

Title:

The Applications of Human Capital Theory and Educational Signalling Theory to Explain Parental Influences on the Chinese Population's Social Mobility Opportunities

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Abstract:

Existing studies argue life chances are, in part, vertically reproduced. Such a statement is applicable to the Chinese contexts as, but not limited to, parental *hukou* status, to some extent, determines the life chances their children receive. In this essay, the author would like to introduce human capital theory (HCT) and educational signalling theory (EST), and assess how the applications of each of these two models can enrich the understanding of vertical reproduction of individuals' social mobility opportunities. The author would also present the limitations of each of these two models when addressing relevant Chinese contexts.

Keywords:

human capital; educational signal; education; labour market; social mobility; social reproduction; China

Since the economic reforms and opening up of China in 1978, the country has been undergoing a series of *hukou* reforms. The *hukou* system was introduced initially in cities in 1951 and was extended to villages in 1955 (Lu & Wan, 2014). However, not until in 1958 was the *hukou* system used to restrict the geographical mobility of Chinese citizens (Fan, 2008). The design of the system followed the Soviet *propiska* (i.e., internal passport), aiming to stimulate the country's then planned economy by encouraging city dwellers to support the heavy industrial development and village residents to maintain the surplus of agricultural products (Donzuso, 2015). Each Chinese citizen is allocated either a rural or urban *hukou*. Under the system, *hukou* status is primarily inherited from their parents at birth. Before 1998, children's *hukou* was inherited from their mothers (Wang & Schwartz, 2018). Since 1998, however, children can choose to inherit either their mothers' or fathers' *hukou* location and type (i.e., rural/agricultural or urban/non-agricultural) (Congressional Executive Commission on China, 2005; Song & Smith, 2019). Children born in cities whose both parents have rural *hukou* inherit rural *hukou* (Montgomery, 2012).

Under such reforms, mobility barriers have gradually been removed, leading to the gain of momentum of the rural-to-urban migration (Chen & Hoy, 2011; Meng, 2016). Rural-to-urban migrants have been encouraged to work in cities in the construction and services industries due to their low wage levels, by-products of occupational discrimination against the migrant populations (Bengoa & Rick, 2020; Hou *et al.*, 2019). Their opportunities to capitalise on rural-to-urban migration and economic development of China for the growth of life chances have been hampered, since the *hukou* system has restricted the welfare and resource distribution to these migrant cohorts (Piotrowski *et al.*, 2016).

To date, to a large extent, when rural individuals migrate to urban spaces, they are excluded from the entitlement to healthcare, unemployment insurance, pensions, subsidised education, housing and alternative social welfare that are restrictively allocated to urban Chinese communities (Lin & Rodgers, 2018; Tani, 2015). This is, in part, because rural *hukou* holders residing in cities are denied to work in the public sectors nor enjoy the associated benefits, including unemployment subsidies and old-age pensions. These migrant cohorts have, thus, to work in non-public sectors, implying more working hours, lower wages and worse working conditions (Akgüç *et al.*, 2014).

Even if rural *hukou* holders reside in villages, agricultural households are entitled to significantly fewer amount of social benefits and welfares, relative to their local urban *hukou* holding counterparts (Rarick *et al.*, 2017). For example, urban *hukou* holders are entitled to preferential access to higher-ranked schools, better-paid and less labour-intensive occupations and more state-subsidised welfares (Bengoa & Rick, 2020). These descriptions briefly outline that both rural-to-urban migrant and local rural populations, relative to individuals holding urban *hukou*, are subject to institutional discrimination as a result of their membership of rural *hukou*.

Existing studies argue life chances are, in part, vertically reproduced (Friedman, 2014; Bourdieu & Passeron, 1977). Such a statement is applicable to the Chinese contexts as, but not limited to, parental *hukou* status, to some extent, determines the life chances their children receive. In this essay, the author would like to introduce human capital theory (HCT) and educational signalling theory (EST), and assess how the applications of each of these two models can enrich the understanding of vertical reproduction of individuals' social mobility opportunities.

Human Capital Theory

In the section, the author briefly outlines the genesis of HCT. Then the author assesses how HCT can be applied to explain the desirability to reach higher education level and obtain urban *hukou* status. Here entering higher education is one of the requirements enabling *hukou* conversion from rural to urban status. They also evaluate how the concepts of the inheritability of human capital (HC) can be employed to address the essay aim on investigating parental influences on individuals' social mobility opportunities.

