

**The Impact of Interrupted Education on Earnings:
The Case of China's Cultural Revolution**

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By

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Abstract

The Chinese Cultural Revolution began in 1966 and continued on for a decade before coming to a close. During that time, many schools ceased to operate normally – senior high schools stopped recruiting students for up to 6 years and universities stopped recruiting students for as long as 8 years. Such an extensive interruption of education consequentially reduced the opportunity for many students to obtain senior high school qualifications or a university degree. More than half of those born before the Cultural Revolution and of college-age at the beginning of the Cultural Revolution who would have normally obtained a university degree were unable to do so. This thesis will look into the extent of how the interruption of education caused by the Cultural Revolution impacted earnings. The primary results of this study suggest that the interrupted education prompted by the events of the Cultural Revolution led to a difference in returns on income. Those whose education was not affected by the Cultural Revolution experienced higher returns on incomes than those who would have either started, continued, or finished school during the Cultural Revolution.

Introduction

The Great Proletarian Cultural Revolution began in 1966 in China – a time during which intellectuals were scrutinized against, prosecuted, and sent to labor camps.

Throughout the 1950s, the purpose of Chinese education was based on expansion and growth, also known as “mass” education.¹ The function of mass education was, therefore, to give and rural population the skills to effectively participate in the development of a socialist revolution.² Mass education, in Chairman Mao’s eyes, was education made accessible to all classes of people in China and maintained a standard curriculum that did not foster any type of specialized learning. Not only did Mao believe that education led to a classist society (a society in which there is systematic oppression of subordinated class groups to advantage the dominant classes) he also believed that the true power of society rested in the hands of the peasant class, not the intellectuals. Mao famously stated, “the intellectuals will accomplish nothing if they fail to integrate themselves with the workers and peasants.”³

During the Great Leap Forward, students were encouraged to focus more on ideological framework at the expense of their academic work so as not to lose sight of their political values.⁴ This restructuring of higher education led to the inevitable lowering of academic standards and poor quality of the graduates of institutions of higher education.

¹ Fraser, Stewart E. Ed. *Education and Communism in China: An Anthology of Commentary and Documents*. Hong Kong: International Studies Group, 1969

² Hayhoe, Ruth. Ed. *Contemporary Chinese Education*. London: Croom Helm Ltd., 1984. P. 34.

³ Mao Zedong. *Selected Works of Mao Tse-tung*. Peking: Foreign Language Press, 1988. Vol. II.

⁴ This started a period of rampant anti-intellectualism during which intellectuals of any status were persecuted, punished, and silenced. Red guards, young revolutionaries who were typically high school students, humiliated professors and intellectuals for being “bourgeoisie” and “capitalists.” Mao enforced the distribution of propaganda to “purify” the class ranks in schools through a mass “struggle, criticism, and transformation” movement. Cheng, Kai Ming. “China's Recent Education Reform: The Beginning of an Overhaul”.

Higher institutions were run by revolutionary committees which were made up of workers, peasants, and revolutionary activists of all ages. Often times, Red Guards or revolutionaries were put in charge of the universities, which was a direct response to the idea that university leadership was dominated by bourgeois academic experts. As a result, revolutionary committees were controlled entirely by non-academics.⁵

The Cultural Revolution led to a period of chaos, disruption, and total upheaval of China's education system. Red Guards attacked universities, destroyed libraries and museums, burned books, and humiliated professors and intellectuals for being "bourgeoisie" and "capitalists."⁶ Ideological and political struggles became so intense that the higher education system was shut down entirely for a period of time. Colleges and universities ceased to operate from 1966-1969 and reopened in the early 1970s; however, the school system was entirely reconstructed, and political studies took precedence over professional course work.⁷

Over the entire course of the Cultural Revolution, a generation of young, urban individuals, not just college students, experienced this destructive shock to human capital. Some groups of students missed as much as six years of school and many other missed the chance to receive a university or high school degree. The purpose of this thesis is to analyze how this interruption of education of massive proportions such as that during the Cultural Revolution affects earnings.

