

## Article

# Intergenerational Transmission of Occupation: A Qualitative Inquiry into Frontline Factory Workers in China

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**Abstract:** The intergenerational transmission of an occupation between two generations of frontline workers in Chinese factories shows a copy–paste phenomenon, whereby a new generation of workers not only undertakes the same work as their parents but also remains at the same level of technical ability. This phenomenon runs contrary to the literature on the intergenerational transmission of occupations and is unsuitable for China’s national conditions. More importantly, it restricts the sustainable development of the manufacturing industry in China. This study used a grounded theory approach to interview 30 workers to identify and analyze the factors and influences that created this new generation. The results show that the workers’ drawing of comparisons between and within generations not only limits their technical skills but also affects subsequent generations of workers through the intergenerational transmission of occupation. We draw on our findings to discuss the reasons for and impacts of these comparisons and make suggestions for future research.

**Keywords:** intergenerational transmission; occupation; comparisons; Chinese frontline workers; factories; grounded theory

## 1. Introduction

It is common for the next generation to inherit their parents’ businesses or occupations, along with their social status and achievements. In a society with occupational equality, any family may have children engaged in similar or identical occupations as their parents [1]. However, in a society where there is occupational inequality, the phenomenon of intergenerational transmission usually occurs at the two extremes of society, in families that are either extremely wealthy or extremely poor [2,3]. The intergenerational transmission of occupations is highly dependent on society-specific factors. This was the motivation for our study to focus on China, as it is a high-power-distance society with unequal occupations [4].

Although frontline factory workers in China have average levels of income for the country, compare with other countries, Chinese worker has faced long working hours and a high intensity of work. Additionally, different with developed countries, frontline work is not respected or considered desirable in Chinese society. Interestingly, the new generation (born since the 1990s) of frontline workers in Chinese factories are usually descendants of frontline workers. As the new generation gradually enters the workplace to succeed the older generation as the core labor force in society, Chinese factories encounter worker replacement. Scholars have noted that demand in Chinese industry has gradually shifted away from manual toward technical labor. There is an increasingly serious shortage of technical

labor [5], and China's labor market has not shrunk significantly [6]. This indicates that the new generation of frontline workers has not significantly improved their technical skills compared to the previous generation of workers. From the perspective of intergenerational transmission, there appears to be a copy–paste phenomenon between these two generations. The new generation have taken up the same occupations as their parents and have the same low level of technical skills, a phenomenon that restricts the sustainable development of human resources in Chinese factories.

This merits critical inquiry, given that the phenomenon of a new generation of frontline workers inheriting their parents' occupations is unsuitable for China's national conditions. It may lead to theoretical and managerial issues, particularly because there appear to be differences in personality and work values between the generations. In Chinese society, the parent always try their best to leave good resources for the next generation in the hope that their descendants will achieve more than they achieved themselves [7]. This makes it unlikely that parents would actively encourage their children to work in factories, especially in undesirable frontline work. Furthermore, the personality characteristics of the new generation are such that they are eager to undertake challenging work with greater levels of autonomy [8,9]; even if parental influence makes them willing to accept factory work, it is expected that they will seek work at the high end of manufacturing, such as in technical and managerial positions. Given that the working hours in Chinese factories are long and the work is of a high intensity, frontline factory work may not meet the new generation's criteria for job selection. Therefore, this new generation of young Chinese people are unlikely to choose low-end, mechanistic and routine frontline factory jobs like their parents.

Past studies have indicated that a lack of education and training means that workers of different ages from given families encounter the same issues related to the jobs they are able to do [10,11]. However, few researchers have studied the intergenerational transmission of occupations, which is very important in the context of developing economies. The current literature does not include studies on how intergenerational transmission affects Chinese frontline workers, whether they are from middle-income groups or have less-desirable jobs. The theory of intergenerational transmission emphasizes high levels of similarity in beliefs [12], norms [13], values [14], attitudes and behaviors [15] between two generations. Past studies on intergenerational transmission have focused on violence, marriage, and occupation. These early studies also found a 35%–45% probability of parents' behaviors being passed on to the next generation [16]. It has also been found that children's education [17,18] and the work achievements of their parents [19,20] are the main factors that affect the career choices of future generations.

The focus of the present study is the intergenerational transmission of frontline work in China and the factors leading to such, which not only runs contrary to the theory of the intergenerational transmission of occupations but is also at odds with China's specific national conditions. To address this unexpected phenomenon, our study uses a grounded theory approach to critically analyze the new generation of frontline workers in Chinese factories and explore the mechanisms forming the new generation of workers.

This study addresses inconsistencies between theory and practice and seeks to make both practical and academic contributions. The findings of our study focused on Chinese workers and the Chinese factory environment will enrich the theory of intergenerational communication. As such, we seek to provide a point of reference for human resources managers who wish to attract a new generation of frontline workers to factories and to manage those workers effectively.

The paper is structured as follows. First, we review the relevant literature on Chinese frontline workers and present the methods used in the study. We then discuss our findings, before exploring their theoretical and practical implications, the limitations of the study, and avenues for future research.