HCT was pioneered by University of Chicago economists, led by Schultz (e.g. 1962, 1963) and Becker (e.g. 1962, 1964), from 1960. HCT views that all social phenomena are initiated by individual behaviours; and individuals form HC by acting in their own interests (Blaug, 1976: p. 830). Relevant theorists consider how education and other characteristics help create skills and acquire knowledge that can be used as an investment in the labour productivity (Robeyns, 2006: p. 72; Blaug, 1976: p. 827). Schultz believes that, along with other forms of capital, the possession of HC helps provide economic services. The acquired human capabilities – a term that will be scholarly defined and discussed in the CT section – are not free goods; they are products of the allocation of scarce resources (to be specific, they are products of investments in man) (Flamholtz, 1971: p. 829; Sweetland, 1996: p. 341). For example, policymakers investing resources in schooling aim to raise the future income levels earned by the beneficiaries due to the latter's disposition to translate educational credentials or academic knowledge into professional opportunities or skills (Bowman, 1966: p. 114). Aside from education, on-the-job training, labour migration and health are other major classes of HC (Schultz, 1961: pp. 8-9; Flamholtz, 1971: p. 830). It is noteworthy that, in the Chinese contexts, *hukou* status should also be deemed as a form of contributor to HC, because the possession of urban *hukou* raises human capabilities to engage in labour and professional productivity. Such a growth of productivity would lead to individuals' increase in salary earnings (Tan, 2014: p. 413; Robeyns, 2006: p. 72). In this essay, the author would primarily focus on the discussion of two forms of HC, namely education level and *hukou* status. It is because these two classes of HC do not only raise the salary levels of individuals in China, but are arguably among the most crucial factors to minimising unemployment, improving employment conditions and security, and, ultimately, increasing the opportunities of upward social mobility in Chinese contexts (Tan, 2014: p. 424). Also, the levels of ownership of these two classes of HC would determine the degrees of acquisition of other forms of HC. For example, better parental education enhances the adoption of contraceptive techniques, and better educated individuals are more likely to learn more knowledge about nutritional and healthy lifestyle (Psacharopoulos & Patrinos, 2008: p. 345; Sweetland, 1996: p. 341). Similarly, urban *hukou* holding individuals are better covered by health insurance schemes, relative to rural-to-urban migrant and rural native counterparts (Bengoa & Rick, 2020). Urban *hukou* holders are also subsidised to visit better-facilitated public hospitals in cities, while those holding rural *hukou* are not subsidised by local governments and have to alternatively visit worse-facilitated private clinics (ibid). Therefore, the further the entitlement to educational opportunities and acquisition of urban *hukou* would improve the health conditions of individuals.

Schultz (1961: p. 4) argues that, “young men entering the labour force are said to have an advantage over unemployed older workers in obtaining satisfactory jobs. Most of these young people possess twelve years of school[ing], most of the older workers six years or less. The observed advantage of these young workers may therefore result... from real differences in productivity connected with one form of human investment, i.e. education.” Here Schultz emphasises on the importance of education as an instrument to raise professional and social

mobility opportunities in the long-term. As a desirable output, it is plausibly that upwardly socially mobile individuals, along with their family members, can enjoy upgraded standard of living. For rural-to-urban migrant workers or native rural labourers, upward social mobility would result in the alleviation in rural poverty and destitution. Moreover, upward social mobility does not only benefit a generation of workers or employees, but also their offspring – who can enjoy the privileges derived from better parental education levels and inheritance of urban *hukou* status and find it easier to access to the gateway to the accumulation of a range of capital (Friedman, 2014). Therefore, according to HC theorists, acquiring HC would prompt intergenerational reproduction of a range of capital and strengthen beneficiaries' upward social positions across generations.

The application of HCT comes with a major shortcoming: Such a theory is too economic, where the exclusive benefits from the accumulation of HC are considered as a rise in productivity and salary levels. Such a limitation does not take social, cultural and other non-material dimensions of life into account (Robeyns, 2006: p. 72). To apply HCT, researchers should fully or partially be economically-oriented, where they should discuss how the acquisition of HC would raise the collection of social, cultural, linguistic, political and perhaps more capital with an indication of how earning such a list of resources enhances the labour productivity, chances of professional entry and, as a whole, economic wellbeing of Chinese populations.