⁵ Pepper, Suzanne. *Radicalism and Education Reform in 20th Century China: The Search for an Ideal Developmental Model* London: Cambridge University 1996.

⁶ Chang, Parris H. "The Cultural Revolution and Chinese Higher Education: Change and Controversy." *The Journal of General Education* 26, no. 3 (1974): 188.

⁷ Pepper, Suzanne. *Radicalism and Education Reform in 20th Century China: The Search for an Ideal Developmental Model* London: Cambridge University 1996.

There has been previous literature with similar studies including the work of Andrea Ichino and Rudolf Winter-Ebmer titled “The Long-Run Educational Cost of World War II.”⁸ In that paper, Ichino and Winter-Ebmer compare two countries who suffered from significant loss of human capital, Austria and Germany, with two countries who were not involved in the war, Switzerland and Sweden. Austrian and German children who were ten years old during or immediately after World War II ended received less education than children in other designated cohorts. On the other hand, Ichino and Winter-Ebmer find no effect for individuals born in the same cohorts living in Switzerland and Sweden. Their results show that individuals from Austria and Germany experienced sizeable earnings loss due to educational loss. Moreover, the Austrian and German cohort whose education was interrupted by the war experienced losses in earnings ever forty years after the war had ended.⁹

Eric Maurin and Sandra McNally wrote a paper titled “Vive la Révolution! Long-Term Educational Returns to 1968 to the Angry Students” that similarly investigates educational loss and its effect on earnings. In May of 1968, conflict between students and university officials in Paris led to mass student protests, the biggest national strike in France’s history, and the dissolution of Parliament. Maurin and McNally discover that each additional year spent in higher education increases wages by about 14%.¹⁰

The rest of this paper will continue as follows: a background on the Chinese education leading up to the Cultural Revolution; a description of data and methodology; an

⁸ Ichino, Andrea and Winter-Ebmer, Rudolf, “The Long-Run Educational Cost of World War II: An Example of Local Average Treatment Effect Estimation,” (June 1998). CEPR Discussion Paper Series No. 1895.

⁹ Ibid.

¹⁰ Maurin, Eric, and Sandra McNally. 2005. “Vive la Révolution! Long Term Returns of 1968 to the Angry Students.” Discussion Paper no. 49, Centre for the Economics of Education, London.

explanation of results; and concluding thoughts. The main equation employed for this analysis is a Mincer equation, used to investigate the impact of interrupted education on income (represented in log to express a percentage). The results largely show that those affected experiencing educational loss and/or an interrupted education earn less than those who obtained a normal education.

Background

Historical, political, cultural, social, and economic factors have been woven into the Chinese education system and the renovation done to China's education system between 1966 and 1976 cannot be fully explained without understanding how education existed in China's past.

The beginning of China's so-called modern education system is typically referenced at the end of the 19th century when institutions similar to traditional Western Universities were established. Before then, all institutions of higher education were dedicated to teaching the Confucian classics and preparation of high-ranking officials through a civil service examination.¹¹ The Civil Service Examination tested a comprehensive knowledge of the Confucian Four Books and the Five Classics. In addition to an expansive knowledge of all these texts, examinees were tested on traditional Confucian concepts including filial piety – the virtue of respect for one's parents, elders, and ancestors.¹² No pre-nineteenth century academic institution could be considered “higher education” in the modern sense. The elimination of the civil service examination in

¹¹ Xiong, min-an. *Zhongguo Gaodeng Jiaoyu Shi* (A History of Chinese Higher Education). Chongqing: Chongqing Chuban She, 1988. p. 383.

¹² Pepper, Suzanne. *Radicalism and Education Reform in 20th Century China: The Search for an Ideal Developmental Model* London: Cambridge University 1996.

