louis-Sidois 2020; Navajas et al. N.d.). These identities may take root in response to trauma. Recent work on the legacy of political violence shows that victims and their descendants often reject the political narratives

of their oppressors.[1] The victims of the Franco regime during the Spanish Civil War and their descendants continue to critique the right, while victims of leftist violence and their descendants hold a grudge against the left (Balcells 2012).[2] In some cases, this reaction comes alongside a surge of nationalism. Descendants of the Crimean Tatars who were deported by the Soviet Union in 1944, for example, are more likely to identify with their ethnic group and remain more critical of Russia (Lupu and Peisakhin 2017).

Research on the direct consequences of exposure to political violence for the original victims finds that in many cases, the individuals who bore witness to political violence experienced a variety of post-traumatic growth. Former child soldiers who were abducted to fight in the Lord's Resistance Army, for instance, become more likely to vote and to lead their communities after their return (Blattman 2009), and individuals who experienced violent conflict during the Sierra Leone Civil War are more likely to vote, attend community meetings, and join local political groups (Bellows and Miguel 2009). A common theme in this literature is that the cooperative behavior exhibited by victims of political violence is limited to members of their ethnic group or nation (Bauer et al. 2016). This shift often takes place because political violence raises the salience of ethnic divisions, even in relatively tolerant societies (Hadzic, Carlson and Tavits 2020).

These studies show that one of the legacies of political violence tends to be stronger nationalist sentiment, coupled with hostility towards the group which perpetrated the violence. But what if the violence was perpetrated by a political actor that uses nationalist political rhetoric to legitimate itself? Do individuals still embrace nationalism if their repressors embrace it as well?

Studies of historical persistence that have focused on other outcomes, such as political trust or vote choice, have found that individuals living in regions that experience more targeted killings by members of their in-group often harbor harder feelings towards the government. Citizens living in areas that suffered more casualties from political violence during the Cultural Revolution in China were more distrustful towards the government, more likely to critique the

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1. For helpful reviews, see Simpser, Slater and Wittenberg 2018 and Walden and Zhukov N.d.

2. Victimization does not explain, however, peripheral nationalism in Spain. Balcells (2012) argues that this is because left-right was the key cleavage of the Spanish Civil War and its aftermath.

political system, and less willing to participate in politics (Wang 2021). Individuals who lived near military bases in Chile and were exposed to higher levels of killings and disappearances were more likely to vote against the Pinochet regime in a popular referendum, and continued to support the opponents of military rule for many years, though these effects eventually faded (Bautista et al. 2023).

While the link between experiencing repression and disapproval of the government is an intuitive one, it is less clear if the victims of repression will extend that rejection to the nation and to nationalist identities more broadly. In some contexts, we might expect people to separate their feelings about a repressive government from their attitudes about the nation. We often observe, for instance, critics of a particular government who justify their critique as a form of faithful nationalism. In many authoritarian settings, however, including the Chinese case, this separation is less tenable, since the government has sought to equate support for its rule with support for the nation at large through an extensive series of propaganda campaigns (Wang 2012; Zhao 2004).

What remains unclear is whether victims of repression react by embracing nationalist identities when their repressors continue to use this sort of nationalist legitimation strategy. Existing evidence indicates that nationalism can lose its appeal if the political actors that relied on nationalist messages are discredited. Norris and Inglehart (2009) find in their analysis of the World Values Survey, for instance, that nationalism was especially weak in Germany and Japan between 1981 and 2005, which they attribute to the legacy of WWII. The effect of a failed war or a national tragedy on nationalist political identities depends, however, on the myth-making of political entreprenuers. In some cases, the public reaction to defeat in war or economic dislocation is to embrace nationalist ideas. The Nazi Party was able to garner more political support in areas of Germany that suffered more casualties during WWI (De Juan et al. 2021), while United Russia was able to secure more votes in areas of Russia which experienced higher rates of inflation during the 1990s (Belmonte and Rochlitz 2019). These examples suggest that the effect of repression, war, or national hardship on political attitudes depends on the struggle over how these hardships are portrayed in collective memory by the government and other political actors (Adler 2010; Canetti et al. 2018).

In this paper, we examine the link between participation in a failed social movement and long-term nationalism. We examine the case of the 1989 Tiananmen protests in Beijing. This movement involved a massive mobilization of students and other individuals, which was violently repressed by the state. Our expectation is that the combination of the movement and the state crackdown is associated with a backlash against the state's legitimation efforts for the individuals who personally experienced Tiananmen. In other contexts, survivors of war or repression often embrace national identities as a defensive adaptation, but we do not expect to observe this in China because the Communist Party sought to equate itself with the nation in the wake of Tiananmen. The hypothesis we set out to test is that individuals who were part of the Tiananmen cohort - that is, those who attended college in Beijing during the movement - are less nationalistic than individuals who are part of the Post-Tiananmen Cohort - that is, individuals who also attended college in Beijing who did not start until after the Tiananmen movement was crushed. Our study helps illuminate how political violence is remembered by its victims when the repressing government remains in power, and is able to prevent a public reckoning with its behavior.

Nationalism and Student Movements in Contemporary China

Student movements played a central role in the development of Chinese nationalism. The first large-scale student protest in Chinese history, the May Fourth Movement, was a reaction to the terms of the Treaty of Versailles, which turned German privileges in the province of Shandong over to Japan. College students in Beijing also initiated a mass protest against Japanese aggression during the December Ninth Movement of 1935.

Although the 1989 Tiananmen protests followed in this tradition of student movements, they were less overtly motivated by nationalism. They began in April 1989 as a tribute to Hu Yaobang, a reform-minded party official, before turning into a protest against the party's declarations that the movement represented a form of "turmoil," and then finally a broader call for political change. Zhao (2000a) argues that the 1989 protests differed from the May Fourth movement or the December Ninth movement because students in 1989 used traditional,

moralistic rhetoric, while setting themselves apart from the workers. Other distinctive features of the 1989 protests include the unorganized nature of the interests involved (Zhou 1993), the political opportunity structure created by elite splits (Dittmer 1990), and the decline of political control of the universities during the 1980s (Zhao 1997).

The Tiananmen protests led the regime to rethink its approach towards nationalism (Callahan 2010). In the early 1980s, popular invocations of Chinese nationalism were linked to the decline of communist ideology (Zhao 1997) and a widespread desire to "learn from the West" (Yang and Lim 2010). Although the party articulated its own vision of official, patriotic nationalism, some of the popular interpretations of nationalism included a greater role for the public in political discourse (Gries 2004).

After the Tiananmen protests, Deng Xiaoping observed that "during the last ten years, our biggest mistake was made in the field of education, primarily in ideological and political education —not just of students but of the people in general"(Deng 1994). The CCP responded to Deng's address by mobilizing a patriotic education campaign, which has steadily expanded in scope (Hu 2019; Liu and Ma 2018). By 2020, more than a hundred thousand teachers were working in the field of ideological and political education, according to the Ministry of Education.[3] In its new political education program, the party lays claim to the sprit of the May Fourth movement and invokes the "one hundred years of humiliation" that followed the Opium Wars of the mid 1800s (Wang 2008). Chinese nationalism after 1989 diverges significantly from the nationalism of the May Fourth movement; while early nationalists sought reform and liberation, nationalism under the CCP is designed to reinforce the authoritarian status quo (Wu 2008).

After Tiananmen, the party tried to refocus popular conceptions of nationalism around foreign enemies, rather than domestic challenges (He 2018; Pang and Thomas 2017; Zhao 2000b). The party used propaganda campaigns and its power over organizations such as student unions and the Communist Youth League to mobilize anti-foreign sentiment (Yu and Zhao 2006). This approach came with risks, however, because the force of popular nationalism also constrains the party (Gries 2004). The party can, for instance, provide space for

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3. http://www.moe.gov.cn/fbh/live/2020/52717/mtbd/202012/t20201204_503472.html

nationalist protests in a bid to demonstrate resolve in international disputes. The credibility of these signals, however, rests upon the risk that these protests get out of hand for the party (Weiss 2014). Studies of the 2012 Anti-Japanese protests found that local leaders discourage nationalist protests when they fear political instability, and that unrest was correlated with diminished promotion prospects for local officials (Foley, Wallace and Weiss 2018; Wallace and Weiss 2015).

In recent years, Chinese leaders have taken a more assertive posture in territorial disputes with neighboring countries, leading many observers to the conclusion that Chinese nationalism is rising (Deng and Lin 2020; Wang 2020). Scholarly analyses of the survey evidence have generally sounded a more skeptical note. Johnston (2017) examined time series data from the Beijing Area Survey and found that Chinese nationalism has receded in recent years. He argued nationalism is more prevalent among older citizens than among younger ones, a finding echoed by data from the 2008 China Survey (Tang 2016). Analyses of specific foreign policy beliefs have found more nuanced results; while nationalism may not be rising, most of the public favors a more muscular foreign policy, and hawkish policies are especially popular among younger respondents (Weiss 2019).

In our analysis, we look at whether the experience of collective trauma is correlated with how people evaluate nationalism. By comparing individuals who attended college in Beijing during Tiananmen with individuals who attended the same universities just afterwards, we are able to measure the long-term relationship between mobilization/repression and nationalist attitudes.

Design and Identification

Our research design addresses two challenges to the study of social movements. First, usually there are differences in motivation between those who participate and those who do not, and it can be difficult to separate the impact of movements on participants from the pre-existing characteristics of participants. Second, in authoritarian regimes, suppressed movements are generally taboo and may even be illegal to discuss. Consequently, even measuring

participation and identifying individuals who were part of a movement becomes nearly impossible.

Our study addresses each of these challenges. Regarding measurement of participation, the nature of the movement meant that we can proxy exposure to Tiananmen by year of college enrollment. Respondents who were in college in Beijing in the spring of 1989 almost certainly had substantial exposure to and participation in the movement. Respondents who only started college in the fall of 1989 or later were unlikely to have exposure to the movement. In addition, the key determinant of exposure to the movement was not self-selection, but year of college enrollment, which is primarily determined by an exogenous variable, birthdate. Combined, these allow us to assess the relationship between experiencing the movement and the political preferences of our participants. We elaborate on each of these points below.