Another shortcoming of the application of HCT is that such a theory assumes that individuals are always rational in decision making. HC theorists posit that individuals will only invest in education as long as the marginal benefits value more than, or are as valuable as, the marginal costs. This means individuals will estimate the future gains and costs from a further increase in HC investment and make rational decisions on whether they should perform the investment *per se* (Tan, 2014: p. 420). The assumption of rational decision making may not always hold in reality as individuals may make certain contributions even if the costs outvalue what they can gain in return given the fact that, for example, they enjoy the psychic satisfactions by making such decisions (Tan, 2014: p. 420; Bowman, 1966: p. 114). Although rational decision making does not always stand, the author posits the adoption of HCT to explain parental influences on individuals' social mobility opportunities should be, to a certain extent, valid because they believe most Chinese populations' investment in education is rationally driven by the motives of pursuing upward social mobility and more life chances in the long-term for both themselves and their next generations.

Another criticism concerning education level when applying HCT is that quantity rather than quality of schooling is often exclusively measured. Psacharopoulos & Patrinos (2008: p. 349) argue that quality of schooling is an important determinant of earnings. Researchers are inclined to adopt years of schooling to measure education level due to the absence of appropriate proxies indicating the quality of schooling in available datasets. The author acknowledges there may be measurement errors to some extent when quality of schooling is not taken into account.

Educational Signalling

In order to clarify why better-educated individuals enjoy more desirable opportunities of professional entry and enhanced degree of economic wellbeing, in this section, the author would like to utilise the application of education signalling to address the nuanced relationship between education level and professional entry. Such an understanding is essential to unveil

why better education level can be seen as an instrument to realise upward social mobility in Chinese contexts.

From an employer's perspective, they prefer hiring workers with good work ethics, intelligence and willingness to conform to the values and norms of the workplaces. However, they are unable to fully assess job applicants' suitability for the positions until the latter group begin working. Employers would therefore collect reliable information, known as signals, which, on average, hint the labour productivity of the job applicants. Education is considered as one of the primary signals (Martin, 2019: p. 1). The more years individuals can adapt the system of formal education, despite some failing to earn education credentials in the majors related to the jobs they apply for, the more likely the signalling model informs that they are preferred in the labour market. It is because these individuals are likely to possess the traits employers are looking for – for example, adequate degree of intelligence, motivation and conformity (ibid). Also, better-educated employees usually demonstrate more perseverance, signalling lower propensities for resignation or absence. They may, additionally, have healthier lifestyles due to the more acquisition of nutritional knowledge. Such dispositions and habits are preferred by most employers (Weiss, 1995: pp. 133, 141). Thus, the signalling model helps explain why better-educated rural-to-urban migrant workers are welcomed in the urban labour market while their worse-educated counterparts experience substantial difficulties to enjoy urban occupational security (Rospigliosi *et al.*, 2013: p. 421).

When upper education levels are needed for some kinds of employment, the signalling effect prompts the expectations of higher educational attainment on job candidates applying for most, if not all, positions. Less educated individuals are restricted or even excluded from occupational entry, although they may apply for jobs that do not strictly require advanced academic or professional knowledge (Martin, 2019: p. 3). This explains that higher educational attainment may not necessarily serve as a prerequisite to fulfill occupational tasks, and perhaps may not result in further labour productivity to some degree. Yet, those having better educational profiles are desired for employment in the labour market.

Individuals from financial insecure and rural *hukou* holding backgrounds, for example, are underprivileged to thrive in educational attainment (Afridi *et al.*, 2014). When university credentials act as a prominent signal for higher labour productivity, barriers to higher education, in the forms of financial shortage and rural *hukou* status in Chinese contexts, inherited from parents significantly undermine the equal distribution of opportunities for professional development (Martin, 2019: p. 2).