## 2. Literature Review

### 2.1. Nature of Frontline Workers

Frontline workers are those working on the production line, the largest group in the factory, mostly engaged in repetitive mechanical tasks [21]. Due to the high work intensity and long working hours, frontline jobs are often disregarded by Chinese urban citizens, tending to instead attract those from poor areas in China, especially poor farmers. The frontline workers in China usually have connections with migrant workers, a unique group that emerged from the development of Chinese factories [22,23]. Despite living and working in cities, they are registered in rural areas [24], and with the development of China's manufacturing industry, they have changed from being farmers to being workers. Therefore, they have many attributes in common with Chinese farmers (a group synonymous with poverty and tradition) and display more traditional Chinese thinking than other groups [25]. Frontline workers are the largest group in Chinese society; because migrant workers of different ages have distinct characteristics, scholars generally divide them into first- and new-generation frontline workers.

The first generation of frontline workers are from poor rural areas [26], typically going to the city to work and improve their living conditions. In China's power society, they often live at the bottom of the scale in the cities. As they generally have low levels of education and lack basic vocational skills [27], they can only engage in simple manual labor. Under pressure to support their families and keen to earn a living, they are prepared to give up some of their rights and interests to accept harsh employment conditions and very low pay [28–30]. Due to the oversupply of frontline workers, employers are usually reluctant to provide work contracts or even purchase the appropriate insurance [31]. As a result, frontline workers often work in harsh environments without labor protection or the appropriate safety measures.

This first generation of frontline workers lives on the margins between urban and rural areas. The labor they engage in is non-agricultural, and their income is close to or even the same as that of urban residents [30]. However, institutional factors prevent them from integrating into urban society, and they do not have the same rights and status as urban citizens [29]. This first generation of frontline workers is characterized by the ability to endure hardship, work hard and diligently, and live frugally; in terms of personality, they are regarded as timid and fearful [26,32]. Twenty years ago, these characteristics made them highly suitable for meeting the labor needs of China's manufacturing industry in its early stages.

With work efficiency decreasing with age, the first generation of frontline workers gradually left the manufacturing industry, with the new generation of frontline workers becoming the core labor force in factories. To date, the new generation of frontline workers has been studied less extensively than the older generation, but it is clear that the former has some differentiating characteristics, including higher professional expectations, higher requirements for material and spiritual enjoyment, and lower endurance for work. They are also significantly different from the previous generation of migrant workers in terms of their concepts, values, standards, cultural qualities, legal knowledge, and even attitudes toward life [33,34]. This makes it even more surprising that there is no literature explaining why this new generation of frontline workers continues to engage in manufacturing work, remains in poverty, continues to have low levels of education, and has to work in factories in order to earn a living [24].

### 2.2. Sustainable Development of Human Resources in Factories

Machines cannot completely replace manual labor, and the sustainable development of a factory's human resources depends on its ability to continuously absorb young labor and maintain the orderly replacement of workers [35]. Worker replacement is mainly affected by physical conditions and occupational diseases. Workers play an important role in factory production, and there are strict requirements for their physical condition, including their physical strength, vision, and agility [36].

As they become significantly less efficient with age, they face unemployment and replacement with more-efficient younger workers.

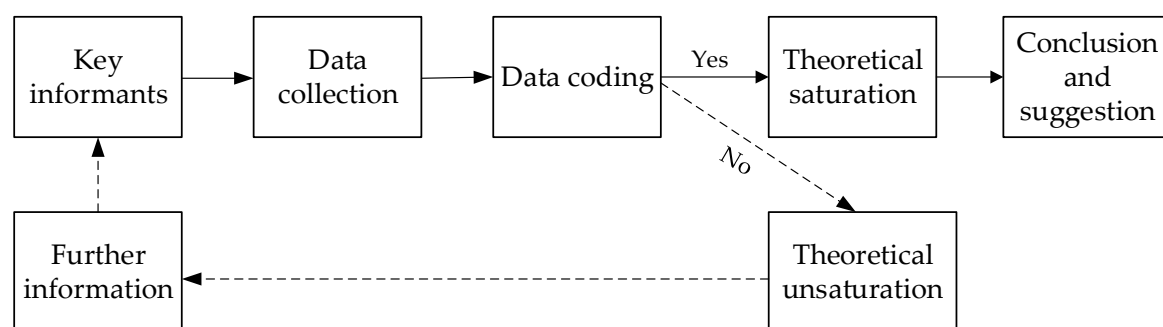
Worker replacement presents both opportunities and threats for a factory. The new generation bring a fresh work attitude; they are more creative than the previous generation, have more of their own ideas and views on work, and are more efficient because of their relative youth [37,38]. However, they are less prepared to work under harsh conditions. The empirical study shows that they have higher requirements than the previous generation in terms of the working environment, promotion, and salary [23,39]. Thus, although the new generation could prompt factories to improve their management and working conditions, less-profitable businesses, particularly small- and medium-sized enterprises (SMEs), may regard the replacement of workers as a threat to sustainable development.

