

The Relationship between Health Human Capital Investment and Physical Quality Improvement

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Abstract: With the advent of knowledge economy, Human Capital has become an important factor to promote the continuous economic development and to promote the organization to obtain sustainable competitive advantage workers, including their knowledge, skills and health status. Among them, as an indispensable form of human capital, the importance of health is beyond doubt. However, many organizations fall into the professionalism of human resource management. They simply understand human resource management as recruiting high-quality talents and reducing labor costs, ignoring the follow-up investment after employees enter the job. Therefore, from the perspective of health human capital, this paper studies the relationship between it and the improvement of physical quality of employees. This paper expounds the health and its influencing factors. And introduces the fancy of the health human capital investment and physiological quality.

1. Introduction

With the advent of knowledge economy, human capital has become an important factor to promote the continuous development of organizational economy and the sustainable competitive advantage of organizations. People increasingly realize that human capital can exert a huge influence on organizations. But the human capital mainly manifests in the laborer body, including the laborer's knowledge, the skill and the health condition. Among them, as an indispensable and important form of human capital, the importance of health is beyond doubt. Under the current economic development rhythm, the organization of employees work pressure increases, long sitting at a desk and other modern work style will create a lot of health risks. In addition, employees not only face the pressure of work safety, job transfer, layoffs and unemployment, but also face life changes such as brokenhearted relationships, family relationships, and the death of loved ones, all of which require employees to spend effort to adjust. In the face of the high incidence of work-related accidents and occupational diseases, the organization has also increased its emphasis on the health of its employees.

But many organizations misunderstand the human resource management. They simply understand human resources management as to recruit talents with high quality at the low cost, ignoring the follow-up investment and the construction of psychological and physiological aspects of employee, which led to the suicides in high pressure working environment or the tragedy of sudden death. Within the organization, employee health includes not only physical health, but also mental health. The organization's investment in employees' health includes the investment in employees' medical treatment, psychological consultation and health care. Most studies have been focused on the impact of educational human capital on organizations. This paper believes that health is as important as education, so the relationship between health human capital and the improvement of employees' physiological quality is studied from the perspective of health human capital.

2. Overview of health human capital

2.1 Overview of Health

2.1.1 Meaning of health

In the traditional cognition, health is "disease-free", and the modern view of health refers to people's comprehensive health. The World Health Organization defines "health" as "a perfect state of being, not only the absence of disease, but also an individual's physical, mental and social well-being"[1]. The WHO Charter measures human health from physical, psychological, social and moral aspects. The National Institutes of Health measures people's health in five ways: physical, emotional, intellectual, spiritual and social. On the one hand, we can see that although the definitions of health in the documents of all parties are not exactly the same, most of them include physical, psychological and social aspects. On the other hand, we can find that these definitions of health are too "perfect". Few people can have such a "perfect" state of health. Therefore, many scholars have questioned the definition of WHO. Modern people's health is a holistic concept, which includes many specific aspects in addition to physical and psychological aspects, such as mental health, intellectual health, moral health, environmental health and so on. This paper will refer to the definition of health by the World Health Organization, and refer to the specific classification of health by Wang Hong et al. to elaborate health from three aspects of physiology, psychology and society [2].

Physical health is the state of health of the human body, which can usually be observed through the perception of fatigue, disease and other levels. Generally speaking, the person that physiology is healthy has more exuberant energy, won't feel the body is tired so that people can maintain more agile reaction ability, and do not suffer from physical diseases. Physical health can be measured by indicators such as mortality, life expectancy, and prevalence of physical diseases.

Mental health refers to a person's mental activity state, namely whether cognition is normal, personality is complete, value is sound, etc. A mentally healthy individual can maintain a positive attitude towards life and work, proclaim justice, and hold a contemptuous attitude towards unjust or immoral behavior. The person of mental health has certain psychology to resist pressure ability, won't make extreme behavior easily because of trifles. The modern health scholar Song Yifu put forward that "the mind must be trained before the health", which shows that mental health and physical health are equally important. Mental health can be reflected by indicators such as depression rates and suicide rates.

