Human Capital Investment and Employment Quality: The Mediating Role of Career Development

Junjie Wang[1, *], Qiangwei Ze[2]

[1]School of Economics & Management, Nanjing University of Science & Technology, Nanjing, China

[2]College of Management, Sichuan Agricultural University, Chengdu, China

* Corresponding Author Email: junjie.bairn@foxmail.com

Abstract. In recent years, due to the impact of COVID-19, the global economic situation has been sluggish, China's economic growth rate has slowed down, the supply-demand contradiction in the labor market has become prominent, and the employment pressure for college students is constantly increasing. This article uses a questionnaire survey to conduct research and measurement from two dimensions: human capital and employment quality. The results show that human capital has a significant impact on employment quality, among which academic performance and various certificates have a significant positive effect on employment quality, while campus experience and internship experience have no significant impact on employment quality.

Keywords: Career development, Human capital, Employment quality.

1. Introduction

Technological changes are changing the traditional labor market, and the core job tasks and required skills of most jobs and professions will undergo fundamental changes in the coming decades (Arntz et al., 2016). Workers need to be able to cope with unpredictable and dynamic career environments, and pay more attention to career choice and self-management behavior in their career development (Hirschi, 2018). The rise of big data technology has accelerated career transformation, and due to the impact of COVID-19, global enterprises have provided fewer jobs, and some workers are facing the risk of unemployment. This requires college students who have not yet entered or are new to the labor market to have a career planning mindset and enhance their competitiveness through investment in educational human capital.

From the employment quality reports released by most Chinese universities in the past two years, it can be seen that the employment rate of college students has declined, the average salary has also significantly decreased, and the overall employment quality has decreased compared to previous years. This article takes Chinese universities as an example to explore the factors that affect the employment level of college students, and measures their impact level. It aims to increase the human capital of college students in a targeted manner, in order to improve the employment rate and quality of college graduates.

2. Literature Review

2.1. Human Capital

Since Schultz proposed the theory of human capital in the 1960s, scholars have continuously enriched and improved their interpretations of its concept. The human capital of college students refers to the various knowledge, skills, and qualities they possess, which can be recognized and paid for by employers in employment. These elements are often formed by college students through education investment and participation in social practice (Wang Ting, 2020). Meanwhile, other scholars have extended this concept. One viewpoint holds that human capital has two different forms of productivity: homogeneous capital and heterogeneous capital. The essence of human capital lies in its increasing returns, but this increasing returns is not fixed. Human capital with the ability to

increase returns is heterogeneous capital, while homogeneous capital evolves from increasing returns to decreasing returns. Heterogeneous capital achieves its own value by creating economic imbalances, and the differences in the allocation of heterogeneous capital also determine everyone's social existence (Li Linying, 2017). Another viewpoint holds that human capital has a hierarchical nature. Human capital idivided into two levels: primary and advanced, and two stages of change: stock and increment. Primary human capital realizes its "capital" value through labor in exchange for a certain amount of reward. High level human capital is the concentrated embodiment of human talent, talent, and potential discovered - wisdom. From the perspective of returns, human capital investment can bring many economic and cultural benefits to investors.

If we discuss the issue of employment differences within the undergraduate graduate group from the perspective of human capital theory, we should make the following judgment: compared with those who invest less in human capital, college students who invest more in human capital will have better employment outcomes.

2.2. Career Development

The term 'career development' is increasingly used to describe the sum of psychological, social, educational, physical, economic, and opportunity factors that combine to form an individual's career behavior throughout their lifetime (Sears, 1982). The use of the term 'career development' includes two sets of theoretical or conceptual categories, one explaining the development of professional behavior throughout its lifecycle, and the other describing how professional behavior is altered through specific interventions (Edwin L. Herr, 2001).

Teenagers and students face the development task of preparing for their career and mastering future career transitions. Existing research has studied a series of concepts related to career readiness, including predictive factors and outcomes. Based on a review of empirical articles on maturity, readiness, and adaptability, scholars have proposed organizational frameworks for various attitudes, knowledge, abilities, and behaviors required for career preparation (Marciniak, J. et al., 2022). Therefore, inferring from this theory, career development is a continuous process. The career development stage includes awareness of the need for early planning, decision-making skills, research skills (use of knowledge and information resources), general career information, general job information, and detailed information on career preferences.

2.3. Employment Quality

Employment quality is a complex multidimensional structure that can be measured using different types of indicators (such as objective and subjective indicators). The EU's "European Employment Report" (2001, 2002) suggests that the evaluation of employment quality must include objective indicators, subjective assessments of worker job matching, and subjective measures of job satisfaction. Scholars define the concept of employment quality as: work has certain objective characteristics, there is a fit or match between job requirements and the characteristics of the job holder, and work generates positive subjective experiences (such as job satisfaction), taking into account two objective job characteristics: salary and grade. In terms of job matching, the relationship between the education level required by the job and the education level obtained by the graduates was considered (vertical matching), as well as the relationship between the majors studied by the graduates and the job (horizontal matching) (Vicente Gonza Å lez Roma Å, 2016).

