

THE IMPACT OF HUMAN CAPITAL, ORGANIZATIONAL LEARNING ON ORGANIZATIONAL PERFORMANCE OF UNIVERSITIES IN HAINAN, CHINA

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ABSTRACT

According to statistics, the number of higher education institutions in China ranks third in the world, after India and the United States. With the development in recent decades, the development quality and comprehensive strength of Chinese institutions of higher education have gradually improved. As a comprehensive and service-oriented organization, the development and utilization of human capital, organizational learning of higher education are important indicators to measure organizational performance of universities. There are three research objectives in this study, which are as follows: (1) To assess level of variables of human capital, organizational learning on organizational performance of universities in Hainan. (2) To explain the variables influence the organizational performance of universities in Hainan. (3) To verify model for improving the organizational performance of universities in Hainan. This study employs quantitative and qualitative research methods to achieve its goals, the author will reveal the long-term impact of human capital and organizational learning on organizational performance of universities, and form a model to promote the long-term and stable development of universities in Hainan. The findings of this paper can help to study the factors affecting the development of organizational performance in universities, optimize and promote the coordinated development of various departments in universities, and achieve the improvement of organizational work efficiency. The research perspective of this paper is in the field of universities, with certain innovation, and the research results will provide help to improve the overall strength and competitiveness of universities. So as to promote the long-term development of regional and national education quality.

Keywords: Human Capital, Organizational Learning, Organizational Performance of Universities

INTRODUCTION

In the comprehensive strength ranking of Chinese universities in 2023, only Hainan University has entered the top 150 in the country, which shows that compared with other provinces in China, the comprehensive strength of universities in Hainan is much lower than that of other provinces with developed education. Hainan is the southernmost province in China, the state has given great support to

its education and economy. Hainan is an international education demonstration island and a national education innovation and development experimental zone approved by the Chinese government. Under the premise of controllable risks, international high schools and kindergartens will be set up on a pilot basis to implement international education. Under the premise of mature conditions, pilot overseas engineering colleges and vocational colleges to run schools independently in Hainan and explore overseas high-level enterprises to run schools solely in Hainan. This means that there are more excellent overseas educational resources cooperating with colleges and universities in Hainan, more and more schools are settled in Hainan, a variety of top universities in China are cooperating with each other in running schools, and a large number of high-quality education and talents are pouring into Hainan. Under the premise that the local education population in Hainan is not growing rapidly, students have more choices, and local colleges and universities in Hainan have gradually lost their previous advantages. Competition among universities has emerged. Faced with this situation, local colleges and universities in Hainan have to plan ahead, pursue excellent teaching quality and school infrastructure construction, improve efficient organizational efficiency, increase human capital investment, and further enhance the university brand image, so as to obtain high-quality student resources and teacher resources in the fierce competition, and finally obtain good social recognition and satisfaction. Based on this, each university has a new understanding of organizational performance, especially the improvement of organizational performance has been included in the daily management and the university's strategic development process. Nowadays, all sectors of society attach great importance to performance. As a representative of higher education, universities not only provide students with academic and vocational education, but also undertake the responsibility of social service. As an educational social service organization, the organizational performance of a university means the level of its management. Administrators of major universities have been seeking to improve organizational performance through innovative management methods and models, and ultimately improve the overall level of the university.

There are some common indicators for university ranking in the world, which are mainly composed of academic reputation, employer reputation, teacher-student ratio, and literature citations. Take China as an example, the comprehensive strength of a university is evaluated by the proportion of disciplines, the strength of teachers, the investment in scientific research and the degree of internationalization. Further refinement, the comprehensive strength of the school in addition to the above factors, there are more and more detailed indicator system construction, including the school's internal organizational structure, management level, management concept, organizational service level, organizational learning level, etc., will have an impact on the overall level of the university. When evaluating the comprehensive level of a university, we usually use organizational performance indicators to measure whether the management of the school is developing towards a healthy state. The factors affecting the development of the organization are the factors that managers need to pay attention to in the daily management process. As students graduate and enter society, the evaluation of employers will also affect the reputation of universities, and the degree of contribution of graduates to society determines the difficulty of employment. A good reputation will have a positive impact on prospective students. On the other hand, from the academic point of view, whether the university's research can be translated into social productivity, whether it can improve the productivity of the region and provide help for economic development is another measure of the university's participation in social development. Therefore, the

university today is not only a comprehensive organization that provides education, but also an organization that provides a continuous output of human capital for social and economic development.

At present, the increasingly fierce competition among universities not only carries the organizational pressure of universities themselves to be promoted to a higher level, but also reflects the social demand of building an innovative country. How to construct competitiveness has become a severe challenge facing Chinese universities. For university organizations whose core mission is knowledge production and dissemination, returning to organizational characteristics and respecting competition rules has become an important choice to turn challenges into opportunities [1].