Social health refers to an individual's ability to adapt to society and get along with others. Social health can be reflected in two dimensions: how quickly a person adapts to a changing social environment and how well he or she can relate to others on a moral basis. The health status of social dimension can be measured by indicators such as happiness rate and satisfaction rate.

2.1.2 Influencing factors of health

There are many factors affecting health, and Lalonde (1974) once put forward four well-known factors associated with death from disease: lifestyle, environment, physiology and health care system. He identified lifestyle as the single most important factor affecting human health [3]. Kenkel (1990) and Rice (1998) argue that a person's health is influenced by health care, lifestyle, environment and genetics [4]. Zhu Bixiang (2005) and Liang Junlin (2006) argue that medical level, income level, social environment, individual health behavior, age, gender, human biology and genetics all have an impact on individual health [5-6]. In this paper, health factors are divided into the following four categories [7]:

(1) Lifestyle

Lifestyle refers not only to one's personal habits, but also to the way one works at work. A good lifestyle contributes to a healthy state, while a bad lifestyle increases the risk of disease. Good lifestyle includes early rising, reasonable exercise, etc., while bad lifestyle includes sedentary life, irregular work and rest, etc.

(2) Family status (including family income, occupation, etc.)

Family status includes factors such as family income, personal occupation and family relationships. Family conditions have a great influence on one's physical health. The level of income of the family determines the level of access to health services, and the inability of a poor family to guarantee basic health services must have a serious impact on the health status of the individual. Personal occupations can affect the way people work and the environment, thus affecting their health. For example, sedentary people in the office do not get enough exercise, and people engaged in chemical production are exposed to chemical pollution all the year round. In addition, family relationships are an important factor in health. In a harmonious family relationship, people will feel warm, and individuals in such family relationship will be more optimistic. On the contrary, if the family relationship is not harmonious, individuals will suffer psychological pressure from both social and family aspects, and will be more likely to suffer from psychological diseases such as depression than others.

(3) Medical level

The level of medical care includes not only the level of hard medical facilities, but also the investment in medical care in the region. Generally speaking, the higher the medical level, the better the prevention and treatment of various diseases are than the backward areas.

(4) Social environment

Social environment includes social interpersonal relationship, social environmental health and other factors. Social relationships have a great impact on people's health, especially their mental health, which is illustrated by the increasing occurrence of "occupational diseases". In daily life, large areas of air pollution or water pollution, radiation pollution and so on, pose a great threat to the health of residents. For example, chronic bronchitis is caused by air pollution.

2.2 The meaning of healthy human capital investment

Based on the existing research on human capital, the human capital value of laborers is mainly reflected in knowledge, skills, experience, health and other aspects. Among them, the knowledge and skills possessed by workers can be realized through investment in education, and the experience can be realized by means of workload and working time. Although improvement in any of the four aspects given can bring additional value to the organization, only the health of the worker determines the sustainability of the value that the worker can bring to the organization.

The research on human capital investment in health comes from the United States. In 1909, Iring Fishe considered health as a form of wealth, which was the earliest argument that health was human capital in a broad sense [8]. In 1961, Schwartz put forward the concept of human capital for the first time and elaborated it. He believed that in economic development, the function of material capital could not be compared with knowledge and technology, and "people" as the basis of human capital was the carrier of knowledge and technology [9]. Schultz clearly put forward the concept of "healthy human capital" in the economics of poor countries in 1979. He regarded healthy human capital investment as a form of human capital investment, believing that this investment includes "all the costs that affect a person's life span, strength, endurance, energy and vitality".

Muskin (1962), an American health economist, believes that human capital investment in education and human capital investment in health are closely related, and the two are complementary. Healthy human capital can be used as both investment products and consumer goods [10]. Since then, education and health have become topics of human capital discussion. Micheal Grossman (1972) put forward the concept of health human capital and incorporated it into the framework of human capital theoretical analysis, and established a theoretical model of individual health and medical service needs [11].

Becker (1987) pointed out the importance of health from the perspective of access to human capital. He believed that human capital not only means the acquisition of individual talents, knowledge and skills through education, but also means the health status and longevity of individuals [12]. Health investment refers to the resources that people spend on food, clothing, exercise (including time) and medical services in order to get healthy.