1905 presented scholars with other methods of achieving upward social mobility, power, and wealth.¹³

The period between 1905 and 1911 yielded an educational reform that prompted a departure from traditional schooling and an introduction to a new school system ranging from elementary school to universities. In developing this new school system, China used Japan as a model as China admired their recent modernization attributed to modern education.¹⁴ The School Regulations of 1904 written by Zhang Zhidong, a leader of educational reform, illustrated China's utilization of the Japanese system in totality.¹⁵ Chinese students traveled in large numbers to Japan to study abroad and many returned to China to open new schools. Like many who study abroad, they became somewhat bicultural both in China's intellectual culture and in that of the Western world. These new intellectuals increasingly identified with the Western liberal arts tradition, meaning their return to China brought more than just an inflow of technology, but also a transfer of Western values.¹⁶

After the establishment of the Republic of China in 1912, all institutions of higher education were structured along Western lines. The leading intellectual philosophy was to focus less on practical, technical training and emphasize more abstract subjects including Western philosophy, literature, political theory, and art. Chinese scholars who studied under American professors and attended American universities became pivotal players in

¹³ Hayhoe, Ruth, *China's Universities and the Open Door* (New York, M.E. Sharpe, 1989), 55.

¹⁴ Pepper, Suzanne. *Radicalism and Education Reform in 20th Century China: The Search for an Ideal Developmental Model* London: Cambridge University 1996.

¹⁵ Barnard, Henry, "Report of the Commissioner of Education" (presented at Carnegie Library at Pennsylvania State College, Lamont, PA, 1909).

¹⁶ Levenson, Joseph Jr. *Confucian China and its Modern Fate*, London: Routledge and Kegan Paul, 1958, vi, p. 60.

the reform of Chinese education.¹⁷ By 1922, American educational influence in China had peaked. China adopted an American educational structure that required six years of primary school, three years of junior high school, and three years of high school. After high school was a typical four-year undergraduate college followed by graduate school.¹⁸

Between 1936-1949 Chinese communists in the border regions of China from took a different approach to education, known as the Yan'an approach. This education system was a deliberate counter to these newly implemented Western education systems, which, according to Communists, did not fit the needs of China during its war period.¹⁹ In the early 1940s, education in the border regions went through a period of regularization that focused on the standardization of school curriculum. Yan'an's education was characteristically political as it involved the theory, study, and practice of productive labor. Political theories including those of Marx and Lenin became core classroom materials and, later on, a requirement for all students to learn.²⁰

For almost half a century, from 1900 to 1949, China's educational system experienced incredible remodeling. However, among the periodic disruption of civil wars, eight years of fighting off invasion from Japan, political tension, and economic instability, educational development was slow and scattered. As a result, the Chinese Communist Party inherited an education system that was fragmented and unstructured. The new leaders of China at this time were enthusiastic to dismantle the old system and install a new system based on an entirely different political entity: a Communist regime built on

¹⁷ Chen, Theodore Hsi-en. *The Maoist Educational Revolution*. New York: Praeger Publishers, 1974. P. 21.

¹⁸ Price, R. F. *Education in Modern China*. London: Routledge & Kegan Paul, a revised edition of *Education in Communist China*. 1979. P. 97.

¹⁹ Hayhoe, Ruth. Ed. *Contemporary Chinese Education*. London: Croom Helm Ltd., 1984.

²⁰ Ibid.

Marxist-Leninist theory. Under the Chinese Communist Party, education existed to serve the state and fit into the plan for increased industrialization and national economic growth. Education, especially higher education, could no longer allow individuals to seek their own highest achievement, but rather had to be a vessel for which the state could provide the tools and personnel needed for national reconstruction.²¹

From 1966-1976, Mao Zedong tried to restructure the entire education system on the basis of work-oriented ideology. This earlier objection to an intellectual elite, isolated from the society their expertise was supposed to provide for, achieved national recognition in the context of mass growth. Because of this, both elementary and secondary school enrollments reached their highest levels in the time between 1968-1976. In addition to mass growth, the content and quality of education were standardized.²² These two goals also applied to the tertiary education level, where teaching and study plans were cut in half. The previous goal of trying to pursue an internationalized or Westernized education was abandoned and replaced with a more technical education to fit China's current economic needs.²³

Chairman Mao's strategy wreaked massive damage on higher education. Although most primary schools continued to operate normally, the majority of secondary and tertiary level academic institutions were shut down completely from 1966-1968 and almost all tertiary level institutions did not reopen until 1972. The time between 1966-1968 was the

²¹ Chung Shih, *Higher Education in Communist China* (Hong Kong: 1953).