Here higher education functions as a screening device and categorises individuals of differing abilities and specialisations, therefore conveying information to employers on what kinds of labour they would like to “purchase” (Martin, 2019: p. 1; Cai, 2013: p. 459). For example, better-educated and better-skilled graduates and job seekers, including those who are rural-to-urban migrants, in Beijing are preferred to occupy higher-paid and more prestigious occupations in the professional fields of technology, commercial services and management (Song, 2016). Hence, for individuals with better academic and/or professional profiles, alongside specialised knowledge and skills corresponding to the job natures of available positions, it is plausibly that employers from more esteemed companies or professional fields would prioritise hiring them.

While better education level serves as a signal to assess job applicants' initial productivity, on-the-job training can also be seen as a signal but to examine their subsequent productivity

(Rospigliosi *et al.*, 2013: p. 422). In existing studies, the levels of on-the-job training individuals receive are predominantly not taken into account. This is because on-the-job training can hardly be quantified, especially when training outputs of different qualities and fields are not directly comparable. The author, thereby, only considers formal education as an educational signal when analysing individuals' odds of professional entry and, ultimately, occupational and economic wellbeing.

Although many less-educated individuals may have the potential to be productive, their lack of signalling pre-conditions in relation to upper social position, financial security or positive parental influences would prompt employers to screen them out from job considerations (*ibid*: p.428). Such an analysis stated in the education signalling model resonates in Chinese contexts, where, as discussed, individuals with education-related underprivileged symbols encounter more barriers to educational attainment, professional success and life chances as a whole.

Not only do disadvantaged cohorts experience substantial difficulties to succeed academically, but the educational obstacles they face are piling up. In contemporary China, education becomes more accessible to the poor, due to state and local governments' interventions (Chen & Hoy, 2011). In response to educational massification, existing literature argues more privileged individuals pursue more advanced levels of educational credentials, such as postgraduate degrees, in order to send a stronger educational signal to the urban labour market. Credential inflation implies that disadvantaged cohorts have to endeavour to invest even more time and financial resources to reach upper education levels for the purpose of surviving in the urban labour market. Underprivileged populations failing to keep up the pace of credential inflations due to the concerns of financial unaffordability would lose their limited signal of employability, compounding their restrictive entitlements to life chances in the long-term (Martin, 2019: p. 2). Such a circumstance helps explain why the education signalling model is important for, and included in, existing research when such project leans on the broad themes of social stratification and sociology of education. In addition, poor rural local governments but not their richer urban counterparts may be financially incapable of subsidising education, including compulsory education, for villagers (Song & Zhou, 2019). Therefore, such socioeconomic and socioeducational arrangements stratify individuals' entitlement to life chances to a significant extent, fostering the adoption and application of EST when addressing such an education-related societal issue in contemporary China.

A shortcoming of the education signalling model is that it assumes educational signals represent a core evaluation on individuals' labour or professional potentials (Bergh *et al.*, 2014: p. 1337). However, in reality, today's employers may emphasise on other non-education-related attributes when hiring graduates and job candidates. Such attributes, in Chinese contexts, include *hukou* status, residency, social network, cultural legitimacy and among others. This list of attributes may be, more or less, as important as the educational signals when Chinese employers consider recruiting suitable job candidates. A sole evaluation on job applicants' suitability and potentials grounded in the educational aspect may lead to the neglect of job applicants' non-education-related qualities and traits. Any misvaluation may foster the occurrence of mismatches in the labour market, where unsuitable individuals may be employed to perform tasks in ineffective, inefficient manners (Levels *et al.*, 2014: p.342).

Moreover, the model posits that job-seekers aim at maximising the returns to their educational investments and searching for the most financially preferable jobs given their education and skill levels (*ibid*: p. 344). However, education level is not exclusively an economic instrument and individuals can seek for career entry beyond financial consideration. Therefore, the over-

emphasis on rational, economic-oriented decision making would misevaluate how graduates and job seekers react in the labour market. The explanations of the EST would conceptually facilitate the sociological discussion on how education levels are associated with labour market entry and the pool of life chances.

Conclusions

As both addressed theories are economically driven, the understanding of parental influences on individuals' education and labour market successes from a non-economic perspective can hardly be attained. The author suggests social researchers to consider adding non-economic models when examining such contexts. Pierre Bourdieu's concepts of capital (namely economic, social, cultural and symbolic capital) could be taken into consideration when investigating how individuals entitled to, or acquiring, a list of capital can climb up the social ladder more successfully than their counterparts with a lack of such resources.

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