This study mainly uses the size of the unit, job remuneration, and job stability of the unit as indicators to measure the employment quality. By comparing the human capital of college students with their employment quality, we analyze the relationship between them and explore their impact mechanisms, which is the purpose of our research (Chai Xiaoli, 2018).

3. Method

3.1. Participants

This study conducted a survey on college students from more than 20 universities in western and eastern China, and a total of 508 questionnaires were collected. After sorting, 506 valid questionnaires were found. Among them, the survey samples are divided in detail according to gender, major, academic performance and internship experience. Male samples account for 22.2%, female samples account for 77.8%, humanities and social sciences account for 71.1%, science and engineering accounts for 18.3%, and other majors account for 10.1%. The sample distribution is relatively large for women and humanities and social sciences majors. Most people have in school and internship experience and have obtained various levels of certificates, but their academic performance and qualification certificates are relatively average. In terms of employment quality information of the sample, the size, prospects, job remuneration, work environment, promotion space, and job stability of the unit are all above average, but the overall level of hard work in the job is also relatively long.

3.2. Hypothesis

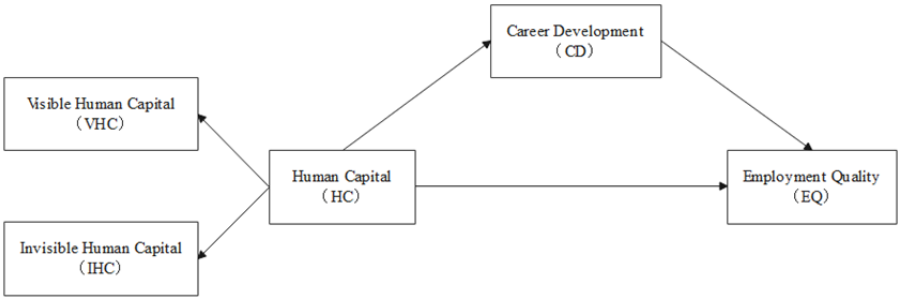
H1: Human Capital (HC) is positively correlated with Employment Quality (EQ).

H2a: Human Capital (HC) is positively correlated with Career Development (CD).

H2b: Career Development (CD) is positively correlated with Employment Quality (EQ).

H2c: The relationship between Human Capital (HC) and Employee Quality (EQ) mediated by Career Development (CD).

Table 1. Conceptual Model Linking HC, CD, and EQ



4. Results

4.1. Analytical approach

Table 2. Mediation Model

	HC→CD	CD→EQ	Indirect effect[95% CI]	Total effect[95% CI]
Income	.117(.004)	.029(.013)	.003[.000, .006]	.046[.058, .033]
Compensation	.085(.005)	.440(.013)	.037[.033, .042]	.046[.058, .033]
Condition	.119(.005)	.525(.016)	.063[.057, .069]	.046[.058, .033]
Hours worked	.688(.050)	.003(.001)	.002[.003, .000]	.046[.058, .033]
Job stability	.071(.004)	.068(.016)	.005[.007, .002]	.046[.058, .033]

The table reports the results of structural equation models linking education to job satisfaction through separate mediators, indirect mediation effects, and total mediation effects.

4.2. Primary results

This study applies the theory of human capital to analyze its impact on employment quality. It can be seen that human capital has a significant positive impact on employment quality. Based on the

above analysis, we can draw the following conclusions. The size of the unit and the job remuneration are relatively influenced by human capital; The prospects of the workplace and the promotion space of the job are relatively lower influenced by human capital; The working environment and stability of the job are almost affected by human capital, both of which are relatively small; Another thing is that the level of hard work in one's job is very little affected by human capital and has little effect.

The table reports indirect effects, direct effects, and total effects of Human Capital Investment on Employment Quality based on our primary structural equation model.

Table 3. Indirect Effects, Direct Effects, and Total Effects

Pathway	Outcome		
	B	95%CI	β
Indirect effect via CD	.045	.040, 050	.083
Direct effect	.020	.011, 029	.036
Total effect	.056	.047, 066	.105

5. Summary

College students can continue to work hard to enrich themselves, but they still need to pay attention to their academic performance, seize the opportunity to take various level certificates, other vocational qualification certificates, and obtain professional qualification certificates in their respective majors, recognize the current employment situation, explore and understand employment information through multiple channels, and achieve a relatively balanced state that meets employment needs, whether it is professional knowledge, comprehensive quality, or psychological state.

Universities should make reasonable adjustments to class hours, teaching content, and teaching forms based on employment conditions. Although various industries are affected by COVID-19, there are also some industries that have developed, and the demand for technical personnel is still increasing. So adjust the course structure appropriately to help graduates better adapt to the employment environment.

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