²² Course content was simplified, and political studies took precedence over professional course work. In both primary and secondary (middle) schools, education had been shortened from six to five years and in college the length had been cut down from four or five years to three and a half. Textbooks used during the Cultural Revolution were entirely rewritten in accordance to the new political doctrine in place.

²³ Chu, Don-chean. *Chairman Mao: Education of the Proletariat*. New York Philosophical Library. 1980.

peak of academic disruption in China. From 1968-1969, primary schools and junior high schools started to reopen.²⁴ Those who would have completed primary school between 1966-1968 were allowed to attend junior high school and children between ages 7 and 9 could be in primary school. Although schools reopened, teachers were not allowed to implement standard course materials. Rather, students were required to go to factories and the countryside to perform manual labor. Senior high schools and universities were still suspended at this time. Most of these students were sent to the countryside to work as peasants or to work in factories.²⁵

Senior high schools began recruiting students in 1972 – those who missed senior high school altogether were not allowed to return to high school to receive a degree. Farm and factory work still took priority in the curricula, however some aspects of the old curricula were being added back into schools. No recruitment or teaching of any standard or level was carried out for university level education from 1966-1971. University students were assigned jobs as schoolteachers, army recruits, or factory workers.²⁶

The new enrollment policy, instituted in 1972, downgraded academic requirements and emphasized political qualifications. Whereas before the Cultural Revolution students were enrolled based on academic qualifications, students were now recruited for their ideological consciousness and correct political attitudes. “Education,” explains Mao, “must serve politics.”²⁷ In order to assure China’s institutions of higher education were serving

²⁴ Kan, David. Ed. diss. *The Impact of the Cultural Revolution on Chinese Higher Education*, 1970, Los Angeles: UCLA.

²⁵ Orleans, Leo A. *Professional Manpower and Education in Communist China*. Washington: US Government Print Office, 1961.

²⁶ Goldman, Merle. *China’s Intellectuals: Advise and Dissent*. Cambridge: Harvard University Press, 1981.

²⁷ Mao Zedong. “Have Firm Faith in the Majority.” October 1957. *Selected Works of Mao Tse-tung*. Peking: Foreign Language Press, 1988. Vol. V.

the CCP's political needs, strict political influence was imposed on the universities. Along with appointing Communist Party cadres to high ranking administrative positions in the universities, political ideology dominated the higher education curriculum. Textbooks used during the Cultural Revolution were entirely rewritten in accordance to the new political doctrine in place. The students and faculty members were required to visit the factories and communes to learn from the laboring class and peasants.²⁸

After the death of Chairman Mao in September of 1976, a reversal of policies in higher education took place, starting with the reintroductions of the key university system and nationally unified entrance exams. The new strategy was to recognize advanced international standards, based on the idea that science and technology are the fundamental reasons for Western economic superiority. Thus, the education system was again redesigned to obtain the talents and skills that would help China achieve its new goal. Human and material resources were placed back into tertiary academic institutions and the system was restructured to reinforce social divisions of labor.²⁹

Figure 1 below displays a timeline of the Cultural Revolution and the interrupted urban education cohort, divided into level of education affected. In conjunction with the background given, the timeline breaks down what birth years can be associated with the level of education affected. People who were born in China between 1947 and 1961 had some level of education affected by the Cultural Revolution. Those people are defined as the “interrupted education cohort” or “IE Cohort.” This group of people experienced the

²⁸ Grieder, Jerome. *Intellectuals and the State in Modern China: A Narrative History*. New York: Free Press, 1981.

²⁹ Ibid.

height of academic destruction brought on by the Cultural Revolution, and therefore are those likely suffered subsequent earnings losses.

