Appendix A: Three cases of human capital investment and ITP

Case 1 Escaping from the ITP

Xiaoqing, male, was born in 1999 in a village in Zhaohua county, Guangyuan municipality, Sichuan province. Six members are in his family, including his grandfather, grandmother, mother, himself and his mother's boyfriend (his father died in 2016). His mother graduated from junior high school and his father graduated from primary school. From 2007 to 2011, his father worked as a part-time worker on a construction site. In 2012, his father began to do decoration work, laying tile floors, and had an annual income of 30,000 yuan. His mother has been working as a temporary worker in a meat factory. Her annual income was 7,000 yuan in 2007 and less than 20,000 yuan in 2018. Both his grandfather and grandmother are over 60 years old. His grandfather has been working as a construction worker and his annual income was 3,000 yuan in 2018. His grandmother has always worked as a farmer.

Although the household income is limited, it is relatively stable. His parents sent Xiaoqing to preschool and kindergarten. After finishing compulsory education in 2014, Xiaoqing went to a vocational and technical school because his score of the entrance exam for senior high school qualified him for only that track. In 2016, he continued to study to go to college while majoring in automobile beauty. During this period, the annual tuition and living expenses were approximately 25,000 yuan. Notably, the main labor force in the family—his father—died, which increased the burden for his situation. He wanted to drop out of school and be responsible for his family, but his mother insisted that he finished school. In the interview, his mother said, “Although my family has less income and more expenditure than before, we should try our best to let the Xiaoqing complete more education. We do not want Xiaoqing to be illiterate and that to rely on coolies for basic living.”

In June 2018, Xiaoqing completed college and began his internship at an automobile 4S store in Guangyuan. He will work in the 4S store after graduation in 2019, with an expected monthly income of 5,000 yuan. The company also provided on-the-job training, welfare, medical insurance, and pension. Facing a liquidity constraint, Xiaoqing's mother invested in Xiaoqing’s human capital to help him achieve a higher educational level. Because of his mother's persistence, Xiaoqing has good employment, earns more money than his parents, and has led his family out of
poverty.

**Case 2 Caught in the ITP**

Xiaojia, female, was born in 2000 in a village in Jize county, Hebei province. Her family comprises five members: her father, mother, herself, and her two younger brothers. Her father graduated from junior high school and has a welder certificate. Her mother graduated from primary school. Her father performed odd jobs on construction sites when she was young and earned approximately 3,000 yuan per year. Then, her father worked as a welder, and his income increased to 7,000 yuan per year. Her father's income increased significantly after he earned the welder certificate. He earned 30,000 yuan in 2016 and 35,000 yuan in 2018, and he worked 20 days per month and 10 hours per day. Her mother worked as a welder for a private company and earned 24,000 yuan per year in 2018. She worked 20 days per month and 11 hours per day.

Xiaojia did not attend preschool or kindergarten and was enrolled in primary school at 6 years old. Her two younger brothers were 3 and 5 years younger than her, respectively, and had been enrolled in kindergarten. When Xiaojia started elementary school, her younger brother started kindergarten, and when she started second grade, her youngest brother started kindergarten. The expenditure on education in her family increased markedly. Xiaojia’s middle school is a public high school in a township that costs 2,300 yuan per year, and the education quality is unsatisfactory. When Xiaojia was in junior high school, her parents used their social capital to send her two younger brothers to a local private primary school, which has a higher quality of education at a cost of 6,000 yuan per year. After graduating from junior high school in early 2016, Xiaojia worked as a server in a restaurant and had no opportunity to participate in skills training. In 2018, in her third year as a server, Xiaojia earned 18,000 yuan while working 30 days per month and 11 hours per day. Although her employer pays for her accommodation and meals, the employer offers no on-the-job training, welfare, insurance, or pension. Xiaojia's hourly wage less than that of her parents.

When we asked her parents why Xiaojia not allowed to continue her education, they said, “She was unwilling to go on to school after graduation from junior high school.” When we asked the same question to Xiaojia, she said, “There are two main reasons. First, I have lost my interest in learning in primary and junior high schools due to the poor quality of education. Second, because I am a girl and the first child in
my family, my parents could not afford for my younger brothers to go to a better school if I remained in school.” Xiaojia expressed regret regarding leaving school but also felt helpless. She only hopes that her younger brothers will study hard and not have to perform the simple manual work that appears to be her future.

*Case 3 Intergenerational earning persistence*

[X#152201109] Xiaoyuan, female, was born in 2000 in a village in Guannan county, Jiangsu province. The several members in her family include her father, mother, grandfather, grandmother, herself, and her younger brother and sister. Her parents graduated from junior high school. Her father was a worker in a light bulb factory at first, and then he became a cook. Her mother was successively a worker in a light bulb factory, a salesperson in a supermarket, and a cook in a restaurant. Her grandparents have always been farmers. Her parents both work in local prefecture-level cities and have considerable incomes. In 2016, together, they earned 78,000 yuan. However, for a family with three children in school and two elders aged above 65 years, they felt some pressure.

Xiaoyuan went to preschool and kindergarten; thus, she started elementary school in first grade at age 8 years, a little later than her peers. Although China offers tuition-free compulsory education, her parents still invested a lot in her education. For example, in the third grade of primary school, they spent more than 1,500 yuan to buy her learning materials. When Xiaoyuan entered junior high school (seventh grade) in 2014, her parents invested more than 6000 yuan in her education to buy books and materials. When she was approaching the high school entrance examination, they spent more on her education. After graduating from junior high school, Xiaoyuan did not enter ordinary high school. Instead, she had planned to remain in school to retake the high school entrance exam; however, she changed her plans because her grandparents were old and in bad physical health and her younger brother and sister were in school. After graduating from junior high school, her parents supported her skills training in computer technology for 12 months. Next, she went to Qingdao to work as a cashier in a shopping mall. Her monthly wage was 4000 yuan in 2018. She received no bonus, benefits, or promotion space but did receive medical insurance and pension.

Regarding her current situation, Xiaoyuan reported that her opportunity to complete computer technology training benefitted her career. Her income is slightly
higher than that of her parents, and the work she performs is physically less difficult than that of her parents. However, she regrets that she did not insist on going to high school and college. She said, “At present, training in a technology after graduating from junior high school can result in a good wage. But in the future, the labor only graduating from junior high school will definitely be eliminated.’’