The influence of technical workers on worker replacement is becoming more pronounced [40]. With the development of science and technology, the dependence of Chinese factories on production machinery has increased, and demand for manual labor is giving way to that for technical labor [41]. However, merely replacing manual labor is not enough to secure the sustainable development of factories. The current study indicates that there is a shortage of technical workers in most Chinese factories, a shortage that scholars have tried to explain in terms of a lack of vocational education and the rapid development of factories in China [42,43]. Although the Chinese government has increased its investment in education year on year, this has not enabled the new generation of workers to become more technically capable than the previous [44]. The shortage of technical workers in Chinese factories has not been alleviated, and its impact on worker replacement is becoming ever more serious.

### 3. Methodology

#### 3.1. Research Design

This study investigated, in detail, the nature of the new generation of workers and how they are formed, using a grounded theory approach to better understand the phenomenon and generate theory through the experience and perceptions of the participants themselves. The method used was that of Strauss and Corbin [45]. Data were first collected through in-depth interviews and then summarized, refined, and compared. Finally, theoretical sampling was used to achieve theoretical saturation (Figure 1).



**Figure 1.** The grounded theory approaches.

The grounded theory approach has been used widely in qualitative studies. It allows the systematic collection and analysis of empirical data and was appropriate for the present study for the following reasons. (1) The purpose of this study was to investigate how the new generation of workers in Chinese factories has been formed and their nature, which had not yet been studied in depth. Hence, it would not have been appropriate to apply other methodologies and techniques based on hypotheses and predictions. (2) The nature of different generations of workers and how they are formed are complex and involve multiple factors. In comparison to other methodological approaches, the grounded theory approach is able to extract and portray the work and life experiences of Chinese factory workers.

### 3.2. Data Collection

#### 3.2.1. Sample Selection

This study selected two SME factories in Shenzhen city, China, for three reasons. First, SME factories account for 95% of the total number of factories in China and are therefore more representative than large factories [46]. Shenzhen is one of China's manufacturing centers, with a large number of SME factories. Second, Sino-Japanese joint venture factories and Chinese-owned factories are the two most common types of enterprises in Shenzhen city, so we chose one of each. Third, both of the factories we chose have production and processing capabilities and complete production lines running from raw materials to finished products. More importantly, as they have been in operation in China for 15 years, they have a suitable range of workers in terms of age composition and sources, and they face the challenges of worker replacement every year.

We employed Thomas' analysis of qualitative study samples to determine the appropriate sample size [47]. Twenty-five key informants are satisfactory for achieving theoretical saturation. In the grounded theory approach, additional data tests can be used to effectively improve the study's results. We chose to interview 30 key informants [45]. We chose these volunteers such as to make our sample representative in terms of age and work position.

Notably, parents in Chinese society often actively influence their descendants' study, employment, and marriage decisions; even after they reach adulthood, their elders still actively and consciously intervene in their lives. To more comprehensively analyze the mechanisms forming the labor force across generations, we included both the older generation of workers and the new generation in our study subjects. We selected 30 in the two factories as our interviewees (Table 1). To protect their privacy and that of the factories, we avoided names and coded the interviewees as A1 to A30.

**Table 1.** Description of the sample.

		Number (n = 30)	Percentage of Sample (%)
Age Gender	Born before the 1990s	11	36
	Born since the 1990s	19	64
	Born before the 1990s	8 F and 3 M	72 and 28
	Born since the 1990s	14 F and 5 M	73 and 27
Education	Primary school	14	47
	Middle school	15	50
	College	1	3
Left-behind child	Yes	27	90
	No	3	10
Parental background	Worker	24	80
	Farmer	5	17
	Business	1	3

#### 3.2.2. In-Depth Interview

The data in this study were collected from in-depth interview records, relevant factory human resource documents, and memos. We developed the procedures of data collection according to [48] and [49]. We followed a semi-structured protocol for the in-depth interview, introducing probing questions at various points to encourage the participants to reflect on their experiences, behaviors, values, and attitudes. For instance, we asked, "If you could do things again, would you still choose to go out to work as soon as possible? Why?" "Are you willing to let your descendants become frontline workers like you? Why?". The interviews lasted 60 min on average. Each was recorded by video and conducted in a relaxed environment to allow the interviewee to feel comfortable about sharing their work and life experiences.

### 3.2.3. Data Translation Concerns

The interviews were conducted in Chinese, and we translated them into English afterward. To avoid the meaning being lost in translation, we invited an independent scholar with a Chinese factory background who is proficient in Chinese and English to perform a joint translation. Consensus was reached with another independent scholar regarding the translations.

### 3.2.4. Ethical Concerns

We described the purpose and process of the study to the factories' owners and managers, and they were interested in our study and keen to have access to the objective results; they gave us permission to select any workers in the factory for interviews. We provided consent forms for each interviewee and clarified that participation was voluntary. To ensure their privacy, we provided them all with anonymity, and the data in our final report to factory management were anonymized. When confirming the data with the factory manager, we removed all the interviewees' names and any potentially identifying characteristics.

### 3.2.5. Triangulation

Before we interviewed the participants, the human resource managers of the two factories informed us that their workers were not good at talking to strangers and often expressed themselves unclearly, even in their daily conversations with managers. Therefore, we used the triangle verification method to improve the accuracy and reliability of the study. After each interview, we spoke with the HR manager to clarify the findings, not only to fully understand the words and points from the participants but also to cross-verify them. We also observed the factory workers before and after the interviews within the span of a month at their workstations in order to obtain a balanced picture of their work lives, thus ensuring the trustworthiness of our findings and analysis.