Timeline of Urban Academic Interruption During the Cultural Revolution

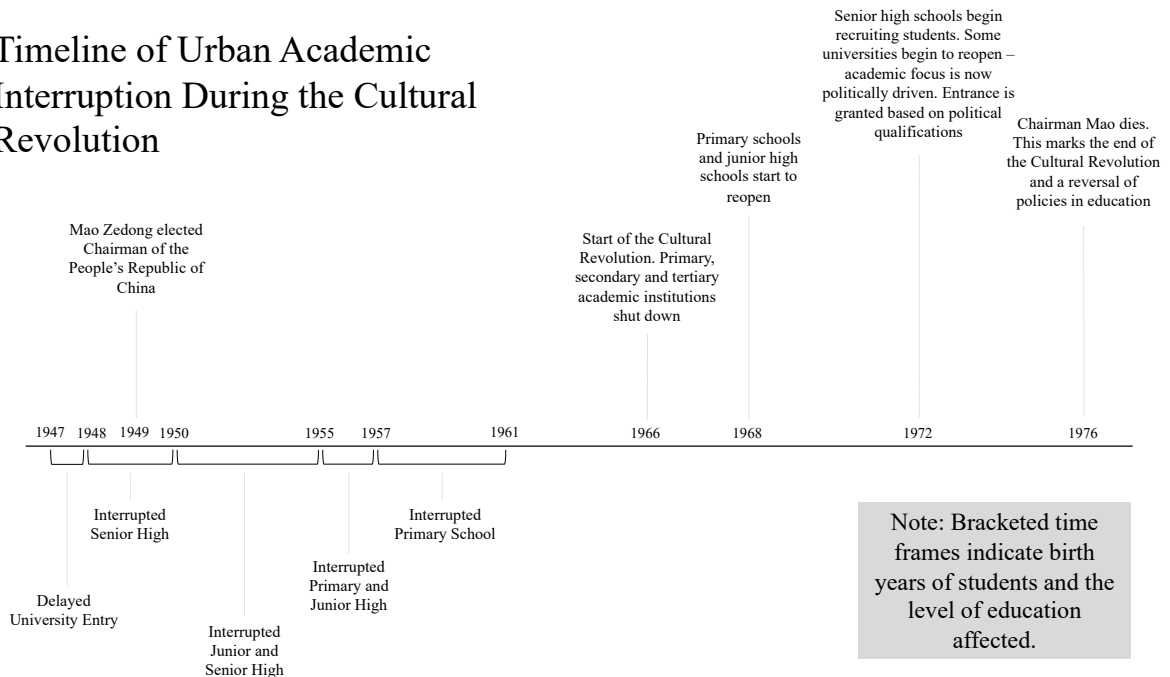


Figure 1: Timeline of Urban Academic Interruption During the Cultural Revolution.

Data and Methodology

The data set used for this thesis is the China Household Income Project (CHIP) survey data set from 2002. The sample includes individuals born between 1915 and 1995 and aged 7 to 87 at the survey year. Before performing any analysis, the data set required a close look into the attachment of birth year to the likelihood of an interrupted education. For the purpose of looking into the effect of an interrupted education on income, two cohorts of people had to be made: the interrupted education cohort (those born between 1947 and 1961) and one that includes people born after the Cultural Revolution. Those born in between 1945 and 1946 would have been either about to begin or already enrolled

in college at the start of the revolution.³⁰ Those born in 1962 and after would have started primary school during the Cultural Revolution when enrollment started back up again. Those in the dataset who were too young to report an income (ages 7 to 16) were generated as “missing” in the dataset so as not to skew the results. Thus, those born between the years of 1947 and 1961 would have missed education at some level, be it tertiary or primary. Income is the independent variable and years of education is the dependent variable.

I used the urban data set provided for reasons including the fact that the urban areas in China during the Cultural Revolution experienced similar economic, political, and academic shocks. Additionally, large-scale academic interruption did not occur in the countryside and therefore does not have a comparable social landscape to that of the urban dataset. Official documentation of school closures in the countryside has not been found and thus, it is logical to assume that the rural areas suffered a much smaller disruption than the urban education system.³¹ Table 1 below shows the highest level of education obtained by those in the non-IE cohort, the IE cohort, and the entire survey dataset. The statistics indicate that, on average, more people obtained higher levels of education that were in the non-IE cohort than those in the IE cohort. The non-IE cohort is quite a bit larger than the IE cohort, though this would make sense since the IE cohort is limited to a specific range of birth years.