First, although we cannot directly ask individuals about their participation in the movement, college enrollment is a very good proxy for exposure. The topic of Tiananmen remains taboo in China. Survey firms would not field a study asking about participation in that movement, and respondents would nearly certainly refuse to answer any questions about that period. However, the nature of that mass student movement means that college enrollment is a strong proxy for exposure. Nearly all college students in Beijing in the spring of 1989 were exposed to some part of the Tiananmen movement. Universities in Beijing are concentrated in the Haidian district, and most students lived in the dormitories with several other roommates. Word of the protests spread quickly, students were able to create strong norms to take part in the movement, and the bulk of the students decided to demonstrate (Zhao 2001). Over 70% of college students attended just one of the many protests, the April 27th protests against a critical editorial in the People's Daily.[4] Thus, those in college in Beijing in the spring of 1989 would bear witness to the initial marches in honor of Hu Yaobang, the mass protests after the April 26th People's Daily editorial, the wrenching scenes of the hunger strikes, and the bloody crackdown. Meanwhile, respondents who did not start college until the fall of 1989 were still living in their hometowns at the time of the protests and preparing for the college entrance examinations under the watchful eyes of their parents. This Post-Tiananmen cohort of students

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4. Of the 141, 600 full-time college students in Beijing, a reported 100,000 participated in just that one protest.

missed out on direct exposure to the Tiananmen movement by enrolling in university after the government crackdown.[5] Thus, the nature of the student experience at that time allows us to use college enrollment as a proxy for exposure to the movement.

Second, the key determinant of whether a respondent was in college or not during the movement was not self-selection, but an exogenous variable: birthdate. If students followed the standard academic calendar, then the individuals who were born before the September 1, 1970 cutoff would be scheduled to start their college education by the fall of 1988 and would have been in Beijing in the Spring of 1989. Those born September 1, 1970 or later should have only arrived in the fall of 1989, after the movement and its suppression. This effectively exogenous assignment to enrollment addresses concerns with endogeneity.

Of course, birthdate does not perfectly predict whether our respondents were enrolled in university by the Spring of 1989. Some individuals started primary school late, spent an extra year in primary school, had to re-take their college entrance exams, or chose to work for a short stretch before starting college. Other students, perhaps pushed by their parents, may have skipped a grade or taken the college entrance exam at an especially young age. Consequently, we use a fuzzy regression discontinuity design to ameliorate concerns that individuals in our sample may have been able to manipulate their assignment to the Tiananmen or Post-Tiananmen cohorts (Lee and Lemieux 2010).

Fuzzy RDD is appropriate when there is not a sharp cutoff in the running variable, and mis-assignment may reflect unobserved confounding variables. To address this, fuzzy RDD uses a two-stage, instrumental variable approach. In the first stage, an exogenous variable (birthdate, in our case) is used to predict assignment to the Tiananmen or Post-Tiananmen cohort and to create an instrument for exposure to Tiananmen. In the second stage, the predicted assignment to the Tiananmen or Post-Tiananmen cohort is used to assess the relationship between exposure to Tiananmen and nationalism. The first stage of our model is specified below:

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5. To be sure, some high school students went to Tiananmen Square and participated in the Movement, but few of them would have subsequently enrolled in college in Beijing, given the extremely limited higher education opportunities at that time. In addition, any bias introduced by such students would attenuate estimated treatment effects, making any significant results especially robust.

$$T = \alpha + \beta_1 C + \beta_2 D + \varepsilon.$$

In this equation, T indicates students' exposure to Tiananmen. T can take on one of two values: $T = 1$ indicates that a student was in college in the spring 1989 and $T = 0$ indicates that the student had not enrolled in college yet. α, β_1, and β_2 are regression coefficients, and ε is the error term. C is a dummy variable, where we have $C = 1$ if a student was born before the September 1970 cutoff and $C = 0$ if not. The continuous variable D incorporates the difference between the birthdates for each respondent and the cutoff date. We also present results based on an alternative first-stage model which includes polynomials and interactions of C and D.[6]

We draw attention to several key features of this design. First, the independent variable in this study, exposure to Tiananmen, combines mobilization and protest with repression and state violence. Mobilization and repression often go together in authoritarian regimes, and studies of social movements in autocracies often study these two phenomena together. Second, because we cannot directly observe the degree of participation of any respondent - they may have just watched some speeches, or they may have organized and led massive marches - we refer to our independent variable as "exposure to the movement" rather than "participation in the movement." Third, a strength of the design is that the Tiananmen and Post-Tiananmen cohorts have similar exposure to potential confounding variables. Both cohorts experienced the relatively open years of political debate that preceded Tiananmen, and both groups endured the fearful climate that took hold after the crackdown concluded. Both cohorts took part in military training on campus (Genevaz 2019), and as prospective elites in the capital, both cohorts were offered the opportunity to share in rising economic fortunes. Their critical divergence is in their exposure or lack of exposure to the unprecedented Tiananmen movement and the equally dramatic state repression that followed.

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6. We should note that while the standard OLS and the Fuzzy RDD models were pre-registered, the alternative Fuzzy RDD models that include polynomials were not pre-registered. We thank an insightful reader for suggesting these alternative specifications, which are presented as Models 5 and 6 in Table 2.

Data

Our data come from a survey conducted in the summer of 2015 which interviewed graduates of Beijing universities who were between 41 and 49 years old. This particular sample frame captures our population of interest, as roughly half of respondents should have been old enough to participate in the movement, and half would have been too young. Respondents who were at least 45 years old would have been old enough to start college by the fall of 1988, while respondents who were younger than 45 would have been in high school during the movement, if they followed the conventional enrollment schedule.[7]

Our survey enumerators began with a commercial panel and selected college graduates from that panel. After encountering high refusal rates and difficulties finding respondents, the survey firm also turned to colleges, alumni associations, and other means to identify potential respondents. Consequently, our survey is not a simple random sample from a well-defined population, but a combination of panel sampling and some convenience sampling.[8] Nearly all respondents (over 90%) participated via an online questionnaire, with a few respondents participating via phone, email, or face to face interviews.[9]

Our survey asked respondents when they were born, as well as the years that they were enrolled in university. Our independent variable is the degree of exposure that each respondent had to the Tiananmen movement and the government crackdown, which we measure by recording whether a given individual was attending a university in Beijing in the spring of 1989. Our dependent variables consisted of five measures of nationalism, measured on a five point scale. We asked respondents to indicate how proud they were to be Chinese, how proud they were of the economic system, how proud they were of the political system, their degree of unconditional support for their country, and the extent to which they agreed that China is a better country than most developed countries.

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7. In practice, the sample frame diverged slightly from this population because some respondents went to college much later in life or went to college outside Beijing and moved their sometime after graduating. In this study, we only include respondents who attended college in Beijing and started between 1985 and 1994.

8. We expect that those individuals who were the most involved in the Tiananmen movement and, as a result, the most exposed to repression would in turn be the least likely to participate in a survey. In this way, we anticipate that sampling bias would remove the individuals most affected by Tiananmen and reduce any estimated effects.

9. Results are unaffected when controlling for response medium or when only examining the online responses.

Table 1: Summary Statistics

Variable	Control (Enrolled after Tiananmen)	Treatment (Enrolled during Tiananmen)	Overall
Where Respondent Grew Up (%)			
Village	19.4	18.3	19.1
Small town	20.1	17.7	19.5
City	60.5	64.0	61.4
Gender (%)			
Male	65.0	65.0	65.0
Female	35.0	35.0	35.0
Marital Status (%)			
Single	5.8	6.9	6.1
Married	94.2	93.1	93.9
Education (%)			
BA	68.9	56.5	65.6
MA	21.8	29.3	23.8
PhD	9.3	14.2	10.6
Income in thousands of RMB (%)			
0-5	3.8	2.2	3.4
5-10	11.1	15.5	12.3
10-20	36.1	35.0	35.8
20-30	23.7	19.9	22.7
30-40	9.8	5.7	8.7
40-50	6.8	5.4	6.5
50-80	3.5	5.7	4.1
80-100	2.4	3.5	2.6
100+	2.8	7.3	4.0
N	891	317	1208

Table 1 presents summary statistics for the subgroups in our sample which enrolled during and after Tiananmen, as well as for our sample overall. The students who were enrolled in the spring of 1989 and those who enrolled afterwards are relatively similar on a number of socioeconomic characteristics. Not unexpectedly, respondents from the Tiananmen cohort are slightly older and more likely to have received an advanced degree. The Tiananmen cohort also has slightly higher incomes overall than the Post-Tiananmen cohort.

Results

We begin by examining descriptive statistics, then present results from our models. As we discuss below, in almost every analysis, we find that the Tiananmen cohort is significantly less nationalist than the Post-Tiananmen cohort. The consistency and size of the difference is dramatic, decades after the movement.

Descriptive Analysis

Figure 1: Mean Nationalism of Alumni who Started College Immediately Before and After Tiananmen
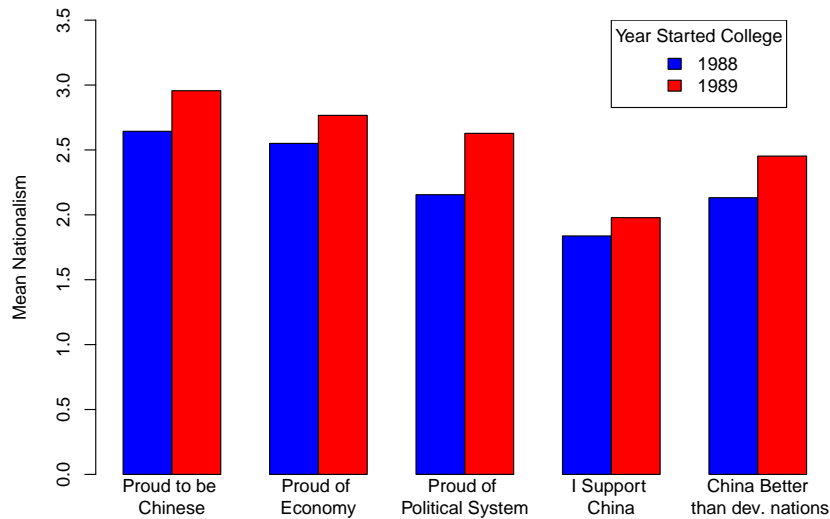
Figure 1 shows mean nationalism for all five measures, comparing just alumni who started school in 1988 with those who started in 1989, after Tiananmen. For every measure of nationalism, alumni who were exposed to the Tiananmen Incident report lower mean nationalism than those who started college after the Incident. These differences are significant at the .05 or

.10 level for every measure except for the "Support China" question.[10]

Figure 2 then shows the full distribution of nationalism measures, again comparing students who began college in 1988 with those who began in fall 1989. The distributions show that both cohorts have relatively high levels of pride in their nationality, their economy, and their political system. For example, 73% of the Post-Tiananmen cohort and 60% of the Tiananmen cohort were "proud" or "very proud" to be Chinese.

