

Dropout in Rural China's Secondary Schools: A Mixed-Methods Analysis

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Problem

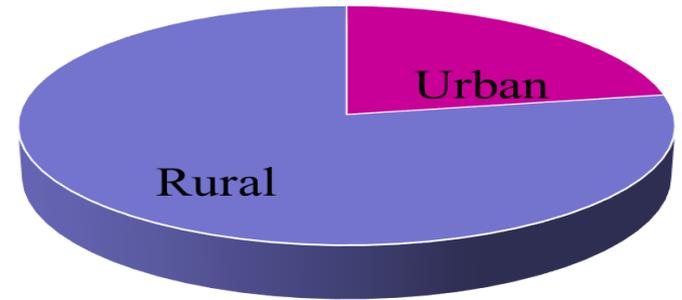
As China's economy transitions from low-wage, labor-intensive manufacturing to high-wage, higher value-added industries, their demand for skilled labor will increase significantly (Heckman et al., 2012; Liu et al., 2009)

This means that students likely need to be educated at the high school level or higher to compete in China's coming economy (Zhang et al., 2012).

In China (as in other developing countries) today, students from disadvantaged (e.g. poor, rural) backgrounds are receiving much less upper secondary education than their urban peers (Wang, Liu, Rozelle, 2013; Duflo, Kremer, 2003; Reddy, Sinha, 2010; Loyalka et al., 2011).

A Core Driver of Future Rural Development Is Educated Children

- Roughly 172 million children (0-14) grow up in China's rural areas (NBS, 2010)
- They are tomorrow's future workforce, and make up 78% of all school-aged children in China



Data source: 2010 population census.
*0-14 children.

The education of rural children will decide the future development for the entire country.

Student Dropout in Rural China

Happens in both lower and upper secondary education:

- High dropout from junior high school
- Low matriculation into senior high school
- High dropout from senior high school

(Mo et al., 2013; Yi et al., 2013a; Wang et al., 2011; Yao et al., 2013)

Mixed Methods Analysis

Mixed Methods Analysis

- The breadth of statistical research
- The depth of interview-based case studies.

Objectives

- Summarize rates of dropout at each level of secondary education
- Identify the correlates of dropout
- Explore the reasons for dropout

Quantitative Data

- 7 years, 8 studies, 4 provinces
 - 24,931 students
 - 262 junior high schools
 - 46 academic high schools
 - 107 vocational high schools



Qualitative Data

52 semi-structured interviews

- 18 dropouts
- 11 vocational high school (VET) students
- 20 academic high school (AHS) students
- 3 students repeating their final year of junior high



Secondary Schooling in China

Free compulsory education:

Grades 1-9

Academic high school:

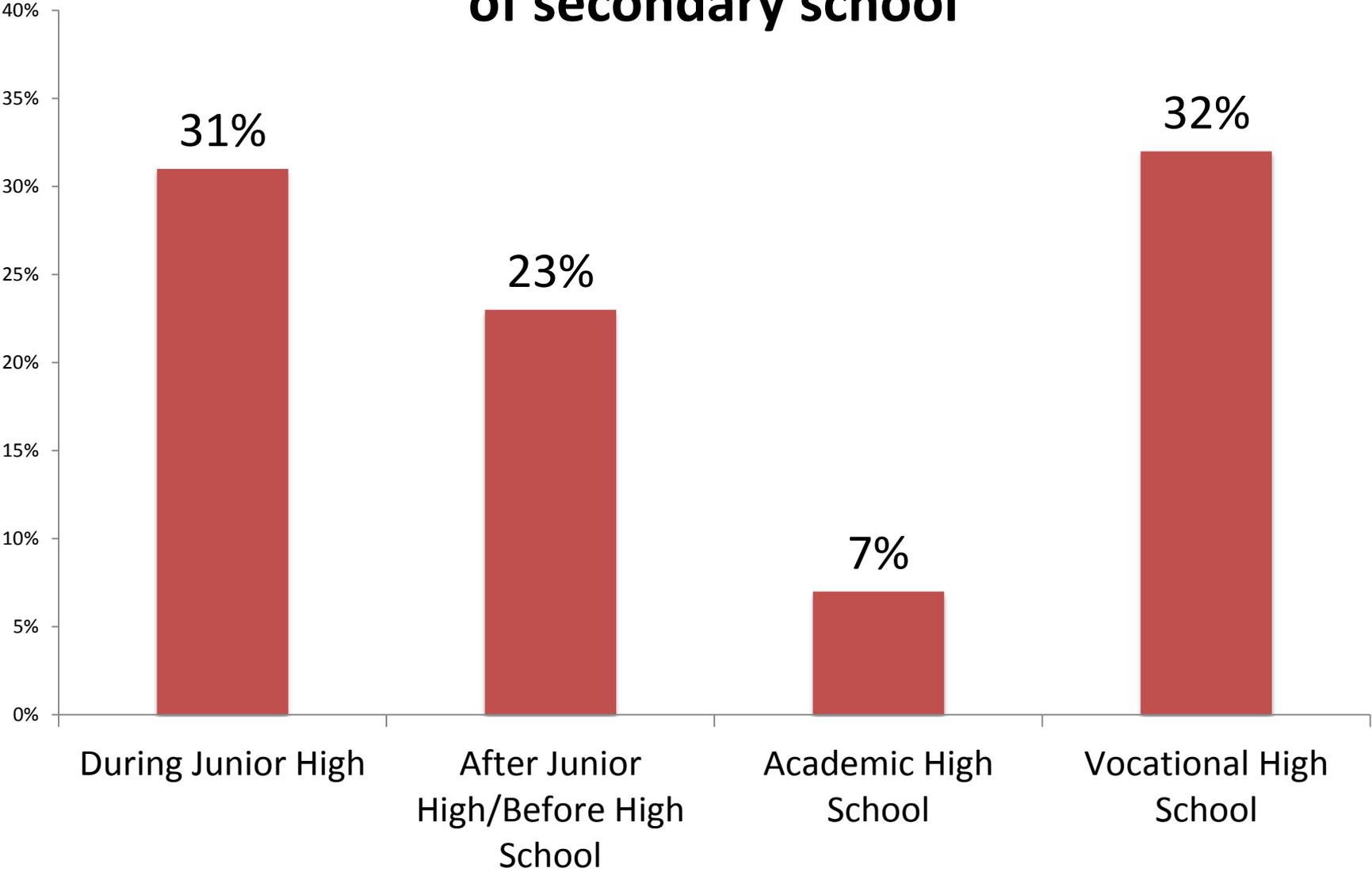
competitive and expensive

Vocational high school (VET):