As Zhu Bixiang mentioned in his article, in Europe and the United States and other countries in the research literature, words like "the employee health and well - being", "employee health care", "the health promotion designed" are commonly used to reflect on employee health management problems [13]. Dee W. Edington (1993) believes that health management is a process of comprehensive management of health risk factors aimed at improving the health awareness of the whole society [14]. Cirillo (2006) describes health management as "using information analysis to improve health care management and performance [15].

Chapman L and Sulliva S. C (2004) believe that employee health management is a workplace problem [16]. There are many employee health management programs carried out by enterprises, such as health risk assessment, physical examination or physical examination, health education and workplace exercise [17].

Health human capital investment is a branch of human capital investment. According to Shen Chenguang, employee health management is a combination of human capital theory and health management. Human capital theory is the foundation and health management is the method [18]. He noted, "The human capital theory of Schultz and Denison emphasizes more on the enhancement of human capital by education and training to employees. The health of employees is the foundation of their comprehensive quality. Without health, there is no such thing as comprehensive quality. Shen Chenguang mentioned in his article "Discussion on Human Capital and Employee Health Management" that compared with education investment, employees' health investment returns are not so intuitive and the results cannot be observed quickly. However, from the perspective of the whole society, employees' health investment is beneficial to the economic development of the whole society.

Most of the existing studies focus on human capital investment in education, but the research on human capital investment in health is still lacking. Compared with human capital investment in education, the return on human capital investment in health is less direct and less obvious. But an increase in investment in employee health increases organizational value by influencing other aspects. For example, good staff health management, on the one hand, reduces the staff health risk to the development of their ability to work, the limitations of job opportunities to expand, improve the quality of the organization's human capital; On the other hand, it makes employees feel the humanistic care of the organization, which alleviates their worries to some extent, optimizes their work motivation and willingness, and then improves their efforts and work performance.

2.3 Characteristics of healthy human capital investment

Based on the existing literature, this paper summarizes several characteristics of healthy human capital investment, which are listed as follows:

First, investment in healthy human capital is an investment in people, in their health status. Unlike the general concept of physical capital investment, investment in healthy human capital does not have access to physical objects and is limited to the prevention and improvement of individual health status.

Second, healthy human capital is both an investment and a consumer good. As an investment product, investing in people's health can earn corresponding returns. On the one hand, investments in healthy human capital reap the benefits of an increase in people's total working hours, that is, working years, thus increasing the amount of time people spend creating value and improving the economic performance of the organization as a whole; On the other hand, the investment in health is comprehensive, the improvement of people's comprehensive health quality will lead to the improvement of work ability and work mentality, thus improving people's work enthusiasm and productivity. As a consumer product, people can derive utility from being "healthy," and people who are healthy live and work happier and more smoothly.

Third, health human capital is not exactly the same as traditional health care. Traditional health care is usually provided to employees with a medical condition, a "back-hand" safeguard if an employee has had an accident or contracted an illness. Human capital investment in health puts more emphasis on "pre-emptive prevention". It is a long-term process to avoid health risks as far as

possible by advocating healthy life and work style.

3. Overview of physiological quality

3.1 Status of physiological quality

In recent years, people's economic level and lifestyle have been changing with the development of information technology, and these changes also have a significant impact on people's physiological quality, mainly reflected in the following aspects [19]:

Consumption levels and eating habits have changed. Compared with the past, people's consumption level has been improved, the diet structure has been improved, the intake of nutrients needed for body growth from food has been greatly increased and people's intake of energy is often more than the body needs, thus leading to obesity.

The demand for mental work is increasing. With the development of science and technology, the manual work of laborers has decreased significantly, while the demand for mental work has increased, resulting in the modern way of "sedentary" work. In this way of working, the lack of physical exercise (especially lower limb exercise), long-term, may lead to the degeneration of human organs and resistance. And the increase of mental work increases the burden on the brain and heart, thus increasing the possibility of heart and brain diseases.