With the changes in the economic development environment of various countries, the environment of higher education is also constantly changing, and the competition among institutions of higher education has become normal, which means that institutions of higher education enhance their visibility by constantly improving their own construction. In other words, the development and survival of institutions of higher education cannot be separated from benign competition, which means the battle for talents and the continuous optimization and reform of management level. If an organization wants to have a competitive advantage, it must take the development and investment of human capital as the overall picture of development. Choosing employees suitable for the development of the organization and stimulating their learning ability and cultivating their knowledge reserve through training and management means are the issues that organizational leaders need to think about. As an important prerequisite for organizational development, it is very necessary to provide employees with a steady stream of promotion opportunities and training programs, with the ultimate goal of retaining excellent employees, digging deep into potential human capital and making investment. To achieve this, organizations need to invest significant resources to ensure that employees produce high productivity in a rapidly changing and increasingly complex work environment. And acquire the knowledge, skills and competencies needed to work effectively.

Barney believed that if a university's resources and capabilities have the three characteristics of value, scarcity and difficulty to imitate, then the university has a stable and strong core competitiveness. In the current university competitiveness evaluation system, when we use some evaluation indicators, it is most easy to ignore that human capital, as a scarce resource, also plays an important role in the development of universities. In addition to some hardware equipment owned by universities, such as campus scale, laboratories, stadiums, libraries, etc. The real core competitiveness of a university is whether human capital has been effectively developed and utilized. Human capital must play an important role in the establishment and coordination of organizations. If a university has an advantage in the utilization of human capital, it is likely to determine the monopoly of competitive assets. Nowadays, universities have excellent human capital resources, which cannot be copied by other schools. It exists in the group organization. Therefore, the establishment of a healthy and agile internal organization is an important platform for human capital accumulation and development, so as to improve the value of human capital. Through reasonable and innovative organization and management, the university can finally achieve all-round development.

Innovation management cannot be separated from the support of knowledge. Organizational learning is an effective way to integrate knowledge. Knowledge can optimize people's cognition and improve people's behavior, and help organizations achieve expected goals [2]. Carrying out effective organizational learning plays a very important role in the process of management innovation. The

adoption and implementation of management innovation will also provide an opportunity for organizational learning and promote enterprises to produce new methods, knowledge and dimensions [3].

In order to adapt to the changing environment and achieve a high level of organizational performance, each university organization will adopt a variety of ways to maintain long-term competitive advantages, and management innovation has become the key means for the transformation and upgrading of university organizations. The cultivation of a university's core competitiveness is inseparable from the innovation, accumulation, transfer and sharing of knowledge, which requires that a university should become a learn-based or knowledge-based organization. By absorbing the external and internal knowledge of the university, the university should integrate and form its own comprehensive internal capability. Once formed, such capability will become the core competitiveness of the university. This kind of competitiveness is difficult for other universities to imitate. Therefore, attaching importance to the cultivation of human capital and the stimulation of value, optimizing the internal management of the organization, is fundamental to enhance the core competitiveness of the university.

How to motivate universities to produce greater performance through internal management of organizations? Nowadays, with the continuous advancement of the education reform in colleges and universities, the contradiction between the development of colleges and universities and the resources of colleges and universities has become increasingly prominent. In the daily management of colleges and universities, due to outdated management means and poor coordination ability within the organization, a lot of human resources are wasted. Organizational learning ability is not strong, leading to the lack of innovation ability, the final result is unable to play the role of the organization, the organization performance has a great obstacle. There are many problems in the performance management of Chinese universities, such as attaching importance to performance appraisal while ignoring the function of performance management; Overemphasize the quantity of scientific research and underestimate the quality of teaching; The goal of performance management is not clear, and the performance appraisal mechanism is not perfect; Lack of communication and feedback between evaluators and faculty [4].

In the 1990s, performance management emerged in western enterprises, and many managers applied it to enterprise management. This management method can use scientific and systematic standards to evaluate the working style, ability and effectiveness of enterprise employees, and promote employees to achieve work goals and achieve excellent work results. Although the internal organizational structure of universities is not exactly the same as that of enterprises, they have the same organizational goals and similar management methods. More and more universities have introduced the management methods of enterprises to strengthen the collaborative development of various departments, and the management methods of enterprises have played an important role in the daily management of colleges and universities. In the process of employee performance and departmental organizational performance management, the managers of Chinese colleges and universities are linked with the long-term development of the university. We can see more and more management methods and strategies in the management work of colleges and universities. Some universities no longer wait for the allocation of higher management departments but take the initiative to win more student resources and human resources through reform. China is in the midst of rapid development, but the aging population and low birth rate are a problem that we have to face. When they no longer enjoy the demographic dividend, colleges and universities should pay more attention to the quality of population in their development. In

the future, the competition among Chinese universities will become increasingly fierce. Besides school ranking, the competition indicators should focus on the education quality, the number of students, the level of scientific research, the number of schools, hardware, and software equipment of the whole region. One of the most important links is the construction of university teaching staff. In the context of workplace competition, more and more schools no longer regard the size of teaching staff as a hard indicator but begin to pay attention to the quality of teaching staff. In particular, the quality of human capital of teaching staff in some key departments determines its stable and efficient operation. These factors will directly or indirectly affect the sustainable development of colleges and universities.