less competitive and less expensive

Quantitative Results

Dropout rates are high throughout all stages of secondary school



Cumulative dropout: 63%

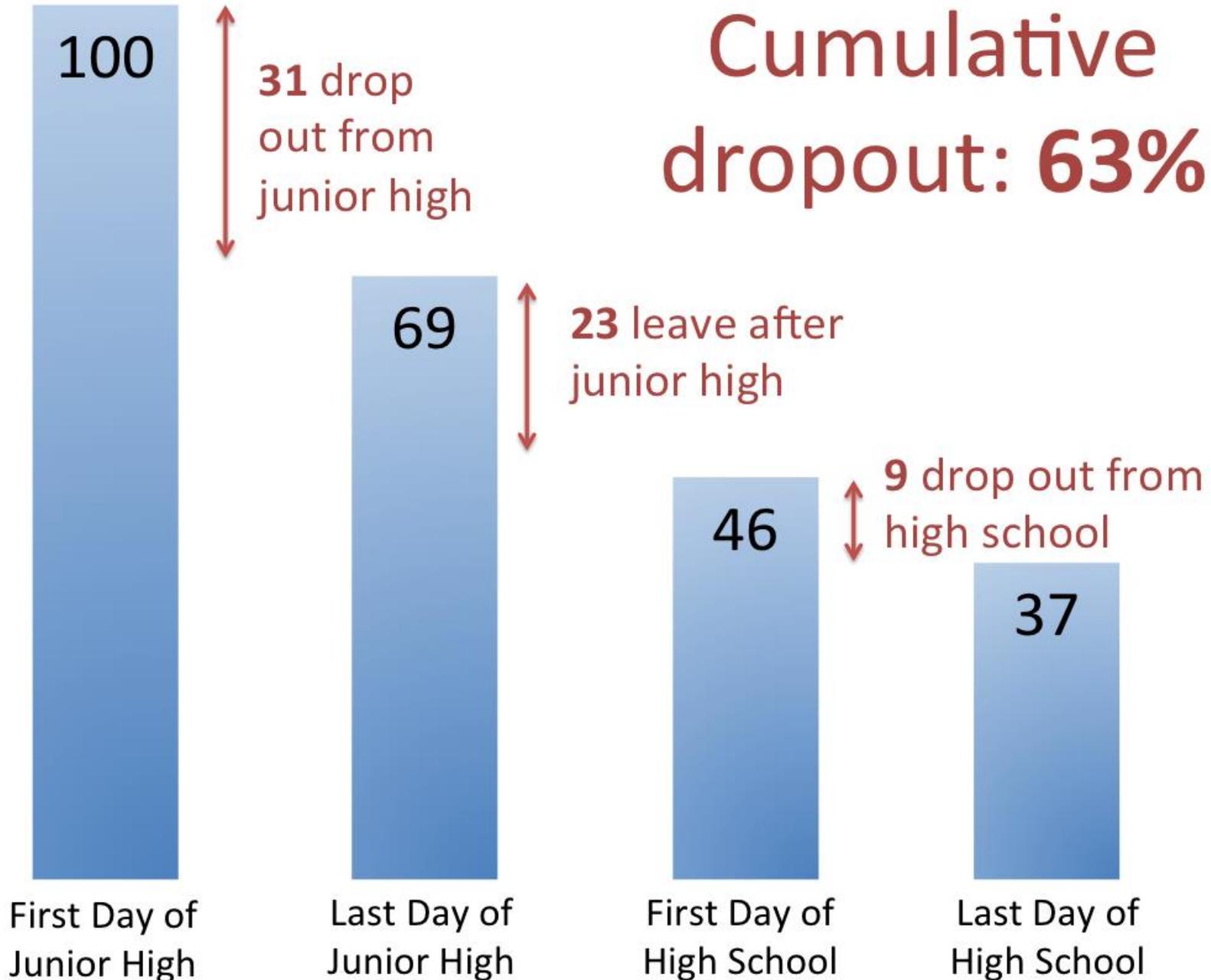


TABLE 3 Correlates of dropout

	School level surveyed	Number of observations	Correlates: who is more likely to drop out?
Mo et al. (2013)	Junior high school	1507	Low academic performance, boys, older, & poverty
Yi et al. (2012)	Junior high school	7811	Low academic performance, older, poverty, has siblings, less educated father, poor parental health, & migrated parent
Wang et al. (2014)	Junior high school	4840	Low academic performance, boys, older, poverty, boarding status, has siblings, less educated father, & poor mental health
Yao et al. (2013)	Vocational high school	7172	Low academic performance, less educated mother, & migrated mother

Summary: Who drops out?

- Lower academic achievement
- Boys
- Older
- More disadvantaged family backgrounds
- Mental health issues

Simple framework to understand dropout

1. Rational Choice

1. Impulsive Choice

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Students consider the costs and benefits of staying in school and conclude that they will be better off in the long run if they drop out.

2. Impulsive Choice

Simple framework to understand dropout

1. Rational Choice

Students consider the costs and benefits of staying in school and conclude that they will be better off in the long run if they drop out.

2. Impulsive Choice

Even if the long-term benefits of remaining in school outweigh the costs, students face immediate psychological stress that leads them to impulsively drop out of school.

1. Rational Choice

1. Rational Choice

- A. the cost of going to school (tuition + fees + opportunity cost), given the perceived benefit, is too high.
- B. the capabilities of students are so low they expect to derive little benefit
- C. the quality of school facilities, teachers and/or curriculum is so low that students have no incentive to attend

A. Cost is a major concern

“I said, if I go to high school, will Dad be able to support me? Because there’s no subsidy and you have to buy your own textbooks. I said, **if I stay in school after one year all our family’s money will be used up.** Then no one said anything else. And in the end I didn’t go to high school.”
(dropout, 3106346)

The **direct costs** associated with going to three years of academic high school in China amount to 1,659 USD—roughly 10 to 15 times the per capita net income in poor, rural areas.

The **opportunity costs** of secondary school are also high: *monthly* earnings of the typical unskilled worker are comparable to the *annual* per capita income in poor rural areas (Huang et al., 2011).

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But... costs are not the only concern

As we heard in the first presentation in this session, financial incentives for staying in school were not effective in reducing school dropout.

Cost is only a ***critical*** deterrent to going to high school for a minority of kids

B. Student capabilities determine expected benefit



“My parents had to work very hard to support my schooling. Since my grades were bad going to school was just a **waste of money.**” (dropout, 3328121)

“When I got a scholarship it didn’t change anything. I thought, I’m still not going to be able to test into academic high school. No way. My grades were really bad.”
(dropout, 1314308)



“Some of my friends dropped out of school and some are still in high school. **It was pretty much decided by their grades.** If their grades were bad they left.” (AHS, 1327232)

B. **Capabilities**: What does quantitative analysis show?

- Internationally, poor academic performance is one of the strongest and most consistent predictors of dropout—especially in competitive educational systems like those in China (Battin-Pearson et al., 2000; Rumberger, 1987).

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BUT, in vocational high schools...