### 3.2.6. Theoretical Saturation

Theoretical saturation is important in a grounded theory approach, and researchers must collect and analyze data continuously to supplement and consistently improve the emergent concepts and categories. A theory is considered to have reached saturation when the further collection of data does not contribute to the development of the categories [45].

We used data from 25 interviews for three-level coding and to obtain the categories. We then used the remaining five interviews to encode the data, at which point, no new categories were generated. We also provided feedback on the categories and explained the model produced to the factory managers and some of the interviewees for confirmation; they thought the model was consistent with the situation of the workers. At this point, because no new categories had been found, data collection was stopped.

## 3.3. Data Analysis

From the interview records, relevant factory human resource documents, and memos, we manually developed verbatim reports and imported them into NVivo 12 for data summarization and analysis. We analyzed the data in two phases. In the first, the interview transcripts were analyzed on the basis of the data from each participant. In the second, we used the data from the first phase to generate themes, explore findings, and draw conclusions. In line with the grounded theory approach, the data analysis consisted of three steps: open, axial, and selective coding [45].

Open coding is intended to develop a large quantity of code to describe, name, or classify events. We used it to categorize interviews, memos, and observations [45], summarizing all the data into 9 initial classifications (Table 2).



**Table 2.** Open coding of factory worker intergenerational transmission (excerpt).

Initial Categories	Labeling	Original Data
Comparisons	Compare with fellow	I think my life is better than them, at least I can be self-sufficient. They have never even been out of a small mountain village, nor do they know what a big city is like. Every time I go home, I tell them that working here is much better than living in a small mountain village.
	Compare with workmates	I don't think I will be less productive than them. If I use the same method as them, it can be done faster. I usually teach new workers how to be more efficient . . . I do it faster than the average worker. If we learn their methods, then the slowest is not me, but unfortunately there is no chance.
	Compare with citizens	If you live in a big city, you should learn about the local lifestyle. Their consumption level is much higher than ours. We cannot afford to buy a house here like a local. When I first came here to work, I would envy their lives, but then I found that I could not compare with them.

Axial coding is the process of classifying and abstracting the categories initially identified in open coding by exploring the inherent relationships between the categories [45]. We divided the 9 initial categories into 4 main categories: Worker trajectory, Social cognition, Left-behind children background, and Comparisons (Table 3).

**Table 3.** Axial coding of factory worker intergenerational transmission.

Core Categories	Conceptualization	Dimension
Worker trajectory	Envy	New things, new experience, salary, car, expensive stuff
	Action	Giving up education, desire to reach legal age to work
	Work	Hard to adapt to the city, hard to find job, discrimination in city, children pressure, living pressure, being “successful”, long working hours, high-intensity work, less leisure time
	Expression	Price of cars, rare items, luxury gifts, money to elders, interesting things, work opportunities
Social cognition	Individual condition	Poor family, do not like school, poor academic performance
	Environmental trend	Environment effect, family effect, following relatives, following friends
	Cognize	Schooling return, social situation
Left-behind children background		Far away from parents, cannot be disciplined, parents in children's eye, children in parent's eye
Comparisons		Compare with fellow, compare with workmates, compare with citizens

In selective coding, one category is selected as the core category, and its associations with every other category are examined [45]. We applied selective coding to re-examine all the sub-categories and then used the connections between them to build the study model (Figure 2).

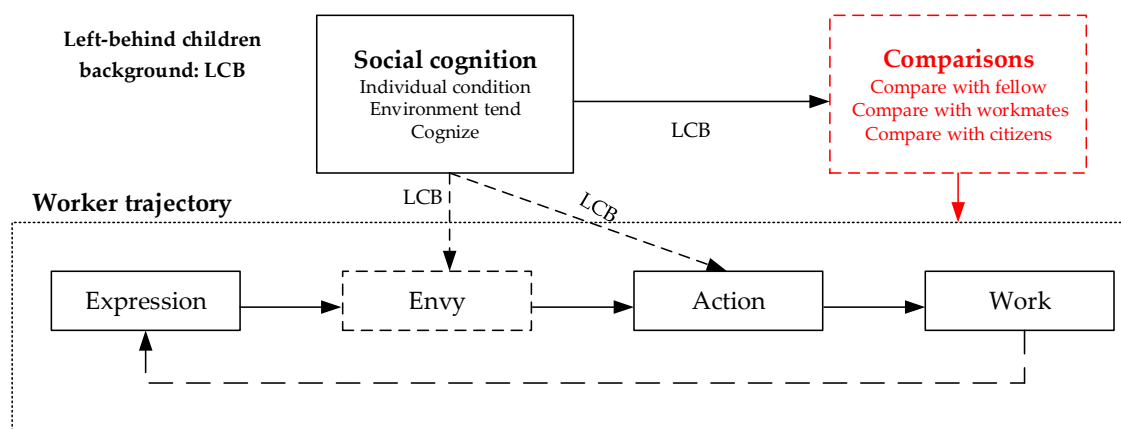


Figure 2. An integrative understanding of worker intergenerational transmission.