Performance evaluation in academia has traditionally been somewhat biased towards research indicators and it seems that this orientation is becoming even more profound. A growing number of reports document that universities striving for government funding, research grants and high rankings have adopted strategies including recruitment and reward systems that favor academics with top publications or the potential to secure such publications [5].

In this study, the researcher intends to analyze the performance of colleges and universities in Hainan and build a model of the factors that affect the performance of colleges and universities. In the first stage, researchers hope to study the relationship between organizational performance, human capital, organizational learning through quantitative research design. The model developed from the first stage is then discussed through in-depth interviews. Finally, the qualitative research results obtained can help and confirm the application of the model in universities to some extent.

Through the preliminary investigation and research of the author, it is found that the expansion of the scale of China's higher education is not accompanied by the improvement of efficiency, and the quality and efficiency of some higher education have declined when the scale is expanded. While strengthening organizational management, management should also produce benefits. The application of organizational performance management as a management method in enterprises has achieved good results. How to apply performance management in the management of colleges and universities to provide reference for the management of regional universities has not been deeply studied in the previous research. Therefore, the research on the factors that affect the organizational performance of universities can be taken as the research gap of this study. The researchers plan to analyze the performance of several colleges and universities in Hainan and build a model of factors that affect the performance of colleges and universities. In the first stage, researchers hope to study the relationship among organizational performance, human capital and organizational learning through quantitative research design. The models developed from the first stage are then discussed through in-depth interviews. Finally, the obtained qualitative research results can help and confirm the application of the model in universities to a certain extent.

OBJECTIVE

This paper mainly studies from the following three aspects, through the investigation to obtain the current human capital, organizational learning among five colleges and universities in Hainan, through the questionnaire to obtain important reference information.

(1) To assess the level of variables of human capital, organizational learning on organizational performance of universities in Hainan.

(2) To explain the variables, influence the organizational performance of universities in Hainan.

(3) To verify model for improving the organizational performance of universities in Hainan.

The author clearly conducted a lot of research on each variable, so that the correct definition and questionnaire can be made through the correct understanding of variables.

Performance is mainly divided into organizational performance and individual performance. It can be understood as a total collection of benefits produced within an organization within a certain time range. Individual performance can be simple to achieve organizational performance, the organization sets performance standards for individuals, so organizational performance is based on individual performance development. This refers to organizational performance in Chinese colleges and universities.

According to Schulz, human capital is a type of capital embodied in the workers, which is expressed in the quantity and quality of the workers, that is, the knowledge level, technical level, working ability and health status of the workers, and is the sum of these aspects of value. Human capital is formed through investment and plays an important role in social production like land, capital, and other substantive elements.

Organizational learning refers to all kinds of actions taken by organizations around information, knowledge, and skills in order to achieve development goals and improve core competitiveness. It is the process by which an organization constantly strives to change or redesign itself to adapt to a constantly changing environment.

University organization has at least the following four characteristics: first, duality, that is, the dual characteristics of academic and administrative; Second, gambling, that is, different interest groups around different resources, especially academic resources bargaining and competition; Third, knowledge, that is, knowledge preservation, dissemination, application and innovation based on disciplinary professional form; Fourth, disorder, that is, due to the differences in knowledge fields, there are great differences in the work paradigms among the grass-roots academic organizations, and it seems that there is no common goal, or the goal of the university organization is relatively vague.

According to the above definition of variables and the characteristics of the organizational structure of higher education, the author conducted research on each variable, and determined the relationship between each variable through the research results, so as to clarify the significant impact of the above two variables on organizational performance.

METHODOLOGY

According to the three research objectives of this paper: (1) To assess level of variables of human capital, organizational learning on organizational performance of universities in Hainan. (2) To explain the variables, influence the organizational performance of universities in Hainan. (3) To verify model for improving the organizational performance of universities in Hainan. Therefore, the research process is as follows:

Sub-Section 1

This paper adopts a hybrid research method, which can combine quantitative and qualitative data and solve problems through various analyses. It was decided to adopt quantitative research methods to

collect data for the questionnaire survey on human capital, organizational learning, organizational performance of university, and add the data from qualitative interviews to quantitative experiments as a check of operational results, and finally draw a conclusion. This paper will use the Likert scale to collect data, publish questionnaires mainly through network platforms, and collect information about target groups. The questionnaires employed in this study are well-established scales that have been validated by previous researchers, demonstrating satisfactory levels of reliability and validity. Qualitative research methods were adopted, and data were collected through in-depth interviews.