The problem of poor vision is becoming more and more serious. Nowadays, computers, mobile phones, tablets and other multimedia devices have become indispensable tools for learning and working. Most jobs need computers in the process of working, such as accountants, lawyers and investment banks. Staring at the screen for a long time in front of the computer results in the eyes receiving screen radiation for a long time. In addition, the increase of work pressure leads to staying up late and not getting enough rest, which greatly harms the eyesight of workers. Not only the organization of workers, the rate of poor vision of students also greatly increased, and the phenomenon of myopia shows a younger trend, poor vision of the individual age is getting younger.

At the same time, due to the rapid development of industry, the pollutants discharged by industrial organizations also bring great threat to people's physiological health. Pollution of toxic gases and solids in the atmosphere may cause respiratory bronchitis. Water pollution may cause aquatic organisms to absorb contaminated elements. Human consumption of these contaminated aquatic organisms may also cause health problems.

3.2 Meaning of physiological quality

Physiological quality is the basic quality of human being as organism, mainly refers to the physical state of human being, which is more physical than mental quality. Ma Shibin defined physiological quality as "the morphological and functional characteristics that affect the behavior and activity pattern, activity ability and activity efficiency of human organisms, and it is the internal stipulation of human organisms" in Physiological Quality Indicators [20]. Ma Shibin examined physiological qualities from two perspectives, namely health and physique. Health refers to the healthy state of the human body, such as whether the body is suffering from diseases and physical lesions. The physical appearance and functional characteristics of the individual, such as heat resistance, flexibility, softness, etc., are emphasized. There are also differences between healthy individuals.

Due to the great repeatability between the factors affecting physiological quality and the factors affecting health, the influencing factors of physiological quality are not discussed separately.

4. Relationship

Dee w. Edington (2006, 2007) and Schultz A.B (2007) both believed that carrying out health investment and management would improve the quality of human resources and even the quality of life, so as to improve the enterprise's human capital returns, enhance its core competitiveness, and ultimately promote the sustainable development of the enterprise [21-22]. This paper considers the health human capital investment of the organization and the improvement of employees'

physiological quality influence each other. The investment of human capital in health will promote the improvement of staff's physiological quality. According to Ma Shibin's physiological quality theory, this influence is mainly reflected in the health aspect of physiological quality. Referring to Luo Wenhao's viewpoint on the relationship between human resource management and employee health in the Era of Great Change, this paper believes that the impact of investment in healthy human capital on the improvement of physiological quality is as follows [23]:

The first is to accurately identify the hazards to employee health. When the organization plans the investment of health human capital, it will explore the factors that endanger the health of employees. For example, the modern work pressure is increasing, and the phenomenon of working overtime and staying up late is more serious. Luo noted that scholars at home and abroad have started to carry out research on this phenomenon. Another, this paper argues that, although the work is serious, but for each specific organization, the cause of overtime is quota and task allocation is not reasonable, or employees enthusiasm is not high and low working efficiency to complete the task within the allotted time, or for other reasons, need to each organization in-depth analysis in the comprehensive planning, to identify the deep reason of affect employee physical quality. Some of these factors are not only factors that affect workers' health in the work situation, but also important factors that influence health in family life. For example, the sedentary and inactivity that characterizes the modern work style may lead to the deterioration of human functions. In the non-work time, this factor can also have a huge negative impact on the physiological quality of the human body, which does not differ according to the environment.

Second, we can prevent the decline of physiological quality through intervention mechanism. The organization shall develop a preventive mechanism for the factors analyzed, and take prior control before the occurrence of problems in the physiological quality of employees. Take the lack of exercise among employees for example. Those who do not exercise will experience physical degradation and lower body resistance. To address this, organizations can set up gyms in the company for employees to use for free or for a small fee, or set up break time at work, hold sports meeting and other methods to increase employees' exercise. It provides time and place for employees to exercise, which can relieve the pressure of sitting at a desk for a long time and prevent the decline of physiological quality to a certain extent.