Figure 2: Distribution of Nationalism of Alumni who Started College Immediately Before and After Tiananmen
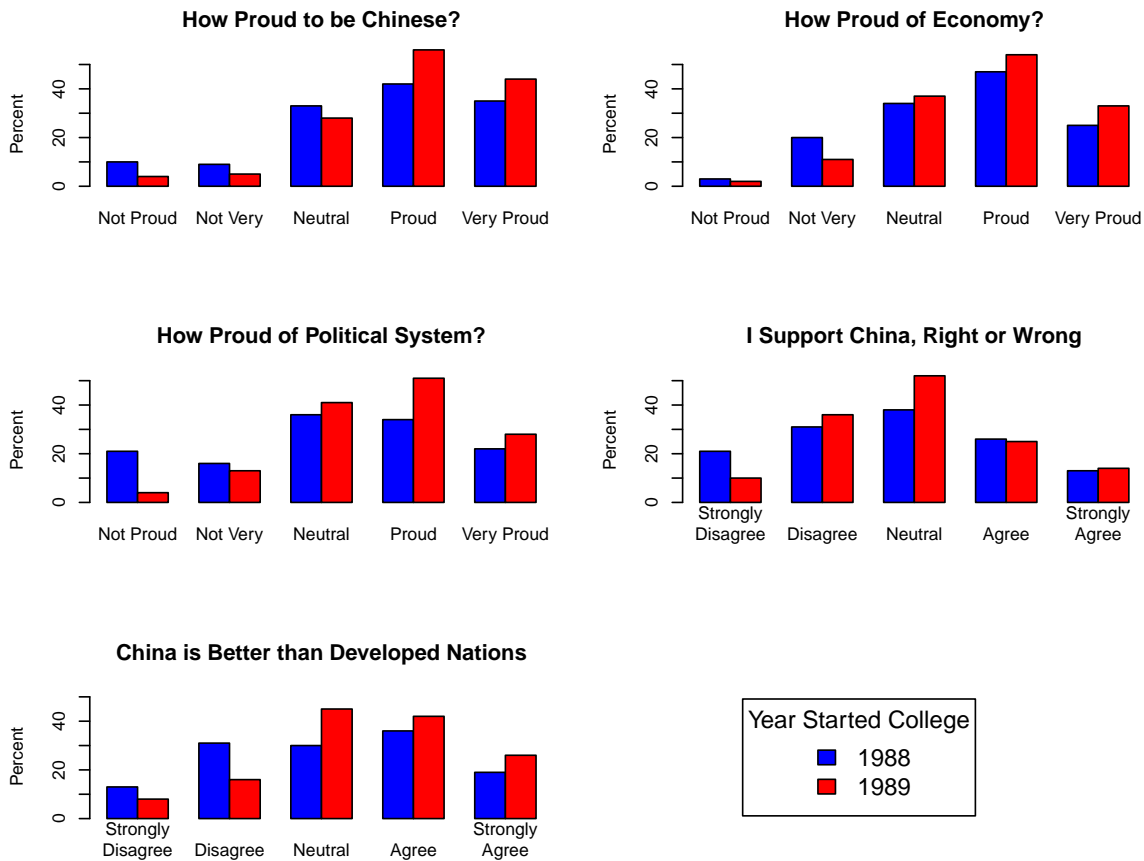
The differences between cohorts vary across the measures of nationalism, but consistently

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10. P-values for difference of means are as follows: Proud to be Chinese, $p = .019$; Proud of the Economy, $p = .080$; Proud of the Political System, $p = .001$; Support China Right or Wrong, $p = .319$; and China is Better than Developed Nations, $p = .026$ (two-sided p-values, see Appendix for details).

show lower nationalism for the Tiananmen cohort. Interestingly, the largest difference between cohorts is regarding "Pride in the Political System," where just 3% of the Post-Tiananmen respondents are "not proud," compared to over 16% of those exposed to Tiananmen. Similarly, for the statement, "I Support China whether Right or Wrong," the primary differences are in the strongly disagree and neutral categories. About 7% of the 1989 cohort strongly disagreed compared with over 14% of the 1988 cohort. For "China is Better than Most Developed Nations," more than 35% of the 1988 cohort disagreed, compared with 16% of the 1989 cohort.

Fuzzy RDD and Other Multivariate Analyses

We turn now to a multivariate analysis of the impact of Tiananmen. This analysis uses all respondents who started college between 1985 and 1994. In Table 2, we show the estimated impact of Tiananmen on five measures of nationalism, measured in six models. The value in each cell is the estimated effect of Tiananmen and its standard error. Rows correspond to different measures of nationalism. Columns show estimates from different model specifications, including simple regression with and without controls (columns 1 and 2) and Fuzzy RDD with various first stage models and controls (columns 3, 4, 5, and 6). For example, the "-.31" in the upper left hand corner indicates that, in a simple bivariate regression examining the impact of T on how proud a respondent is to be Chinese, the Tiananmen cohort was .31 below the Post-Tiananmen cohort.[11]

Our analysis shows that twenty-five years after the fact, the individuals who were a part of the Tiananmen cohort are less nationalist than those in the Post-Tiananmen Cohort. The estimated coefficients are negative in every model, and are statistically significant for most specifications. The coefficient sizes are substantively significant - the average standard deviation of the nationalism variables was 1.11, so the mean observed difference of -.22 represents 20% of a standard deviation.

The differences we observe across measures of nationalism may be linked to the nature of the movement and the regime. Most notably, the largest effects are observed for the question

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11. We use two-sided hypothesis tests. See appendix for details.

17

on Pride in the Political System, which reaches -.40 in the bivariate model. A central aim of the movement was political change, including democratic reforms. The movement was suppressed by the same regime that continues in power today, and instead of a democratic opening, the outcome has been a reduction in freedom. The contrast between the hopeful and inspired goals of the movement and the political reality are especially stark.

Other measures of nationalism suggest differentiating between evaluations of the political system and broader affection for China. Activists in 1989 were motivated in part to improve their country and saw themselves as patriots, not revolutionaries (Brown 2021; Calhoun 1994). Many were proud of Chinese cultural traditions and the economic progress of the past decade, but critical of the political system. In our data, we observed small and sometimes insignificant differences for the questions on "Proud of the Economy" and "Support China, Right or Wrong." Regarding economic pride, respondents may see China's economic achievements as due to efforts of actors outside the regime - entrepreneurs, business people, workers, and others. To the extent that respondents decouple these achievements from the ruling regime, alumni of the Tiananmen movement may be nearly as nationalistic as those from the Post-Tiananmen period. Similarly, respondents may interpret the "Support China" question in the context of international competition, linking the question to the Chinese nation rather than the regime. For both of these variables, and estimated effects were consistently smaller than differences on other nationalism measures. For the "Support China" question, the estimated coefficient for Tiananmen cohort was only significant in the bivariate model. These patterns across variables and specifications are of course only suggestive, and were not pre-registered, but do suggest areas for future research.

Table 2: Impact of Exposure to Tiananmen on Nationalism 25 Years Later

		OLS		$T = f(X,D)$		Fuzzy RDD $T = f(X,X^2,X^3,D)$	
		1	2	3	4	5	6
Proud to be	Est.	-0.305 *	-0.248 *	-0.200 *	-0.172 +	-0.297 *	-0.254 *
Chinese	SE	(0.067)	(0.067)	(0.095)	(0.094)	(0.088)	(0.087)
	$p =$	0.000	0.000	0.036	0.068	0.001	0.004
Proud of	Est.	-0.256 *	-0.201 *	-0.114	-0.090	-0.194 *	-0.155 +
Economy	SE	(0.067)	(0.066)	(0.095)	(0.094)	(0.088)	(0.087)
	$p =$	0.000	0.002	0.229	0.337	0.027	0.074
Proud of	Est.	-0.396 *	-0.297 *	-0.176	-0.140	-0.280 *	-0.229 *
Pol. System	SE	(0.076)	(0.074)	(0.109)	(0.105)	(0.100)	(0.097)
	$p =$	0.000	0.000	0.106	0.185	0.005	0.019
Support China,	Est.	-0.176 *	-0.098	-0.057	-0.027	-0.144	-0.100
Right or Wrong	SE	(0.074)	(0.074)	(0.106)	(0.105)	(0.098)	(0.097)
	$p =$	0.018	0.186	0.592	0.800	0.144	0.304
China Better	Est.	-0.323 *	-0.240 *	-0.171	-0.143	-0.250 *	-0.210 *
than Others	SE	(0.076)	(0.075)	(0.109)	(0.107)	(0.101)	(0.099)
	$p =$	0.000	0.001	0.118	0.182	0.014	0.034
Controls?		No	Yes	No	Yes	No	Yes
n		1208	1208	1190	1190	1190	1190

$* \; p < .05; + \; p < .10$

Table shows the estimated impact of exposure to Tiananmen and five measures of nationalism (rows), when estimated using different methods and controls (columns). P-values are for two-sided hypothesis tests, although originally preregistered as one-sided tests. Full results for these and other specifications, as well as a discussion of our preregistration plan are in the Appendix.

Discussion

We find in this study that direct exposure to the Tiananmen tragedy is associated with less support for nationalism. Our respondents in the Tiananmen cohort are less likely to believe that China is better than most developed countries, less likely to say they are proud to be Chinese, less likely to express pride in the economy, and express less unconditional support

for their country. These differences are in many cases the most pronounced when we ask our respondents if they are proud of the political system.

Why are the individuals in the Tiananmen cohort less likely to endorse nationalist ideas than their counterparts in the Post-Tiananmen cohort? We believe that a combination of two mechanisms could be at work. First, the experience of organizing and mobilizing the movement may have contributed to this difference.[12] If mobilization played the key role in changing how our respondents related to nationalist ideals, then our results would be in line with other research, which found that the Tiananmen movement helped inculcate democratic values in the students who had direct exposure (Desposato and Wang 2020). We would be able to understand the Tiananmen cohort's resistance to nationalist ideals as part of a broader shift towards a more cosmopolitan worldview that is at odds with both the CCP's attempt to redefine democracy and with the party's nationalist messaging.

A second mechanism reflects the combination of the experience of repression, regime continuity, and official efforts to promote nationalism. The diminished enthusiasm we see for nationalist ideas in our study could be one of the costs of the Communist Party's decision to repress the movement. Although individuals who face repression often embrace nationalism as a form of protective in-group solidarity (Bauer et al. 2016), in this case the nationalist banner has been claimed by the CCP. While it may be possible for critics of the regime to put forward a distinctive vision of nationalism which stands apart from the nationalist messages driven by the party, it is very difficult for this distinction to be organized around the events of Tiananmen because of the CCP's efforts to curtail public discussion. Our findings would be consistent with other work, which shows that repression can induce a backlash against governments that repress, even if they are able to hang on to power (Bautista et al. 2023; Wang 2021).

Although the Tiananmen tragedy took place under a different generation of Chinese leaders, we find that those who witnessed the movement and the crackdown remain less willing to endorse nationalist ideas. The durability of the differences we see between the Tiananmen and Post-Tiananmen cohorts is striking, and we offer two potential explanations for why these differences persist. One reason is the high degree of continuity in both the Party's personnel

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12. We outlined some of the evidence we found in support of this mechanism in Appendix A.1.

20

and its policies in the years after 1989. China's leaders during this period were selected in large part on the basis of an evaluation of their stance on Tiananmen in particular and their ability to quell social unrest more generally. Despite periodic calls to reevaluate the movement and the crackdown, the party has refused to revisit its decision to label the protests a counter-revolutionary riot.