- Costs are not a major concern
 - Tuition rates are lower and heavily subsidized.
- Capabilities are not a major concern
 - There are no academic requirements for admission

So why are 32% of kids still dropping out of VET?

C. For VET, school quality is a major concern



“I thought I might go to the local vocational school but I don’t like that school. For lots of reasons. I think they would cheat me. **Everyone says those schools are a scam.**” (dropout, 1305146)

“I really regret going to vocational school. It’s like they’re looking for ways to cheat us. And classes here are bad. The teacher’s up there talking but no one understands anything. A lot of people sleep through class. And everyday about half of the kids don’t even come to class. **Everyone regrets coming here.**” (VET, 1103420)

Loyalka et al. (2013):

Attending vocational high school leads to deteriorating academic skills and does not improve career-specific skills

Summary: 1. Rational Choice

- A. Cost is a major concern—but not the only concern
- B. Student capabilities determine expected benefit
- C. For VET, school quality is a major concern

2. Impulsive Choice

2. Impulsive Choice

Students regret leaving school shortly after they have made that choice... and advise current students to stay in school.

“From the first day I left school I immediately regretted it.” (dropout, 1305335)



2. Impulsive Choice

- A. Mental stress in school
- B. Encouragement to drop out for short-run reasons
- C. Distant parents provide little guidance in making these decisions.

A. Mental Stress

Wang et al. (2014) :

74% of junior high students in rural Shaanxi Province were clinically at risk for mental health issues, a rate 12 times higher than that found among urban students.

Correlates: Who drops out?

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A. Source of **Mental Stress**:

Poor Relationships with Teachers

“I never liked school. I didn’t like my teachers. There was one who I really hated. **She would hit people whenever you made any kind of mistake...** The biggest reason I wanted to leave school was just that. That the teachers hit me.” (dropout, 1302134)

A. Source of **Mental Stress**:

Poor grades make these relationships even worse.

“The teachers would always **take special care of the students with good grades.** They wouldn’t even yell at those kids. But then they would hit all the kids with bad grades.” (dropout, 3106347)



A. Source of **Mental Stress**: Poor Relationships with Classmates

“My relationships with my classmates were very bad. So that made me not like school. I can’t tell you what they did. But it was so awful I just had to leave. From the first day I left school I immediately regretted it. But **even if I would regret it I knew I had to leave, I had get away from those girls.**” (dropout, 1305335)

A. Source of **Mental Stress**: Poor Relationships with Classmates

Wang et al., 2014:

Fully **37%** of junior high school students reported being **frequently bullied by their classmates.**

A. **Mental Stress** makes school a hostile environment

“When it was almost time to take the *zhongkao* my friends and I talked about how we were finally about to graduate. Soon we wouldn't have **to sit in school like prisoners sitting in a jail.**”
(dropout, 3106346)



B. Encouragement to drop out

“I thought that getting a job might be more relaxed than staying in school... I saw that other people had left school to get jobs. I saw that after they came home **they were all having fun and so happy**. I started to think that maybe working would be less tiresome than school. **Working would be more free.**” (dropout, 3328121)

B. Encouragement to drop out

“Back in junior high we would all say that in the real world you could have money to spend and more freedom. That’s what we would hear from other kids who had already dropped out. They said working was really great... **At that time I was curious.**”
(dropout, 3305252)



C. Distant parents

- “Left-behind” children
- Boarding students who go home only on weekends

Distant parents

“My dad really cares about my studies but my mom doesn’t at all... Before when I would go home my dad would always supervise me doing my homework. **But then after he migrated to work far away I pretty much never did any homework.**
(dropout, 3510301)

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Summary: 2. Impulsive Choice

- A. Students experience high levels of mental stress in school, making school a hostile environment
- B. Students receive encouragement to drop out from friends for short-term considerations
- C. Distant parents provide little guidance in making these important decisions

Conclusion

- Dropout rates are HIGH
 - If 100 students enter junior high, only 37 of them will graduate from high school.
- Students choose to drop out:
 - Rationally: Due to cost, capability and quality concerns
 - Impulsively: Due to psychological stress and lack of mentoring

Policy Implications

Intertwining cost and capability concerns



High school should be made free and compulsory for all students.

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High school should be made free and compulsory for all students.

Poor school quality (especially VET)



The quality of rural schools (and VET in particular) needs to be improved.

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Intertwining cost and capability concerns



High school should be made free and compulsory for all students.

Poor school quality (especially VET)



The quality of rural schools (and VET in particular) needs to be improved.

Hostile schooling environment with little mentorship



Rural students need more support in the classroom and at home

Thank you!



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