## 4. Findings

### 4.1. Worker Trajectory Circle

The trajectory of workers consists mainly of envy, action, work and expression, and form a circle in chronological order.

#### 4.1.1. Envy

Workers generally come from economically underdeveloped areas. When discussing why they left their hometowns to work in a big city, the participants cited the novelty of big-city life and their envy of others' wealth. "They say it's a wonderful world out there, every time they come back, they tell me something I don't even know" (A12). "I would be shocked by what they bought in a big city" (A14). The wealth gained from work is even more attractive than the novelty of big-city life: "They can make money by going to work ... they can wear new clothes" (A18). "Cars are not common in our hometown, they [migrant workers] all bought cars after working for several years" (A3). "I found that they usually use some very expensive accessories after going out to work" (A23). Based on the participants' desire for the unknown world when they were young, especially the wealth their peers made when they went out to work, this study used envy to describe the participants' inner states before going out to work.

#### 4.1.2. Action

A variety of factors encourage participants to give up their school education, although they have to wait until they reach the legal working age before going away to work. "I dropped out of the second year of middle school and stayed in my hometown for two years and then came to work here" (A12). "I went to work with my brother when I was 16 years old, and I borrowed someone's ID to work in the factory" (A24). "I didn't go to middle school, finished primary school, took care of my brother and sister at home, and then went out to work when I was 17" (A28). The participants described the situation after envy; they began to give up school education and wait for the legal age to go out to work. This study uses action to describe the participants' behavior after envy.

#### 4.1.3. Work

Life away from home may turn out to be far from ideal, and the participants reported that the reality could be cruel. "Is difficult to find a job in a big city without education background and technical



ability" (A15). "All other jobs have education requirements . . . I have to come to work in the factory" (A16). "A lot of work requirements need local citizenship, we have not" (A29). Participants stated that the pressure of working in a big city could be difficult to bear. "At first, I thought I had to work 12 h a day, it was too hard, now I am used to it . . . I feel good" (A12). "There is a lot of pressure here, I need to give my parents money, raise children and live in a big city" (A13). "The cost here is much higher than in my hometown" (A3). When asked directly why, given the difficulties of living and working in big cities, they chose to stay rather than return to their hometowns, the participants answered that they saw little alternative. "If I go back now, relatives at home will think I am a loser" (A6). "You can't look back when you come out . . . it will be embarrassing to go back home before you achieve anything" (A28). "My grandparents think that I am working well here, so I can't let them down. Even if I don't have a good life here, I have to say [that it's] good" (A16). It was important for the interviewees to maintain appearances; because leaving home is supposed to bring success, they never spoke to their relatives in their hometowns about the difficulties of living and working in big cities. This study uses "work" to describe the state of the participant after going out for work.

#### 4.1.4. Expression

Chinese New Year is a day of family reunion, and during this period, most workers choose to return home to spend time with their families. It is also a time when friends and family may expect a demonstration of success. "I haven't been home for a year, so I have to buy something good for my parents, otherwise they will think I'm not doing well here" (A1). "If I return with nothing, then my status among friends and family will be very low" (A17). In addition to buying gifts to take home, relatives and friends who go away to work may find themselves under pressure to exaggerate their achievements when they talk to friends and relatives. "I heard that my uncle had a good life in a big city, but after arriving in a big city, I found that he had a bad life" (A23). "The big-city life is absolutely different from what they said at New Year" (A21). "He looks very good, but in fact he has a lot of debt . . . I don't know what will happen in the future" (A15). Based on the participants displaying their wealth and achievements in various forms during visits back to hometown, we used expression to summarize their mentality of displaying wealth and achievements.

#### 4.2. Social Cognition

The reasons why left-behind children envy people who go away to work include individual circumstances, environmental trends, and cognition. "When I was a kid, my family was very poor, and I admired others for having money to buy snacks" (A13). "When I was in junior high school, my parents could not afford my living expenses" (A21). "I didn't study well since I was a kid, and I didn't know how to continue when I was in middle school . . . work as early as possible is a good choice for me" (A27). In addition to individual circumstances, environmental trends also affect the motivation of left-behind children to go out to work as early as possible. "When I went to middle school, every new semester started, many classmates were missing, and they all went to work in big cities" (A21). "My relatives work in big cities . . . they say that big cities have better lives than small villages" (A2). Because left-behind children lacked education, and most of their relatives and friends had gone to work in big cities, there was a cognitive bias toward work. "I thought I could make money by going out to work" (A7). "I didn't understand the situation in big cities at the time . . . after working in big cities for a few years, I found schooling to be very important" (A27). "I used to think that schooling was useless . . . Now I find it is a tough life have not enough schooling" (A18).

We analyzed and summarize the reasons that caused the participants to give up education and go out to work. In the interview, we found that most of the participants gave up school education due to poor academic performance; they thought that school education was useless at that time. Only a small proportion of the participants were unable to continue to receive school education due to poverty and having to go out to work. The relatives and peers around them all went out to work, and gaining wealth is the important factor for most participants encouraging them to go out to work as early as

possible. Almost all the participants said that they lacked social cognition when they were young, especially regarding the benefits of education, and regretted their premature decision to go out to work. Therefore, we use social cognition to describe participant envy and action to work.