³⁰ Pepper, Suzanne. *Radicalism and Education Reform in 20th Century China: The Search for an Ideal Developmental Model* London: Cambridge University 1996.

³¹ Hayhoe, Ruth. Ed. *Contemporary Chinese Education*. London: Croom Helm Ltd., 1984.

<i>Educational Level</i>	<i>Non-IE Cohort</i>	<i>IE Cohort</i>	<i>Total Dataset</i>
<i>Missing</i>	55	0	57
<i>Never Schooled</i>	21	15	160
<i>Classes for Eliminating Illiteracy</i>	8	12	82
<i>Elementary School</i>	211	305	1,095
<i>Junior Middle School</i>	1,784	1,606	4,244
<i>Senior Middle School</i>	2,646	782	3,835
<i>Technical Secondary School</i>	975	466	1,817
<i>Junior College</i>	1,878	526	2,662
<i>College/University</i>	810	151	1,517
<i>Graduate</i>	61	11	76
<i>Total</i>	8,449	3,874	15,185

Table 1: Highest Level of Education Received, divided between Non-IE Cohort, IE Cohort, and the total dataset. “Missing” indicates that an educational level was never recorded. Note that the total numbers include those who were counted as “missing” in the analysis (i.e. those who are too young to report yearly incomes and those who are retired and out of work and did not fit the criteria of either cohort) – they account for 2,862 values in the data set.

Table 2 below presents summary statistics, again split into non-IE cohort, IE cohort, and total dataset. The non-IE cohort has slightly more females than males whereas the IE cohort has slightly more males than females. The sample was sufficiently large and balanced for this study. It is important to note that the “Total Dataset” column in both tables represents the aggregate people included in the survey data. A total of 2,857 survey participants were not included in the analysis as their birth year or income criteria did not meet the requirements to be in either cohort (i.e. too young or too old). The two cohorts sum to 12,328 data points, and the total dataset amounts to 15,185 survey points.

	<i>Non-IE Cohort</i>	<i>IE Cohort</i>	<i>Total Dataset</i>
<i>Age (mean)</i>	35.46 (8.21)	37.81 (2.51)	44.78 (13.35)
<i>Gender (Male)</i>	4,093	2,007	7,701
<i>Gender (Female)</i>	4,356	1,872	7,484
<i>Years of Education (mean)</i>	12.34 (3.21)	9.41 (3.01)	10.54 (3.52)
<i>Income (mean)</i>	10,410.18 (8741.01)	8,517.43 (6452.33)	10,679.42 (8415.4)
<i>Total Number of Observations</i>	8,449	3,879	15,185

Table 2: Summary Statistics. Again, the total numbers include those who were counted as “missing” in the analysis – refer to table 1. Values in parentheses indicate standard deviation.

Results

The analytical purpose of this thesis is to investigate the effect of interrupted education, caused by the Cultural Revolution, on income. In this instance, the outcome is earnings and the treatment is the cohort. In order to test the hypothesis that an interrupted education would lead to lower incomes, a Mincer equation was used. For the purpose of this thesis, a Mincer equation provided estimates of the average monetary returns of one additional year of education. This information will importantly tell us whether or not the interrupted education system due to the Cultural Revolution had an effect on income. The set-up of the Mincer regression is as follows:

$$\ln(\text{income}) = \beta_{age} + \beta_{age^2} + \beta_{partymem} + \beta_{yearsedu} + \beta_{gender} + \beta_{marstat}$$

Where “partymem” is party member; “yearsedu” is total years of education; and “marstat” is marital status. The log of income was taken so as to represent the data in a percentage. A robust regression of the above equation was taken for both the non-IE cohort and the IE cohort in addition to an analysis of both males and females separately.