A second reason has do with the nature of political socialization. Classic work in this area indicated that partisanship, values, and core political beliefs are heavily influenced by family socialization (Jennings, Stoker and Bowers 2009; Jennings and Niemi 1968). Other work in this domain has shown that the events that take place when an individual enters the electorate can shape political orientations in the long run. Research by Bartels and Jackman (2014) indicated, for instance, that presidential approval ratings during a generation's early adult years play a key role in shaping their political preferences in subsequent decades. In the Chinese context, different age cohorts possess markedly different political preferences (Harmel and Yeh 2015), and work by Wang (2021) suggests that experiences such as the Cultural Revolution have a long-term effect on attitudes. We anticipate a similar political process playing out in the case of Tiananmen.

We see many avenues for future work, and emphasize two. First, there are suggestive differences in Tiananmen's impact across different measures of nationalism. For the literature on legacies of violence and nationalism, an important next step will be understanding the way individuals separate or combine nation and regime in constructing nationalism. Future scholarship should explore the nature of nationalism in other authoritarian settings. Second, many social movements in other countries have been violently repressed, and their legacies should be investigated, measured, and compared with the case of Tiananmen. Differences in outcomes, movements, and political paths will help clarify the way movements and regimes shape attitudes.

In the years since Tiananmen, the Chinese Communist Party has sought legitimacy as the guardian of the Chinese nation and as the key to realizing the Chinese Dream. To achieve these ends, it has overseen an ambitious patriotic education campaign and remade its propaganda apparatus to tap into the power of Chinese nationalism. In this paper we reveal some

potential limits to the party's approach. Just as the historical traumas of twentieth-century China continue to reverberate in the form of mistrust of the party and its priorities today (Chen and Yang N.d.; Desposato, Wang and Wu 2021; Wang 2021), we find that this skepticism extends to the party's nationalist legitimation strategy. Individuals who were directly exposed to the Tiananmen protests and the subsequent crackdown are less likely to support the party's nationalist appeals, despite the CCP's efforts to conceal its repression and bury its history. Our results provide some sense of the shadow that history continues to cast on public opinion in China, even when it remains taboo.

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A Appendix

A.1 The Impact of Tiananmen on Core versus Peripheral Universities

After presenting our core results, we conduct a further test to validate our findings. While we cannot measure individual exposure to or participation in the movement, journalists and observers who were in China during the Incident did identify campuses that were most involved in the movement. If the difference in attitudes was indeed driven by the movement, then those most involved should have the largest response. We thus compare the impact of Tiananmen among alumni of the universities that were most involved, with alumni from universities that were largely peripheral to the movement. These results further strengthen our argument: we find a sizable effect of Tiananmen on alumni from core universities, and no impact among alumni from peripheral universities.

Recent work on Tiananmen has suggested that the movement's legacy varies depending on degree of exposure. Some students simply heard about the movement. Others were deeply involved and immersed. While we cannot ask about the movement, which remains a sensitive topic in China, we can proxy involvement using the respondent's university. Some campuses were awash in the movement with speakers, protests, organizing, and discussions. Others, especially those involving more technical and professional majors, generally had less involvement on campus. Thus, by comparing the impact of the movement on students from Core versus Peripheral universities, we can test whether increased exposure to the Movement increased attitudinal effects, or whether the differences are uniform across all respondents. [13]

In particular, observers' accounts identify four universities as being especially central to the movement: Peking University, Beijing Normal University, Renmin, and Tsinghua University (Calhoun 1994). These four core universities were physically proximate to the protests and were a hub for organizing activity, campus speeches and protests, and other related activity. In contrast, other universities whose alumni are in our sample often featured lower

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13. This analysis was not preregistered, but suggested by an insightful reader.

levels of political engagement. We thus separated our analysis of the alumni of the four core universities from our analysis of the graduates of the other peripheral universities.

Figure 3: Impact of Tiananmen Incident Greatest Among Alumni of Core Universities with Greatest Exposure to Movement
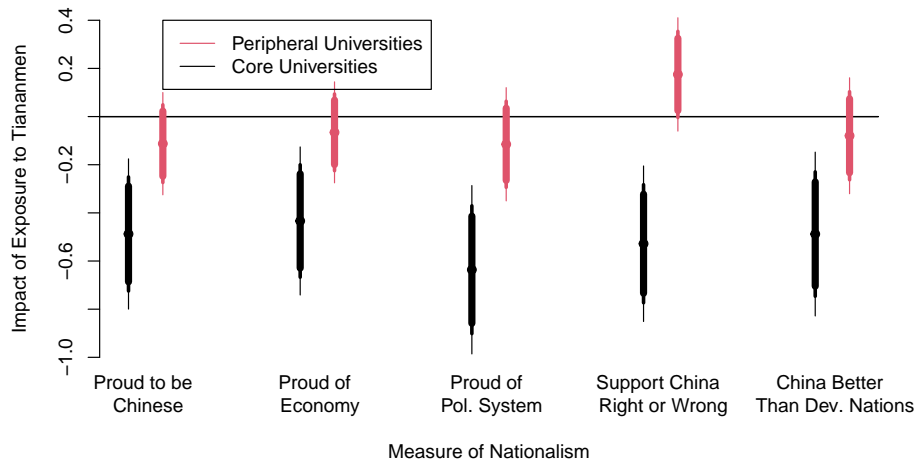
Figure shows differential estimated impact of exposure to Tiananmen Movement on nationalism for Core and Peripheral Universities, using five measures of nationalism. Results estimated via Fuzzy RDD with controls and polynomials. Lines show 90%, 95%, and 99% confidence intervals for estimates. Full results for these and other specifications are in Appendix C.1.

Figure 3 compares the impact of the movement on nationalism, separating respondents into those that attended one of the four core universities and into those that did not. The contrast is quite clear. Being on a peripheral campus during the movement had effectively no impact on nationalism. The results are never significantly less than zero, and in one case (Support China Right or Wrong) the estimated effects are actually positive.[14]

In contrast, for students at the four core universities, the impact of Tiananmen was substantively and statistically significant. The impacts range from .5 to .6, in every case larger than the full sample estimates presented above, and exceeding 10% of the range of the variables. Being in the Tiananmen Cohort represents roughly a half standard deviation change in nationalism

14. Note that we preregistered one-sided hypotheses.

31

measures. Pride in the political system is again the most affected measure of nationalism, but the effect of Tiananmen is large and significant for every measure.

These results are consistent with our argument: exposure to the movement is highly correlated with larger effects. At the four core universities, alumni from the Tiananmen cohort have starkly lower levels of nationalism than alumni from the Post-Tiananmen cohort. At peripheral universities, estimated effects of Tiananmen on nationalism were still negative (except for the Support China measure), but the coefficients are very small and are never statistically significant. The contrast between core and peripheral universities further suggests that the difference between cohorts is driven by the movement, not by some other factor.

The differences we observe between the alumni of the core universities and the alumni of more peripheral universities lend credence to the notion that a difference in the degree of mobilization was the key mechanism that explains why exposure to the Tiananmen movement and the state crackdown shaped attitudes towards nationalist identity.

B   Text of the Questionnaire

Survey File Number: ☐☐☐☐☐☐

A Survey on Social Values of Former Undergraduates

The Research Centre for Contemporary China

Peking University

April, 2015

Interviewee ID: ☐☐☐☐☐☐☐☐

Interviewee's location: _____Province _____ City

Interviewee's college of graduation: _____

The date of Interview: 2015_____Month_____date

Notes:_____

Verbal Consent:

The Research Centre for Contemporary China of Peking University and the University of Zurich are currently conducting a survey on social values of former undergraduates. This survey aims to get information on the changes and tendency of the social values of Chinese former undergraduates.

It is completely voluntary to participate in this survey. We will do the survey only when you agree to do so. We are looking forward to your cooperation and assistance as your opinions and attitudes are very important to our survey and research. We guarantee your private information will not be mentioned or released in any way, at any time and under any circumstances. Any publications based on this survey will only use the aggregate data rather than your private or family information. These publications will not release anything related to you or your family. It will take about 15 minutes to finish the survey. During the survey process, you can ask to stop at any time.

We are trying to apply scientific and quantitative methods to conduct the survey. In the survey there might be some inquiries you are not familiar with and we wish you could understand us. If you feel uncomfortable to any specific question please let us know. We definitely respect your personal feelings and ignore the question.

If you have any questions on our identification, you are welcome to call 010-62755443 and verify it.

Do you agree to participate?　　　　　　　　1 YES　　　2 NO

Please record interviewee's gender（V1）：　1 Male　　2 Female

First, we want to know something about your background.

V2. What's your birthday please? (Please specify the month of birth.)

　　　　　　Year:_____ Month:_____

V3. When and where did you start your college education?

　　　　　　Year:_____ Month:_____ City:_____

V4. When did you complete your college education?

　　　　　　Year:_____ Month:_____

　V4a. What's your highest degree：　　1 Bachelor　　2 Master　　3 Doctor

V5. Are you currently working for?

1	Government
2	State owned enterprises
3	State owned institutions
4	Private owned enterprises
5	NGO /non-profit organization
6	My own business
7 (please specify)	

V6. What's your political identity?

CCP Party member	1
Member of Democratic Parties	2
No party affiliation	3

Now I'd like you to tell me your views on various issues.

V7. How do you agree with the following statements?
"1: strongly disagree", "2: disagree", "3: neutral", "4: agree", "5: strongly agree".

I support my country whether its policies are right or wrong	1	2	3	4	5
In view of China's history and current power, it is natural that China has more decisive influence on regional affairs than any other countries in East Asia	1	2	3	4	5
Generally speaking, China is a better country than most developed countries	1	2	3	4	5

V8. Would you please place your position in the following statements?
"1: not at all proud", "2: not very proud", "3: neutral", "4: quite proud", "5: very proud ".

How proud are you to be a Chinese?	1	2	3	4	5
How proud are you in the way that our country's economic system works?	1	2	3	4	5
How proud are you in the way that our country's political system works?	1	2	3	4	5

Now I'd like you to tell me your views on policy issues.
V9. If 0 means you agree completely with the statement that government's economic policy should increase private ownership of business and 10 means you agree completely with the statement that government's economic policy should increase state ownership of business, how would you place your views on this scale? If your views fall somewhere in between, you can choose any number in between.

Government's Economic policy should increase private ownership of business   Government's Economic policy should increase state ownership of business

0	1	2	3	4	5	6	7	8	9	10

V10. If 0 means you agree completely that household registration should be abolished completely and 10 means you agree completely that household registration should still be enforced strictly, how would you place your views on this scale? If your views fall somewhere in between, you can choose any number in between.

Household Registration should be abolished completely										Household Registration should still be enforced strictly
0	1	2	3	4	5	6	7	8	9	10

V11. Could you tell me how much you trust central and local government leaders? On the scale 0 means you don't trust them at all; 10 means you trust them completely and you can choose any number in between.