#### 4.3. Left-Behind Children Background

It is common for descendant of workers have left-behind children background. Because workers in big cities have low incomes and educational resources are lacking, the next generation is usually sent back to the parents' hometown to be raised by the grandparents. Left-behind children usually have little contact with their parents. "I only met my parents once during the Chinese New Year" (A18). "They only call back occasionally to ask about my study, I have a better relationship with my grandparents" (A20). Parents may feel that they have little choice but to send their children to be brought up by their grandparents in their hometown. "We can't afford children's education in big cities, and children's school expenses will occupy most of our salary" (A9). "We have to work 12 h a day ... no time to take care of the children" (A26). Because of parents' long working hours and low salaries, the next generation are separated from their parents at an early age, and this leads to poor relationships between children and parents. The left-behind children background is one of the most obvious characteristics of young workers. Almost all young workers have a left-behind children background, and the proportion of older workers is more than 50%. Due to the lack of parental discipline and education, the background of left-behind children generally has an important influence on the cognition and behavior of participants. Therefore, we summarize the background of left-behind children as one of the influencing factors.

#### 4.4. Comparisons

The participants tended to draw comparisons with their peers, workmates, and local citizens. When asked why they did this, they reported feeling happy and satisfied when they found that they were in a better position than others. "When you find that you are better than others, you will be happy" (A14). "If your life is worse than others ... shameful ... it's a boring life" (A5). "Sometimes it's not that I compare with others, it's that they compare with me ... if someone tells you that he is better than you ... is it embarrassing" (A9). At work, it is common for them to make comparisons between themselves and their colleagues. "I don't think I will be less productive than them" (A19). "If I use the same method as them, it can be done faster" (A16). In addition to work efficiency, they also compare their children and daily consumption. "My son has better grades in reading than their children" (A17). "I am the first person in the factory to buy a car except at the manager level" (A19). "I think they will envy my dress" (A20). Participants also tended to compare themselves with local citizens, usually unfavorably. "If you live in a big city, you should learn about the local lifestyle" (A28). "Their consumption level is much higher than ours ... we cannot afford to buy a house here like a local" (A27). "When I first came here to work, I would envy their lives, but then I found that I could not compare with them" (A12). However, comparisons with peers from their hometowns, especially those not working in a big city, can generate a feeling of superiority. "They are still in the small mountain village ... I must be better than them" (A9). "Although I am not wealthy in a big city ... I am very good in our hometown" (A3). "I'm happy to drive my car back home ... I am one of the wealthy people in my hometown" (A12). Comparisons were the most important feature for the participants during the interviews. From the decision to go out to work to returning to their hometown, the participants were affected by the comparisons at every stage.

### 5. Discussion

This study used a grounded theory approach to analyze the intergenerational transmission of occupations for 30 factory workers. We found that comparison was a significant factor in the intergenerational transmission of frontline worker occupations, leading to a high degree of similarity between generations in terms of job choices and work skills. The core category connections with

intergenerational transmission of frontline worker shown in Figure 3. The descendants of frontline workers with a left-behind-child background generally lack parental education and good social cognition. They envy the wealth achievements of peers, which makes them give up school education and go out to work as soon as possible to narrow the wealth gap. As they go out to work and grow older, they express their achievements to appear successful when they return to their hometowns. This causes the younger generation to envy their achievements, similarly to how they envied their peers when they were young. The “envy” shown by the frontline workers when they were teenage, “action” and “work” shown when they get older, the “expression” shown after their achievements are all affected by comparisons. This kind of intergenerational transmission leads to the unsustainable development of human resources in factories. Previous studies have emphasized how external factors, such as a lack of education and training [50,51], cause the new generation to become factory workers, and this study demonstrates that comparisons are the root cause of said situation.

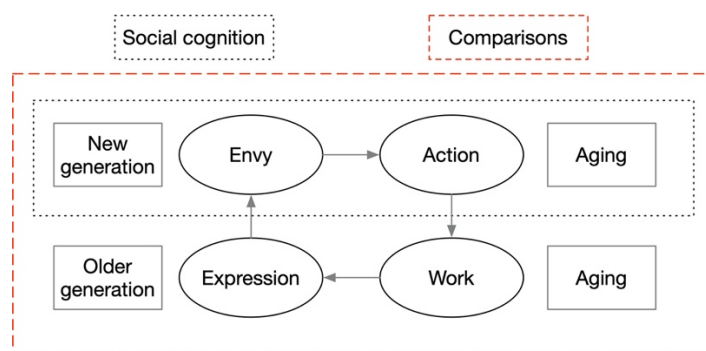


Figure 3. Overview of core category connections.