The regression results in Table 2 show that the IE Cohort's returns on income are lower than the non-IE Cohort's returns on income in terms of years of education. In other words, for every additional year of education received, the non-IE Cohort is expected to earn, on average, 1.85 percent more than those in the IE Cohort. As indicated in the table, both coefficients are statistically significant at the 1 percent level. This result implies that there is some relationship between years of education and income, and that something about those in the IE Cohort experienced something differently than the non-IE Cohort.

VARIABLES	(1) Non-IE Cohort	(2) IE Cohort
Age	0.147*** (0.0153)	0.666*** (0.199)
Age^2	-0.00171*** (0.000212)	-0.00649*** (0.00196)
Years of Education	0.0911*** (0.00346)	0.0726*** (0.00399)
Party Member	0.149*** (0.0183)	0.210*** (0.0234)
Gender	-0.237*** (0.0174)	-0.249*** (0.0225)
Marital Status	0.0559* (0.0333)	0.0185 (0.0364)
Province	-0.00270*** (0.000593)	-0.00445*** (0.000699)
Constant	5.278*** (0.238)	-8.260 (5.056)
Observations	8,449	3,879
R-squared	0.266	0.184

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 2: The Effect of Interrupted Education on Income

Table 3 indicates similar regression results, though these regressions were split based on gender. For both men and women, the IE Cohort's returns on income are lower than the non-IE Cohort's returns on income in terms of year of education. For men, those

born in the non-IE Cohort earn with every additional year of education, on average, 1.57 percent more than the IE Cohort. Women saw an even bigger difference, with women in the non-IE Cohort making on average 1.95 percent more with every additional year of education. Again, the years of education coefficients are statistically significant at the 1 percent level. This further analysis only emphasizes the implication that those in the IE cohort experienced something different in terms of education than those in the non-IE cohort, and it affected their earnings thereafter. It can be inferred that the interrupted education caused by the Cultural Revolution had an impact on earnings.

VARIABLES	(1) Non-IE Cohort (Male)	(2) IE Cohort (Male)	(3) Non-IE Cohort (Female)	(4) IE Cohort (Female)
Age	0.164*** (0.0220)	0.769*** (0.275)	0.133*** (0.0213)	0.550* (0.286)
Age^2	-0.00192*** (0.000302)	-0.00756*** (0.00271)	-0.00153*** (0.000299)	-0.00526* (0.00281)
Years of Education	0.0780*** (0.00437)	0.0623*** (0.00519)	0.104*** (0.00534)	0.0845*** (0.00604)
Party Member	0.111*** (0.0233)	0.209*** (0.0316)	0.198*** (0.0289)	0.211*** (0.0351)
Marital Status	0.0391 (0.0459)	-0.172** (0.0763)	0.0721 (0.0482)	0.0541 (0.0403)
Province	-0.00455*** (0.000741)	-0.00578*** (0.000876)	-0.000807 (0.000923)	-0.00288** (0.00112)
Constant	4.967*** (0.343)	-10.40 (6.977)	4.800*** (0.321)	-6.279 (7.286)
Observations	4,093	2,007	4,356	1,872
R-squared	0.293	0.138	0.217	0.161

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3: The Effect of Interrupted Education on Income. Individual cohorts have been divided by gender.

Conclusion

For the past century, China's education system has remained in a perpetual search for an ideal reform model while society as a whole is seemingly unreformed after the collapse of the old order. In education particularly, both the achievements and the damaging reforms of China's modern development seem to have stemmed from this search for an ideal solution. The Cultural Revolution abolished the college entrance examination system, interrupted education for an entire generation worth of people, and reduced subsequent school attainment. The educational reform represented radical academic reform tied to social revolution. The masses were designated the beneficiaries and the intellectual elite were the targets.

This political and revolutionary event allows for the evaluation of the impact of an interrupted education on earnings. The main results of this study indicate that the interrupted education spurred by the events of the Cultural Revolution led to a difference in returns on income. That is, those whose education was not affected by the Cultural Revolution experienced higher incomes than those who would have either started, continued, or finished school during the Cultural Revolution.

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Xiong, min-an. *Zhongguo Gaodeng Jiaoyu Shi* (A History of Chinese Higher Education). Chongqing: Chongqing Chubanshe, 1988.