Central government leaders	0	1	2	3	4	5	6	7	8	9	10
Provincial government leaders	0	1	2	3	4	5	6	7	8	9	10
County government leaders	0	1	2	3	4	5	6	7	8	9	10

V12. On a scale from 01 to 10, with 0 indicating this is not a problem at all in China and 10 indicating this is an extremely serious problem, how serious do you think these problems are in China today?

Corruption	0	1	2	3	4	5	6	7	8	9	10
Efficiency of government services	0	1	2	3	4	5	6	7	8	9	10

Now I'd like you to tell me your views on institutional issues.

V13. If "0" represents completely disagree and "10" represents completely agree, how do you agree that the following things are essential characteristics of democracy?

People choose their leaders in free and fair elections	0	1	2	3	4	5	6	7	8	9	10
Civil rights protect people from state oppression	0	1	2	3	4	5	6	7	8	9	10
The state makes people's incomes equal	0	1	2	3	4	5	6	7	8	9	10
The state maintains economic growth	0	1	2	3	4	5	6	7	8	9	10

V14. If "0" Means that democracy is completely unsuitable for our country today and "10" means that it is completely suitable, where would you place our country today?

Completely unsuitable										Perfectly suitable
0	1	2	3	4	5	6	7	8	9	10

V15. If 0 means entirely undemocratic, and 10 means entirely democratic, please tell us how democratic you believe our country is under the current regime?

Completely Undemocratic   Completely Democratic

0	1	2	3	4	5	6	7	8	9	10

V16. If you need to make a choice among democracy, social stability and economic development, which one do you think is the most important, the second important? [1means the most important; 2 means the second important; 3 means the least important.]

Democracy	
Social stability	
Economic growth	

V17. Did you vote in the most recent elections for the following organizations?

Elections	Yes	No	Don't Remember	Not Applicable
Local People's Congress	1	2	3	4
Homeowner's Association	1	2	3	4
Resident's Committee	1	2	3	4

V18. Are you interested in Politics?

Not at all interested	Not much interested	interested	very interested
1	2	3	4

V19. How frequently do you do each of the following things?

	very frequently	fairly frequently	occasionally	never
Follow political news	1	2	3	4
Talk about politics with friends	1	2	3	4

V20. I'm going to read out a variety of activities. I would like you to tell me for each one, if you have ever done any of them, if you might do any of them, or if you would never do any of them?

Activities	Have done in the past 5 years	Might do	Never do
protests and demonstrations			
strikes			
visiting			
Signing a petition			

V21A. What's your general opinion on college students' participation in such activities as protests or demonstration?

Support	1
Neutral	2
Oppose	3
Hard to say	4

V21B. What's your general opinion on workers' participation in such activities as protests or demonstration?

Support	1
Neutral	2
Oppose	3
Hard to say	4

In the end, we have a couple of more questions on your background.

V22. What's your current annual income?

1	0-50000 RMB
2	50000-100000RMB
3	100000-200000RMB
4	200000-300000RMB
5	300000-400000RMB
6	400000-500000RMB
7	Above 5000000RMB

V23. What's your marriage status?

1	Single (Never Married)
2	Married
3	Divorced
4	Other

V24. How many kids do you have: _____

V25. How do you satisfy with your current life?

Not at all Satisfied	Not Satisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

Interview Record

1. Interviewer's number: _____

2. Interviewer's gender: 1. Male   2. Female.

3. Interviewer's Age: _____

4. The total interview time: _____ minutes

5. Has the respondent ever refused to be interviewed during the whole process?

   [1] Yes. Right at the beginning of the interview
   [2] Yes. In the middle of the interview
   [3] Yes. Towards the end of the interview
   [4] Never.

6. Has the respondent ever felt impatient during the interview?
   [1] Never [2] Occasionally [3] Sometimes [4] Always

7. How cooperative was the respondent during the interview?
   [1] Highly cooperative [2] Fairly cooperative [3] Not very cooperative

C Anonymized Pre-Registration Plan

The Long-Term Impact of Mobilization and Repression on Democratic Attitudes

August 03, 2015

Abstract

This research investigates the long-term impact of mobilization and repression on support for democracy. The study uses a discontinuity in exposure, comparing Chinese college graduates who were at University during the democracy movement and subsequent repression in 1989 and students who arrived after that period. We hypothesize that those in college during the movement and repression will generally have more support for democracy and stronger democratic values and behaviors. We also offer hypotheses about employment and life outcomes. Our data are an original survey of 41-49 year old college graduates from China.

1 Introduction

In the spring of 1989, over 100,000 Chinese students in Beijing mobilized in the largest student revolt in human history (Zhao, 2011).[1] At the height of the protests, an estimated 1 million protestors gathered in Tinananmen Square (Zhao, p171), demanding a democratic form of government. This movement was crushed by repression of the Chinese central government on June 4th of 1989. As part of this repression, student movements – on and off campus – were banned and public protest severely restricted. In addition, media censorship tightly restricted access to information about the protest. These events are known as the Tinananmen Square incident or June Fourth Incident.

This study exploits a discontinuity in exposure to the June Fourth Incident to measure the long term impact of exposure to mass movements and their repression on Chinese former undergraduates' democratic values. Treatment assignment is determined by students' college entry years which in turn are determined by subjects' ages. Using survey data to be collected in Beijing and other major cities, we will test hypotheses on the differences in understanding of democracy held by the treatment and the control groups. In particular,

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[1] Zhao, Dingxin. 2011. *The Power of Tiananmen: State-Society Relations and the 1989 Beijing Student Movement*. Chicago: University of Chicago Press.

we expect to find that Chinese former undergraduates who experienced the democracy movement and repression against it will demonstrate greater support for political rights and civil liberty, but those who did not experience the movement will have weaker democratic values, and will be more likely to consider democracy as a welfare state rather than a question of liberties and rights. Based on these findings, we hypothesize that Chinese government repression on the 1989 pro-democracy movement has significantly changed people's understanding of democracy.

2   Data

In the summer of 2015, we will survey Chinese former undergraduates on various social values in Beijing and other major cities. The survey will be conducted by Research Center for Contemporary China of Peking University. Our population of interest is college graduates between the ages of 41 and 49. The survey asks respondents to report the years that they were studying at university as well as their birth years and months. These variables will be used to measure the independent variable, exposure to the student movement and subsequent repression. The survey will also ask a series of questions about attitudes toward democracy, national pride, and social capital. These will be the dependent variables. The survey also includes demographic variables that will be used as covariates. The following paragraphs first explain how we measure the independent variable, present each of the dependent variables and our hypotheses for each. The dependent variables reflect six distinct research agendas, exploring six different effects of the incident, including: understanding of democracy, support for democracy, participation, national pride, political attitudes and life achievement and satisfaction.

A. Independent Variables

The key independent variable is exposure to the pro-democracy student movement and subsequent repression of that movement. We measure this based on subjects' entrance year into the university. Students that were in college in the spring of 1989 were exposed to both the student movement and the repression. Students that began university studies in the fall of 1989, however, had no exposure to the pro-democracy student movements or their protest and repression experiences. In our survey, we ask respondents the year that they started and finished university as well as their birth years and months. We define our treatment group as subjects who report being in university in the spring of 1989, and our control group as subjects who only began university in fall 1989 or later. We limit our analysis to subjects between the ages of 41 and 49, which implies that the vast majority would have started university between 1986 and 1991.

B. Dependent Variables and Hypotheses

The following presents the survey question used to measure each of the dependent variables, as well as the associated hypotheses. Note that these are translated from the Chinese original. The complete questionnaire in English and in Chinese is included with this document.

Q1. [Understanding of Democracy] If "1" represents completely disagree and "10" represents completely agree, to what extent do you agree that the following things are essential characteristics of democracy?

People choose their leaders in free elections	1	2	3	4	5	6	7	8	9	10
Civil rights protect people from state oppression	1	2	3	4	5	6	7	8	9	10
The state makes people's incomes equal	1	2	3	4	5	6	7	8	9	10
People receive state aid for unemployment	1	2	3	4	5	6	7	8	9	10
The state maintains economic development	1	2	3	4	5	6	7	8	9	10

3 Hypotheses

This preregistration plan reports on several research agendas on democratic values and life outcomes. Generally, we expect more democratic values and behaviors but worse outcomes among subjects who were exposed to the treatment (student movements and subsequent repression) than subjects who were not exposed to the treatment.

3.1 Characteristics of Democracy

We expect to find that former undergraduates who were exposed to the treatment will report more agreement that political rights (PR, measured by free elections and civil rights) are essential characteristics of democracy than those not exposed to the June 4th movement. In addition, we expect to find that subjects not exposed to the treatment will report more agreement that welfare support (WS, measured by income equality, state aid and economic growth) is an essential characteristic of democracy than do subjects exposed to the treatment:

3.2 Support for democracy

We measure people's democratic aspirations by looking at the gap between the demand for democracy and the supply of democracy within the current regime. In the survey, the demand for democracy and the supply of democracy are measured as follows:

[Demand for Democracy] If "1" Means that democracy is completely unsuitable for our country today and "10" means that it is completely suitable, where would you place our country today?

Completely unsuitable   Perfectly suitable

1	2	3	4	5	6	7	8	9	10

[Supply of Democracy] If 1 means entirely undemocratic, and 10 means entirely democratic, please tell us how democratic you believe our country is under the current regime?

Completely Undemocratic									Completely Democratic
1	2	3	4	5	6	7	8	9	10

We expect to see that the 1989 Tiananmen Incident has a significantly reduced people's support for democracy in China.

3.3 Informal Political Participation

The specific survey questions related to informal political participation include:

(1) Are you interested in Politics?

Not at all interested	Not much interested	interested	very interested
1	2	3	4

(2) How frequently do you do each of the following things?

	very frequently	fairly frequently	occasionally	never
Follow political news	1	2	3	4
Talk about politics with friends	1	2	3	4

(3) I'm going to read out a variety of activities. I would like you to tell me for each one, if you have ever done any of them, if you might do any of them, or if you would never do any of them?

Activities	Have done in the past 5 years	Might do	Never do
protests and demonstrations			
strikes			
visiting			
Signing a petition			

Two main hypotheses on subjects' attitudes towards informal political participation will be tested:

Hypothesis 1. The treatment (in college during the 1989 Tiananmen Movement) significantly reduces people's interests in politics.

Hypothesis 2. Chinese former undergraduates exposed to the treatment will be significantly less likely to participate in informal political activities.

3.4 Patriotism and Nationalism

In this study, we expect to find that exposure to the treatment reduces patriotism and nationalism in various measures among those students who experienced the incident. In particular we will test:

Hypothesis 1: Chinese former undergraduates who were in college during the Tiananmen Incident will be less proud to be a Chinese.

Hypothesis 2: Chinese former undergraduates who received the treatment will be less likely to support for nationalism.