Our results emphasize the important effect of comparisons among the new generation. The comparisons not only limit their occupational choices, obliging them to become frontline factory workers, but also limit their ability to improve their technical skills once they become such workers. The comparisons identified in this study can be understood as a sequence of envy, self-improvement, and expression. Comparisons have caused the new generation to envy their peers who have already gone out to work and gained a certain amount of wealth, and envy has prompted the new generation to go out to work prematurely. However, the older interviewees are generally dissatisfied with the status quo that they can only become frontline workers, regretting giving up the opportunity to receive education at a young age. They do not want their descendants to have the same educational experience and become frontline workers like themselves. Their uncontrollable need for comparison led them to deliberately exaggerate their achievements and flaunt their wealth when they returned to their hometowns. Comparisons based on such have led to conscious imitation by their descendants. What has been practiced by the parents and grandparents who secured a living through manual factory jobs lingers in the minds of the children, who later continue to take up the same line of work. Similar to their ancestors, the new generation neglect the need for upskilling and higher education. This affects and stimulates the cycle of living by comparison and adherence to tangible hedonism. Thus, there is an intergenerational transmission of occupation through a copy–paste phenomenon between two generations, perpetuating the vicious cycle of life success being judged based on material goods such as luxury holidays, cars, jewelry, large houses and an abundance of money.

The characteristics of worker comparisons are different from those identified in previous comparisons studies. According to social comparison theory, upward comparison (comparing oneself with somebody stronger) can lead to self-improvement or a loss of confidence, and downward comparison (comparing oneself with somebody weaker) can lead to emotional satisfaction [52,53]. However, self-improvement is not continuous among frontline workers, nor is it their ultimate goal. Although the interviewees worked hard to improve their work skills when they first started their jobs,

the purpose of this was to narrow the gaps between them and their workmates. When they found that the gap in work abilities was no longer obvious, they stopped the self-improvement. This kind of “good enough” mentality encourages remaining in the middle of the group, not seeking to make progress unless stimulated by external forces. Obtaining emotional satisfaction through comparison is an important goal for frontline workers, and it is also the rationale for the comparisons they make. Unlike urban residents, frontline workers have no advantages in income or in life; this prompts them to show off as much as possible when they return home at Chinese New Year, thereby obtaining emotional satisfaction through comparison with groups that are even more disadvantaged. This study has found that Chinese workers focus on the emotional satisfaction obtained after comparison. Self-improvement is only part of a process of comparison between groups of workers and is short-lived. Through self-improvement, a group surpasses others who are in circumstances similar to its own, at which point it deliberately draws comparisons in order to obtain emotional satisfaction. It can be argued that the comparison mentality of Chinese workers is selective and contradictory, in the sense that objects of comparison are chosen that are inferior in all respects or can be surpassed by simple efforts. Workers feel jealous of the achievements of others, but they are not motivated to continue developing themselves. When they have achieved a little more than the others, they begin to show off, and their self-improvement stops.

This study has found that the comparisons of frontline workers are significantly influenced by two aspects: the left-behind-child background and social culture. Firstly, the background of left-behind children plays an important intermediary role influencing envy. As they usually lack parental discipline and do not develop a nuanced concept of wealth, they may make uninformed comparisons that lead to envy. Their tendency to give up their education because of wealth envy explains the self-improvement behavior that results from comparison [54,55]. They are eager to improve themselves as early as possible and to narrow the wealth gap. Personal circumstances and environmental trends also encourage people to go away to work early. This is particularly the case when poverty and the surrounding environment make it impossible to receive a school education. Secondly, the socialist system in China emphasizes coherence in social thinking, and this has led to an intergenerational transmission based on collectivist values [56], according to which individuals are subordinate to society and individual interests must correspond to the interests of groups, nations, and countries [57]. Under the influence of this socialist system, which pursues commonality rather than individuality, there is no obvious difference in beliefs, concepts, and behaviors between the new and old generations. The left-behind children in this study have infrequent contact with their parents, whose influence on the next generation is therefore not as strong as the influence of society, so the influence of the socialist ethos must be considered to fully understand the intergenerational transmission of occupations. In addition, “saving face” is an important social principle in China [58], and comparison between individuals can cause “face” to be gained or lost in different contexts [59]. Because the interviewees came from humble backgrounds, they tended to display timidity and a sense of inferiority during the interviews. However, when they talked about the achievements of others, the resulting feeling of psychological imbalance (i.e., loss of “face”) made them eager to show their strength (i.e., to gain face). We believe that China’s “face” culture has a strong effect on workers in this group, motivating them to draw comparisons between themselves and others.

The sustainable development of factories requires the continuous improvement of workers’ technical skills. However, comparisons make it difficult for the new generation of frontline workers to obtain a good level of education and technical training, and they end up having to work on production lines, just as the previous generation did. Although comparisons bring a steady stream of manual labor resources to factories, excessive manual labor resources restrict the sustainable technological development of factories.

## 6. Conclusions

The intergenerational transmission of occupations among Chinese frontline workers is affected by subjective and objective factors. The subjective factors include excessive comparisons made by workers, and the objective factors include the backgrounds and personal circumstances of left-behind children alongside the influence of socialism and the general environment. The objective factors in this study caused excessive comparisons and magnified the defects of such. Comparisons have led to the copy–paste phenomenon of intergenerational transmission of occupation among frontline workers, but this phenomenon is not expected by the frontline workers and their descendants or even the factory. Excessive comparisons cause left-behind children to give up their school education prematurely, obliging them to work in factories, and limit their ability to improve their technical skills once they have become factory workers. This exploratory study provides a fuller understanding of the intergenerational transmission of factory work and the issues facing the sustainable development of human resources in Chinese factories (Figure 4). Our analysis shows that the excessive comparisons of frontline workers affect the next generation, creating a vicious cycle of intergenerational transmission of low-end occupations.