Thirdly, employee health management is taken as a part of organizational culture so as to promote the improvement of employees' physiological quality. An organization that values employee health will raise it to the level of policy, increase investment in human capital for health, and care for employee health will be reflected in all aspects of the organization to build a healthy and friendly workplace environment. This emphasis on health will have an impact on employees as part of the organizational culture. Employees who work in a culture that values health also pay enough attention to their own health. In addition to devoting part of their energy to their health in the organization, these employees also spend part of their energy on sports, health maintenance and other things conducive to their health at home. Therefore, as a part of culture, the organization's investment in employees' health will have a beneficial impact on the improvement of employees' physiological quality.

This paper holds that the improvement of employees' physiological quality will also have an impact on the investment of human capital in the organization's health, which is mainly reflected in the positive direct impact of the improvement of physiological quality on the organization, which will further promote the investment of human capital in the organization's health. The impact of the improvement of employees' physiological quality on the organization is as follows:

First, the improvement of employees' physiological quality can extend their total working time in the organization. The improvement of employees' physiological quality means the enhancement of their physical functions and the enhancement of their resistance to diseases. In units of one day at the same intensity of work stress, those with better physical fitness, by contrast, can work longer hours. Similarly, if you look at your entire career and assume that your job hopping rate is zero, you will be able to stay longer.

Secondly, the improvement of employees' physiological quality can enhance their working

ability, thus improving labor productivity and increasing organizational value. Take construction workers as an example. A worker with good physical quality can carry more bricks than others. If the labor productivity is measured by the amount of moving in a day, the labor productivity of a worker with good physical quality will be higher than that of others. Therefore, the improvement of employees' physiological quality can improve their ability to complete work tasks, improve labor productivity, and thus increase organizational value.

Thirdly, the improvement of employees' physiological quality can improve their job satisfaction and organizational loyalty. The influence of physiological quality improvement on employee job satisfaction and organizational loyalty can be expounded from two aspects. In terms of work, the improvement of employees' physiological quality keeps them away from diseases, enables them to complete work tasks with higher quality and may be praised by leaders for this, and may even be rewarded with promotions and raises. On the family side, the improvement of physical quality and the return on work will make employees happy, and from the aspect of medical expenses, it will relieve the burden on the family and promote harmonious relations among family members. And a harmonious family atmosphere can support employees' good performance at work, thus creating a circular effect. Therefore, the benefits of job reward, family harmony and physical quality improvement themselves lead employees to improve their job satisfaction and organizational loyalty in exchange.

Since the improvement of employees' physiological quality brings the above three benefits to the organization, the organization will further increase the investment in healthy human capital to gain more positive effects.

5. Summary

This paper discusses the relationship between health human capital investment and physiological quality improvement, and expounds the health human capital

However, there are still some defects in this paper. First, the exposition of this viewpoint in this paper is basically based on theoretical research, without sufficient empirical research as support. Second, the research in this paper is limited to the positive impact between human capital investment in health and the improvement of physiological quality, without considering both sides of things, namely, it fails to elaborate the negative impact contained therein.

Based on the above defects, the author proposed the future research agenda. In the future, researches can be conducted from the following several aspects: first, to design a reasonable scale, by using the method of questionnaire survey to collect the respondents in the healthy level of human capital investment, the body of the respondents, job satisfaction, such as data, using SPSS software to calculate the data, through calculation results from the empirical validation of health human capital investment and the relationship between the staff raw quality promotion. Second, the negative impact between human capital investment in health and physiological quality improvement should be considered in the future. For example, if organizations focus too much on human capital investment in health, will it lead to higher investment costs for the organization? Will it affect the purpose of profit? If the organization of more recreational and sports activities, how much activity frequency is appropriate? Will it distract the staff and make the work worse? Thirdly, what is the effect of the investment of healthy human capital on the improvement of psychological quality? Fourth, does investment in healthy human capital have the same effect on male and female employees? If there are differences, in what ways and what factors are the differences?

The author believes that the discussion of the above issues can promote the development of relevant researches on the investment of health human capital and employee health management in organizations, and can improve the existing theoretical framework. In-depth discussion of such issues will help the organization to formulate reasonable rules and regulations. Therefore, the above future agenda has theoretical and practical significance.

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