The specific questions related to the above two hypotheses are:

(1) How do you agree with the following statements?
"1: strongly disagree", "2: disagree", "3: neutral", "4: agree", "5: strongly agree".

I support my country whether its policies are right or wrong	1	2	3	4	5
In view of China's history and current power, it is natural that China has more decisive influence on regional affairs than any other countries in East Asia	1	2	3	4	5
Generally speaking, China is a better country than most developed countries	1	2	3	4	5

(2) Would you please place your position in the following statements?
"1: not at all proud", "2: not very proud", "3: neutral", "4: quite proud", "5: very proud ".

How proud are you to be a Chinese?	1	2	3	4	5
How proud are you in the way that our country's economic system works?	1	2	3	4	5
How proud are you in the way that our country's political system works?	1	2	3	4	5

3.5 Political Attitudes

In this topic, we will test four main hypotheses on former undergraduates' political attitudes including political trust, corruption and the efficiency of government services.

Hypothesis 1: Chinese former undergraduates who received the treatment, or were in college during the 1989 Tiananmen Incident, will show lower trust of political leaders.

The survey questions related to this hypothesis is:

Could you tell me how much you trust central and local government leaders? On the scale 0 means you don't trust them at all; 10 means you trust them completely and you can choose any number in between.

Central government leaders	0	1	2	3	4	5	6	7	8	9	10
Provincial government leaders	0	1	2	3	4	5	6	7	8	9	10
County government leaders	0	1	2	3	4	5	6	7	8	9	10

Hypothesis 2: Chinese former undergraduates who received the treatment will perceive higher levels of corruption in China.

The survey question will be asked on perceived corruption in China is:

On a scale from 01 to 10, with 0 indicating this is not a problem at all in China and 10 indicating this is an extremely serious problem, how serious do you think these problems are in China today?

Corruption	0	1	2	3	4	5	6	7	8	9	10

Hypothesis 3: Chinese former undergraduates who received the treatment will perceived government services as less efficient.

The survey question will be asked on the efficiency of government services is:

On a scale from 01 to 10, with 0 indicating this is not a problem at all in China and 10 indicating this is an extremely serious problem, how serious do you think these problems are in China today?

Efficiency of government services   0 1 2 3 4 5 6 7 8 9 10

3.6 Life Outcomes

In this study, we hypothesize that Chinese former undergraduates who missed the Tiananmen incident have a higher income, are more likely to be married, are more likely to be Party members, will have better jobs and higher education, are more likely to have more children, and are more satisfied with their current life, when compared with respondents that received the treatment. Income and life satisfaction are measured by the following survey questions:

Income;

1	0-50000 RMB
2	50000-100000RMB
3	100000-200000RMB
4	200000-300000RMB
5	300000-400000RMB
6	400000-500000RMB
7	Above 5000000RMB

How do you satisfy with your current life?

Not at all Satisfied	Not Satisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

We also will investigate on an exploratory basis the impact of participation in the incident on the number of children and employment status.

Key variables include:

Highest degree:

Did not finish Bachelor	0
Bachelor	1
Master	2
Doctor	3

Party membership:

CCP Party member	1
Member of Democratic Parties	2
No party affiliation	3

Current job:

1	Government
2	State owned enterprises
3	State owned institutions
4	Private owned enterprises
5	NGO /non-profit organization
6	My own business
7	Others

Income:

1	0-50000 RMB

2	50000-100000RMB
3	100000-200000RMB
4	200000-300000RMB
5	300000-400000RMB
6	400000-500000RMB
7	Above 5000000RMB

Marital status

1	Single (Never Married)
2	Married
3	Divorced
4	Other

4. Methods and Estimation

4.1   T-tests for binned local averages

We will conduct T-Tests for differences between treatment and control groups, testing the one-sided hypotheses presented above. For example, if is the mean group score on some variable of interest, and we hypothesize that:

$$\Theta_{Treatment} > \Theta_{Control}$$

Then we will conduct a simple one-sided t-test for a difference in means for treatment and control groups. When the variable of interest is binary, we will conduct a difference in proportions test. When the variable of interest is ordinal, we will conduct a chi-square test.

4.2   Estimating the fuzzy Regression discontinuity by Using Two-Stage Least-Squares

To identify the potential treatment effect, we will apply a fuzzy regression discontinuity design and estimate the regression by using two-stage least-squares (TSLS). Our empirical analysis will be based on the following two equations:

$$Y = \chi + \tau T + h(X - c) + u \qquad\qquad (1)$$

$$T = \gamma + \delta D + g(X - c) + v \qquad (2)$$

(1) and (2) yield the reduced form:

$$Y = \alpha + \beta D + f(X - c) + \varepsilon \qquad (3)$$

where $T \in \{0, 1\}$ indicates the treatment conditions; X indicates subjects' age that is measured in months; c is the threshold value; $D = 1\{X \geq c\}$ represents whether the assignment variable exceeds the cutoff c. In particular, we standardize $c = 0$ indicating those who were born in June, 1970. With this setting, $X = 1$ if a subject was born in May, 1970 and $X = -1$ if a subject was born in July, 1970, so on and so forth. Obviously, $D = 1\{X \geq c\}$ actually refers to the group of students who were born in and before June, 1970 while $D = 0\{X < c\}$ represents the group of students who were born after June, 1970.

In this fuzzy regression discontinuity design, β is the parameter of interest and one-sided hypotheses will be tested as discussed above.

4.3   Incorporating Covariates in Estimation

We hypothesize that adding a set of covariates had no impact on the treatment estimates. We will include the following covariate controls in our models: highest degree, party membership, current job, income and marital status.

C.1 Full Sample Models

Table 3: First Stage Models Predicting Treatment from Cutoff and Birthdate

	1988-89	1987-90	1986-91	1985-92	1984-93	1984-94
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	0.364	0.253	0.252	0.237	0.233	0.225
	(0.056)	(0.034)	(0.026)	(0.022)	(0.020)	(0.019)
	$p = 0.000$	$p = 0.000$	$p = 0.000$	$p = 0.000$	$p = 0.000$	$p = 0.000$
Cutoff	0.082	0.184	0.208	0.262	0.268	0.285
	(0.085)	(0.056)	(0.043)	(0.036)	(0.033)	(0.031)
	$p = 0.340$	$p = 0.002$	$p = 0.000$	$p = 0.000$	$p = 0.000$	$p = 0.000$
D	-0.183	-0.166	-0.140	-0.106	-0.094	-0.085
	(0.044)	(0.022)	(0.013)	(0.009)	(0.007)	(0.007)
	$p = 0.000$	$p = 0.000$	$p = 0.000$	$p = 0.000$	$p = 0.000$	$p = 0.000$
Observations	262	514	734	944	1,084	1,190
R^2	0.152	0.336	0.450	0.501	0.505	0.511
Adjusted R^2	0.145	0.333	0.449	0.500	0.505	0.511

Table shows first-stage models for various year cohorts. These first-stage models were pre-registered and were used to predict assignment to treatment in Models 3 and 4 in the Regression and Fuzzy RDD tables.

Table 4: First Stage Models Predicting Treatment from Cutoff and Birthdate

	1988-89	1987-90	1986-91	1985-92	1984-93	1984-94
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	0.708	0.414	0.286	0.250	0.240	0.232
	(0.161)	(0.080)	(0.050)	(0.042)	(0.038)	(0.036)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
Cutoff (C)	−0.402	−0.226	−0.132	−0.101	−0.107	−0.100
	(0.181)	(0.100)	(0.070)	(0.059)	(0.054)	(0.051)
	p = 0.027	p = 0.025	p = 0.059	p = 0.086	p = 0.046	p = 0.048
D	−1.532	−0.786	−0.402	−0.336	−0.318	−0.302
	(0.823)	(0.268)	(0.113)	(0.087)	(0.079)	(0.071)
	p = 0.064	p = 0.004	p = 0.001	p = 0.001	p = 0.000	p = 0.000
D^2	1.132	0.453	0.163	0.132	0.124	0.115
	(0.995)	(0.225)	(0.064)	(0.047)	(0.041)	(0.036)
	p = 0.257	p = 0.045	p = 0.012	p = 0.005	p = 0.003	p = 0.002
D^3	−0.269	−0.079	−0.020	−0.016	−0.015	−0.013
	(0.323)	(0.051)	(0.010)	(0.007)	(0.006)	(0.005)
	p = 0.408	p = 0.123	p = 0.057	p = 0.024	p = 0.017	p = 0.010
$C*D$	0.788	−0.061	−0.373	−0.382	−0.411	−0.415
	(0.857)	(0.312)	(0.164)	(0.132)	(0.120)	(0.112)
	p = 0.359	p = 0.846	p = 0.024	p = 0.004	p = 0.001	p = 0.001
$C*D^2$	−1.517	−0.807	−0.426	−0.354	−0.351	−0.335
	(1.008)	(0.247)	(0.097)	(0.073)	(0.066)	(0.061)
	p = 0.134	p = 0.002	p = 0.000	p = 0.000	p = 0.000	p = 0.000
$C*D^3$	0.210	0.034	−0.010	−0.008	−0.010	−0.010
	(0.325)	(0.054)	(0.016)	(0.011)	(0.010)	(0.009)
	p = 0.519	p = 0.531	p = 0.539	p = 0.493	p = 0.344	p = 0.287
Observations	262	514	734	944	1,084	1,190
R^2	0.198	0.380	0.508	0.573	0.588	0.597
Adjusted R^2	0.176	0.371	0.503	0.570	0.585	0.594

Table shows first-stage models for various year cohorts. These first-stage models were not pre-registered and were used to predict assignment to treatment in Models 5 and 6 in the Regression and Fuzzy RDD tables.

Table 5: Dependent Variable: Proud to be Chinese

| | OLS Models 1-2 | | Fuzzy RDD Models 3-6 | | | |
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.886	2.622	2.852	2.669	2.877	2.686
	(0.035)	(0.163)	(0.038)	(0.163)	(0.037)	(0.163)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
T	−0.305	−0.248	−0.200	−0.172	−0.297	−0.254
	(0.067)	(0.067)	(0.095)	(0.094)	(0.088)	(0.087)
	p = 0.000	p = 0.000	p = 0.036	p = 0.068	p = 0.001	p = 0.004
Education		−0.147		−0.189		−0.183
		(0.044)		(0.045)		(0.045)
		p = 0.001		p = 0.000		p = 0.000
Party Member		0.227		0.219		0.213
		(0.062)		(0.062)		(0.061)
		p = 0.000		p = 0.000		p = 0.001
Govt Job		0.162		0.193		0.190
		(0.068)		(0.068)		(0.068)
		p = 0.017		p = 0.004		p = 0.005
Income		−0.001		−0.004		−0.004
		(0.017)		(0.017)		(0.017)
		p = 0.961		p = 0.809		p = 0.832
Married		0.265		0.244		0.242
		(0.123)		(0.122)		(0.122)
		p = 0.032		p = 0.047		p = 0.048
First Stage Model	-	-	Linear	Linear	Polynomial	Polynomial
Observations	1,208	1,208	1,190	1,190	1,190	1,190
R^2	0.017	0.050	0.017	0.057	0.021	0.059
Adjusted R^2	0.016	0.045	0.016	0.053	0.020	0.055

Full models used to estimate effect of exposure to Tiananmen on dependent variable. The estimated coefficients for T above are reported in Table 2, row 1. All p-values reflect two-sided hypothesis tests. See Appendix discussion of preregistration plan for additional details.