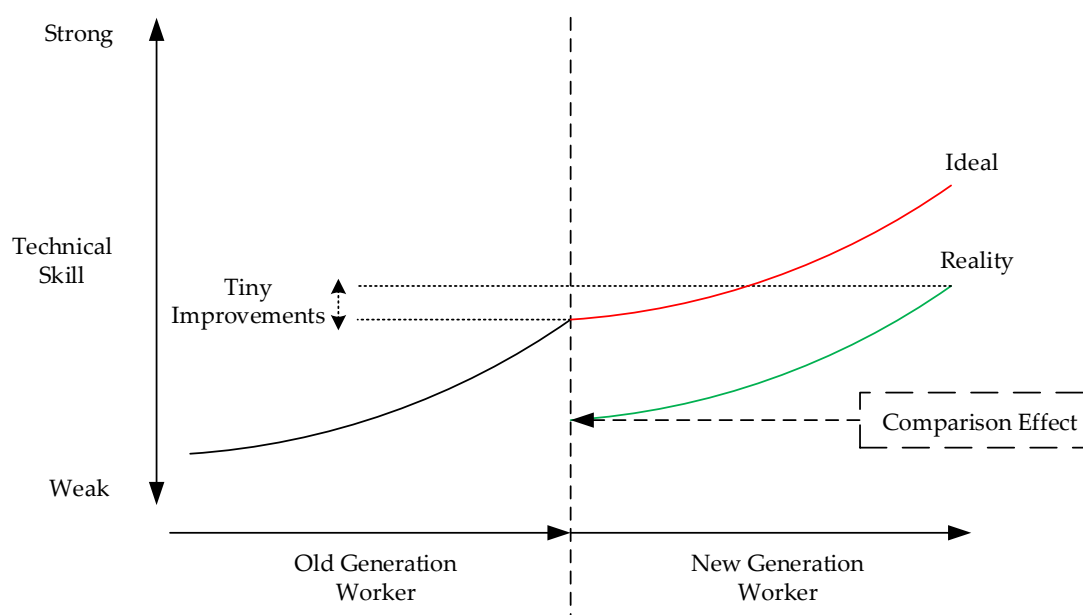


Figure 4. Overview of the comparison effect.

### 6.1. Implications and Contributions

This study makes contributions to theory and has practical implications for employers who have hired new-generation workers. First, our results emphasize the importance of comparisons among workers, and this could be useful for factory managers. For example, managers could set differentiated wages to motivate workers to continuously improve their work skills, thereby alleviating the shortage of technical workers. Our analysis of comparisons will enable human resource managers to formulate more effective human resources policies. Second, our results remind researchers and human resources managers that they cannot ignore the impact of the national system on individuals because China's social system has led to a high degree of similarity between individuals of different generations. Third, our study believes that China's labor force will lose its current demographic dividend advantage in the future. Although China has not yet become an aging society, with the development of society, the technical capabilities of China's frontline workers have not gradually improved. In the era of rapid technological development, when technology workers are increasingly valued, the copy–paste phenomenon regarding Chinese workers cannot achieve the sustainable development of human

resources for factories. The negative influence of comparisons is amplified by the unique characteristics of Chinese culture highlighted in this study. Based on Hofstede's cultural dimensions theory analysis of Asian countries, emerging economies around China generally exhibit a high degree of comparisons [60]. The results of this study offer reminders to other emerging economies in Asia that rely on demographic dividends to develop manufacturing industries. In the initial stage of factory development, appropriate comparisons can maintain the number of low-end workers and satisfy the demand for human resources. However, excessive comparisons have a tendency to limit the sustainable development of factory labor.

At the theoretical level, this study enriches the development of intergenerational transmission theory for socialist countries by helping scholars to understand the mechanisms of intergenerational transmission in Chinese society. The particularity of the national system and the comparisons encouraged by its culture are proposed as a new dimension in intergenerational transmission theory, opening up opportunities for generation theorists to explore it in greater depth.

## 6.2. Limitations and Future Research

This study has certain limitations, most of which derive from the sample we selected. First, the interviews were in Chinese, while the analysis was in English. There might have been some translational issues, although we strove to avoid them. Second, our data are limited to factories in Shenzhen city. Although this reduced the impact of potential confounding factors, it also reduces the universality of the results. China is a multicultural and multi-ethnic country; different regions have different cultures and values that affect intergenerational transmission. We also note that some young workers are the next generation of farmers; the high intergenerational transmission rate for factory work may be an artifact of our sample. Third, our study did not include interviews with left-behind children who have not yet started their careers. Although most new-generation workers have a left-behind-child background, the converse is not necessarily the case, and this may have biased the data.

Future studies should address these limitations by exploring intergenerational transmission using a range of samples, including those from different industries, geographical locations, and backgrounds. Given our finding that comparisons encourage workers to improve their situation and skills in the short term, future study could usefully measure and evaluate the importance of comparisons for self-improvement, emotional satisfaction, and other constructs in order for factory workers, particularly those in developing nations, to chart a more sustainable work life.

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