Table 6: Dependent Variable: Proud of Economy

| | OLS Models 1-2 | | Fuzzy RDD Models 3-6 | | | |
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.637	2.265	2.612	2.215	2.632	2.229
	(0.034)	(0.161)	(0.038)	(0.162)	(0.037)	(0.162)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
T	−0.256	−0.201	−0.114	−0.090	−0.194	−0.155
	(0.067)	(0.066)	(0.095)	(0.094)	(0.088)	(0.087)
	p = 0.000	p = 0.002	p = 0.229	p = 0.337	p = 0.027	p = 0.074
Education		−0.129		−0.131		−0.127
		(0.044)		(0.045)		(0.045)
		p = 0.003		p = 0.003		p = 0.005
Party Member		0.202		0.233		0.228
		(0.061)		(0.061)		(0.061)
		p = 0.001		p = 0.000		p = 0.000
Govt Job		0.169		0.167		0.164
		(0.067)		(0.068)		(0.067)
		p = 0.011		p = 0.014		p = 0.015
Income		−0.006		−0.003		−0.003
		(0.017)		(0.017)		(0.017)
		p = 0.705		p = 0.842		p = 0.861
Married		0.382		0.394		0.393
		(0.121)		(0.122)		(0.122)
		p = 0.002		p = 0.001		p = 0.001
First Stage Model	-	-	Linear	Linear	Polynomial	Polynomial
Observations	1,208	1,208	1,190	1,190	1,190	1,190
R^2	0.012	0.048	0.007	0.047	0.009	0.048
Adjusted R^2	0.011	0.043	0.006	0.042	0.009	0.043

Full models used to estimate effect of exposure to Tiananmen on dependent variable. The estimated coefficients for T above are reported in Table 2, row 2. All p-values reflect two-sided hypothesis tests. See Appendix discussion of preregistration plan for additional details.

Table 7: Dependent Variable: Proud of Political System

| | OLS Models 1-2 | | Fuzzy RDD Models 3-6 | | | |
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.434	2.534	2.386	2.522	2.412	2.541
	(0.039)	(0.180)	(0.044)	(0.182)	(0.042)	(0.182)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
T	−0.396	−0.297	−0.176	−0.140	−0.280	−0.229
	(0.076)	(0.074)	(0.109)	(0.105)	(0.100)	(0.097)
	p = 0.000	p = 0.000	p = 0.106	p = 0.185	p = 0.005	p = 0.019
Education		−0.240		−0.256		−0.250
		(0.049)		(0.050)		(0.050)
		p = 0.000		p = 0.000		p = 0.000
Party Member		0.270		0.288		0.281
		(0.068)		(0.069)		(0.069)
		p = 0.000		p = 0.000		p = 0.000
Govt Job		0.300		0.318		0.315
		(0.075)		(0.076)		(0.076)
		p = 0.000		p = 0.000		p = 0.000
Income		−0.063		−0.064		−0.063
		(0.018)		(0.019)		(0.019)
		p = 0.001		p = 0.001		p = 0.001
Married		0.149		0.126		0.125
		(0.136)		(0.137)		(0.137)
		p = 0.274		p = 0.357		p = 0.363
First Stage Model	-	-	Linear	Linear	Polynomial	Polynomial
Observations	1,208	1,208	1,190	1,190	1,190	1,190
R^2	0.022	0.092	0.015	0.089	0.019	0.092
Adjusted R^2	0.021	0.087	0.014	0.084	0.019	0.087

Full models used to estimate effect of exposure to Tiananmen on dependent variable. The estimated coefficients for T above are reported in Table 2, row 3. All p-values reflect two-sided hypothesis tests. See Appendix discussion of preregistration plan for additional details.

Table 8: Dependent Variable: I support my country right or wrong

	OLS Models 1-2		Fuzzy RDD Models 3-6			
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	1.896	2.016	1.871	2.024	1.893	2.040
	(0.038)	(0.179)	(0.043)	(0.181)	(0.041)	(0.181)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
T	−0.176	−0.098	−0.057	−0.027	−0.144	−0.100
	(0.074)	(0.074)	(0.106)	(0.105)	(0.098)	(0.097)
	p = 0.018	p = 0.186	p = 0.592	p = 0.800	p = 0.144	p = 0.304
Education		−0.274		−0.289		−0.285
		(0.049)		(0.050)		(0.050)
		p = 0.000		p = 0.000		p = 0.000
Party Member		0.183		0.182		0.177
		(0.068)		(0.069)		(0.068)
		p = 0.007		p = 0.008		p = 0.010
Govt Job		0.159		0.172		0.169
		(0.074)		(0.075)		(0.075)
		p = 0.033		p = 0.023		p = 0.025
Income		−0.021		−0.022		−0.022
		(0.018)		(0.019)		(0.019)
		p = 0.265		p = 0.227		p = 0.237
Married		0.152		0.149		0.147
		(0.135)		(0.136)		(0.136)
		p = 0.260		p = 0.275		p = 0.279
First Stage Model	-	-	Linear	Linear	Polynomial	Polynomial
Observations	1,208	1,208	1,190	1,190	1,190	1,190
R^2	0.005	0.047	0.002	0.048	0.004	0.048
Adjusted R^2	0.004	0.042	0.001	0.043	0.003	0.043

Full models used to estimate effect of exposure to Tiananmen on dependent variable. The estimated coefficients for T above are reported in Table 2, row 4. All p-values reflect two-sided hypothesis tests. See Appendix discussion of preregistration plan for additional details.

Table 9: Dependent Variable: China is Better than Developed Nations

| | OLS Models 1-2 | | Fuzzy RDD Models 3-6 | | | |
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.339	2.351	2.308	2.357	2.328	2.371
	(0.039)	(0.183)	(0.044)	(0.186)	(0.043)	(0.186)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
T	−0.323	−0.240	−0.171	−0.143	−0.250	−0.210
	(0.076)	(0.075)	(0.109)	(0.107)	(0.101)	(0.099)
	p = 0.000	p = 0.001	p = 0.118	p = 0.182	p = 0.014	p = 0.034
Education		−0.288		−0.306		−0.302
		(0.050)		(0.051)		(0.051)
		p = 0.000		p = 0.000		p = 0.000
Party Member		0.081		0.089		0.084
		(0.069)		(0.070)		(0.070)
		p = 0.242		p = 0.207		p = 0.231
Govt Job		0.299		0.310		0.307
		(0.076)		(0.077)		(0.077)
		p = 0.000		p = 0.000		p = 0.000
Income		−0.013		−0.014		−0.014
		(0.019)		(0.019)		(0.019)
		p = 0.479		p = 0.448		p = 0.461
Married		0.202		0.194		0.192
		(0.138)		(0.140)		(0.139)
		p = 0.144		p = 0.166		p = 0.168
First Stage Model	-	-	Linear	Linear	Polynomial	Polynomial
Observations	1,208	1,208	1,190	1,190	1,190	1,190
R^2	0.015	0.063	0.010	0.062	0.012	0.063
Adjusted R^2	0.014	0.058	0.009	0.057	0.012	0.058

Full models used to estimate effect of exposure to Tiananmen on dependent variable. The estimated coefficients for T above are reported in Table 2, row 5. All p-values reflect two-sided hypothesis tests. See Appendix discussion of preregistration plan for additional details.

D Additional Robustness Checks

D.1 Test for Self-Selection After the Incident

One possible alternative hypothesis is that self-selection by potential students is driving the results. Perhaps many would-be students chose not to start college immediately after the Incident, or chose to study in other locations. In this case, perhaps more pro-regime students went to college in the fall of 1989, thus creating the apparent difference between cohorts.

We do not believe that this was a major consideration for most potential students given the high value of a college education and scarce opportunities to pursue a degree in 1989. However, there is some evidence of self selection in the broader literature (Rosen 1993).

We test in this section whether there is evidence that self-selection, not the Incident, drives our findings. If self-selection were the mechanism, then we should see differences in nationalism within the Post-Tiananmen cohort. Right after the Incident, the incentives for self-selection were strongest. Within a few years, the stable environment and the high payoffs of a college degree should have eliminated this mechanism of less nationalistic students avoiding Beijing campuses. Thus, we run a regression of each of our measures of Nationalism on "Year Started College", but only looking at the control group. If, in fact, self-selection is driving our findings, then we should observe a negative coefficient on "Year Started College", as selection incentives faded over time.

As reported in Table 10, we find no evidence of a negative relationship between year starting college and nationalism.

Table 10: Nationalism Does Not Vary By Year Starting College - Control Group Only

	Dependent variable:				
	Proud Chinese	Proud Econ	Proud Pol Sys	Support China	China Better
	(1)	(2)	(3)	(4)	(5)
College Start Year	−0.021	−0.009	−0.035	−0.003	0.005
	(0.020)	(0.021)	(0.023)	(0.023)	(0.024)
	p = 0.308	p = 0.658	p = 0.139	p = 0.890	p = 0.829
Intercept	44.063	21.218	71.321	8.352	−8.021
	(40.333)	(41.958)	(46.440)	(46.294)	(47.839)
	p = 0.275	p = 0.614	p = 0.125	p = 0.857	p = 0.867
Observations	891	891	891	891	891
R^2	0.001	0.0002	0.002	0.00002	0.0001
F Statistic (df = 1; 889)	1.042	0.196	2.200	0.019	0.047

Models above report simple regressions of each measure of nationalism on the year that the respondent started college, looking only at the control group.

D.2   How Influential was the Post-Incident Campus Environment?

Another potential confound could be the impact of political re-education programs on campus immediately after the Incident, which were partially relaxed after a few years. Perhaps, rather than the mobilization and repression inoculating the Tiananmen Cohort, it was the Post-Tiananmen political environment on campus that caused the change in attitudes. We note first that most of the Tiananmen cohort was in fact on campus after the incident and thus would have been exposed to the same tightened control and re-education programs. In addition, in a more technical sense, this increased political control was itself caused by the Tiananmen incident. However, in this section, we test whether differences were caused by this period of re-education and tighter control.

Table 11 compares members of the Treatment group who graduated in 1989 and thus were not present for the re-education efforts on campus starting that fall, with members of the

Treatment group who graduated after 1989 and thus would have been on campus during the period of tightened control. In four cases, nationalism is lower among those who graduated before re-education efforts, but these differences are not statistically significant at the .05 level. This analysis does not provide evidence of an impact of being on campus post-Incident.

Table 11: Nationalism By Graduation Date - 1989 or Later, Tiananmen Cohort Only

	Dependent variable:				
	Proud Chinese	Proud Econ	Proud Pol Sys	Support China	China Better
	(1)	(2)	(3)	(4)	(5)
Grad89	0.034	−0.214	−0.156	−0.098	−0.186
	(0.200)	(0.176)	(0.215)	(0.203)	(0.205)
	p = 0.867	p = 0.225	p = 0.470	p = 0.630	p = 0.364
Constant	2.576	2.409	2.058	1.732	2.040
	(0.072)	(0.063)	(0.077)	(0.073)	(0.074)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
Observations	317	317	317	317	317
R^2	0.0001	0.005	0.002	0.001	0.003

Finally, Table 12 tests for an influence of additional military training just looking at the control group. Since extra training was phased out by Fall 1993, we compare respondents from the control group who started college in 1992 or earlier with those who started in 1993 or later. Again, there is no evidence that the additional military training was responsible for higher nationalism among the control group. Differences between the pre and post 1993 respondents are not significant at the .05 level.

Table 12: No Evidence That Being in College During Extra Military Training Period Affected Nationalism

	Dependent variable:				
	Proud Chinese	Proud Econ	Proud Pol Sys	Support China	China Better
	(1)	(2)	(3)	(4)	(5)
Started College 1993+	−0.029	0.091	−0.037	−0.009	0.088
	(0.073)	(0.076)	(0.084)	(0.083)	(0.086)
	p = 0.688	p = 0.229	p = 0.659	p = 0.912	p = 0.306
Constant	2.894	2.613	2.444	1.898	2.315
	(0.038)	(0.039)	(0.044)	(0.044)	(0.045)
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
Observations	891	891	891	891	891
R^2	0.0002	0.002	0.0002	0.00001	0.001

D.3 Test for Long-Term Oppression of Respondents

Another alternative hypothesis is that the Tiananmen Cohort suffered long-term consequences as a result of the Incident, and that this long-term oppression explains differences in attitudes, not the Incident itself. We note again that effectively, this long term oppression is effectively a mediating causal mechanism - since the ultimate cause of the oppression was exposure to the movement. However, we test for evidence of these long-term differences in this section.

We cannot directly observe or even ask about such oppression given the sensitive nature of the Incident. We can, however, look for evidence of differences in life outcomes. We test whether the Tiananmen cohort has lower life satisfaction, numbers of children, income, different marital status, or different incomes, 25 years after the Incident.

Table 13 reports results from regressions of Life Satisfaction, Number of Children, and Educational Achievement on an indicator variable for the Tiananmen Cohort (T) and in some models, a control for age. There is no apparent difference between cohorts in Life Satisfaction or Number of Children, and the Tiananmen Cohort actually reports *higher* educational

achievement. Conclusions do not vary with or without a control for age of respondent.

Table 13: Life Satisfaction, Number of Children, Highest Degree Comparison: Tiananmen and Post-Tiananmen Cohorts

| | *Dependent variable:* | | | | | |
| | Life Satis | | Num Kids | | Highest Degree | |
	(1)	(2)	(3)	(4)	(5)	(6)
T	0.045	−0.084	0.030	0.051	0.173	0.233
	(0.060)	(0.084)	(0.031)	(0.044)	(0.044)	(0.061)
	p = 0.450	p = 0.321	p = 0.333	p = 0.247	p = 0.0001	p = 0.0002
Age		0.032		−0.006		−0.025
		(0.016)		(0.009)		(0.012)
		p = 0.056		p = 0.497		p = 0.033
Intercept	3.380	2.020	1.067	1.322	1.404	2.496
	(0.031)	(0.710)	(0.016)	(0.373)	(0.023)	(0.514)
	p = 0.000	p = 0.005	p = 0.000	p = 0.0005	p = 0.000	p = 0.00001
Observations	1,208	1,190	1,208	1,190	1,208	1,190
R^2	0.0005	0.003	0.001	0.001	0.013	0.013

Table 14 reports on marital status for respondents. Those in the Tiananmen Cohort are more likely to report being divorced, when compared with the Post-Tiananmen cohort. This result is robust to a control for Age. Overall, however, the treatment variable (T) is *not* significant at the .05 level in a likelihood ratio test (p-value for null hypothesis that T has no relationship is .08248).

Table 14: Marriage Status for Tiananmen and Post-Tiananmen Cohorts

	Dependent variable:					
	Married	Other	Single	Married	Other	Single
	(1)	(2)	(3)	(4)	(5)	(6)
T	−0.649	1.139	−2.039	−1.134	0.076	−1.777
	(0.328)	(0.923)	(0.803)	(0.509)	(1.354)	(1.006)
	p = 0.048	p = 0.218	p = 0.012	p = 0.026	p = 0.956	p = 0.078
Age				0.135	0.303	−0.070
				(0.106)	(0.295)	(0.163)
				p = 0.204	p = 0.304	p = 0.667
Constant	3.511	−2.526	−0.041	−2.254	−15.604	2.950
	(0.203)	(0.735)	(0.286)	(4.515)	(12.823)	(6.938)
	p = 0.000	p = 0.001	p = 0.887	p = 0.618	p = 0.224	p = 0.671
Akaike Inf. Crit.	678.255	678.255	678.255	679.560	679.560	679.560

Table 15 compares incomes for the Tiananmen and Post-Tiananmen cohorts. With or without controls for age, respondents from the Tiananmen cohort report *higher* incomes than those in the Post-Tiananmen cohort.

Table 15: Income is Higher for Tiananmen Cohort than for Post-Tiananmen Cohort

	Dependent variable:	
	Income	
	(1)	(2)
T	0.235	0.510
	(0.118)	(0.166)
	p = 0.048	p = 0.003
Age		−0.090
		(0.032)
		p = 0.006
Intercept	3.875	7.722
	(0.061)	(1.393)
	p = 0.000	p = 0.00000
Observations	1,208	1,190
R^2	0.003	0.009

Finally, Tables 16 and 17 report on multinomial logit models of employer category. In this case, we do observe a significant difference between the Tiananmen and Post-Tiananmen cohorts. In particular, the Tiananmen cohort is less likely to report government employment (the excluded category), and these differences persist after controlling for age. Further, in a likelihood ratio test comparing models including and excluding T, we reject the null hypothesis that T does not explain variance in the dependent variable (p-value=.0013).

Table 16: Job Category Comparison: Tiananmen Cohort versus Post-Tiananmen Cohort

	Dependent variable:					
	NGO	Other	Private Biz	Self	SOE	SOI
	(1)	(2)	(3)	(4)	(5)	(6)
T	0.786	2.540	0.506	0.939	0.620	0.336
	(0.537)	(0.616)	(0.343)	(0.446)	(0.308)	(0.311)
	p = 0.144	p = 0.00004	p = 0.140	p = 0.036	p = 0.045	p = 0.281
Age	0.080	−0.288	0.050	0.008	0.053	0.093
	(0.107)	(0.125)	(0.063)	(0.086)	(0.056)	(0.056)
	p = 0.454	p = 0.022	p = 0.424	p = 0.929	p = 0.344	p = 0.099
Intercept	−5.233	10.231	−2.311	−1.528	−1.920	−3.657
	(4.597)	(5.295)	(2.688)	(3.689)	(2.392)	(2.408)
	p = 0.255	p = 0.054	p = 0.390	p = 0.679	p = 0.423	p = 0.129
Akaike Inf. Crit.	4,059.186	4,059.186	4,059.186	4,059.186	4,059.186	4,059.186

Table 17: Job Category Comparison: Excluding Indicator Variable for Tiananmen Cohort

	Dependent variable:					
	NGO	Other	Private Biz	Self	SOE	SOI
	(1)	(2)	(3)	(4)	(5)	(6)
Age	0.179	0.084	0.108	0.127	0.126	0.127
	(0.076)	(0.079)	(0.047)	(0.062)	(0.042)	(0.042)
	p = 0.020	p = 0.289	p = 0.021	p = 0.040	p = 0.003	p = 0.003
Intercept	−9.385	−5.254	−4.738	−6.539	−5.012	−5.120
	(3.368)	(3.458)	(2.034)	(2.715)	(1.815)	(1.835)
	p = 0.006	p = 0.129	p = 0.020	p = 0.017	p = 0.006	p = 0.006
Akaike Inf. Crit.	4,069.005	4,069.005	4,069.005	4,069.005	4,069.005	4,069.005

In sum, there is little evidence of long-term oppression of respondents from the Tianan-

men cohort in our sample. Respondents from that cohort reported no differences in life satisfaction, number of children, or marital status. They also reported higher educational achievements and income. The only potential indicator of oppression might be the lower rate of government employment, although again, the Tiananmen cohort has higher income and educational achievements.

E   Methodological Disclosures

1. Our data was collected using a survey, which sought to recruit respondents through a variety of means - a phone survey, emailed surveys, face to face interviews, and an online survey.

2. The survey was sponsored by the authors and conducted by the Research Center for Contemporary China at Peking University.

3. The questionnaire is available above in Appendix B.

4. The population under study was the population of individuals who were between 40 and 49 years of age in 2015 who had graduated from a university in Beijing.

5. The sampling frame was drawn from two databases. One was maintained by the Research Center for Contemporary China and was subset to individuals who had attended college in Beijing and fit the 40-49 age range. A total of 297 individuals were surveyed through this frame. Our survey partner also purchased access to a database of a market research firm and sent invitations to participate to individuals who fit the eligibility requirements for the survey. A total of 1200 respondents were surveyed through this second frame.

6. The only eligible respondents were graduates of Beijing universities within this age range. They were contacted through a range of methods which included the market research firm, SMS, WeChat, and email. In exchange for their cooperation, they received a small gift from our survey partner.

7. The data was collected between May 13, 2015 and September 25, 2015.

8. The survey used several strategies to maintain data quality. Respondents were sent unique links to the survey which only allowed each respondent to participate once. The amount of time that respondents took to finish the survey was monitored as a check on data quality, and between five and ten percent of the sample was randomly selected for a follow-up phone interview for quality assurance purposes.

9. Our design and data collection process had the limitations characteristic of survey work, such as the unmeasured error inherent in all forms of public opinion research.

F Preregistration Plan and Deviations

This study was preregistered and the registration can be viewed at https://osf.io/uex9r. Analyses that were not pre-registered include the robustness checks as well as the models in columns five and six in Table 2, which were suggested by readers. Note that all hypotheses regarding the impact of exposure to the movement (the variable T) specified one-sided hypotheses. A reviewer and the editor requested two-sided hypotheses which we have adopted herein. P-values for the impact of treatment would thus be halved had we followed the original registered plan, as all estimated effects were negative, consistent with our hypotheses. Consequently, this deviation from our registered plan decreases the power of the test. This change had no material impact on our conclusions as findings are quite robust.