Sub-Section 2

The random sampling method was employed to ensure a representative sample of teachers and employees in the Hainan province of China, encompassing 5 universities. This approach guarantees an equal opportunity for every element within the population to be selected for the sample, thereby facilitating the calculation of margin of error and level of confidence. As the southernmost province in China, Hainan has a small number of colleges and universities, and the management level and education development level of colleges and universities are obviously different from those in developed regions. Therefore, studying colleges and universities in Hainan is of great significance to this topic, which can provide suggestions for the management of colleges and universities in Hainan, improve the quality of talent introduction, and provide important reference data for talent management of colleges and universities.

The following suggestions for minimum sample sizes are offered based on the model complexity and basic measurement model characteristics:

Minimum sample size-100: Model containing five or fewer constructs, each with more than three items(observed variables) and with high item communalities (6 or higher)

Minimum sample size-150: Models with seven constructs or less, modest communalities(5) and no underidentified constructs

Minimum sample size-300: Models with seven or fewer constructs, lower communalities(below .45), and/or multiple underidentified(fewer than three) constructs.

Minimum sample size-500: Models with large numbers of constructs, some with lower communalities, and/or having fewer than three measured items.

The SEM should be modeled using a multivariate approach, and it is recommended to have a sample size threshold of at least 20 times the number of observable variables used in defining the samples. In this study, there were 10 observable variables, thus requiring a minimum sample size of $(20 \times 10) = 200$ samples.

Considering the actual situation of the research object, the number of parameters estimated for structural equation modeling (SEM) and the number of variables in the research model and other evaluation criteria, the researcher finally selected a sample size of 220 in order to ensure sufficient feedback degree in the collected questionnaires and to meet the acceptable deviation level of 5% of participants. Completed questionnaires are submitted anonymously and are kept confidential with respect to the dissemination of results.

Sub-Section 3

Quantitative research

The sample was randomly selected from 5 universities in Hainan province,

In this study, semi-structured interview was adopted, so the number of interviewees was set to 20, and the selection was made in accordance with the principle of purpose and convenience sampling. The number of interviewees is 20, 12 of whom are employees engaged in school management for a long time, mainly the staff of the university's academic affairs office and personnel department. 8 teachers are engaged in teaching and management. They are familiar with organizational innovation management. Teachers will be selected from management schools or management majors in each university.

Sub-Section 4

The Quantitative Study

The researcher divides the questionnaires into four parts: personal background, human capital, organizational learning, organizational performance of universities. The questionnaires use a Likert-type scale. The questionnaire design should fully consider its rationality and applicability, and all documents will be in Chinese. The validity and reliability of the questionnaire were tested before it was sent to the sample group.

The researchers must evaluate the consistency of the model against specific criteria, in the process, the researchers test the consistency of the model with empirical data by ensuring that the factor load of the observed variable measured by each potential variable is greater than 0.6, showing that the observed variable can be used to measure the potential variable.

Sub-Section 5

1. Organizational performance of universities scale

In order to better evaluate the organizational performance of universities in Hainan province, this study conducted an empirical analysis on the characteristics of higher education organizations based on the three dimensions of Kim Cameron's study on organizational performance of colleges and universities. The paper also modified the organizational performance scale of higher education designed by Jiang et al. (2011) according to the actual situation. Three dimensions were selected, namely, staff satisfaction, social satisfaction, teaching and research performance. The questionnaire asked respondents to choose their attitude towards each statement on a scale of 1 (strongly disagree) to 5 (strongly agree). According to the performance of the obtained data in different performance dimensions, the mean description statistics were carried out and the significance test was conducted for the mean difference of independent samples.

2. Human capital scale

The four components of human capital were used to divide the dimensions: knowledge, experience, skills, and attitude. In the process of questionnaire design, based on Schulz and Backer's theory of human capital, and questionnaire was prepared covering all the dimensions (knowledge, skills, attitude and experience of human capital). These indicators were synthesised and drawn from the studies of Bontis (1999), Bontis and Fitz-enz (2002), Bukh et al. (2001), Dzinkowski (2000), Edvinsson and Malone (1997), Gu and Zhou (2004), Knight (1999), Roos et al. (1997), Stewart (1997), Sveiby (1997), Van Buren (1999) and Wu (2000).

3. Organizational learning scale

This study uses the scale designed by Sinkula, Baker & Noordewier (1997), which is widely used and has high reliability and validity. It includes three dimensions: learning commitment, shared vision and open mind. There are 4, 4 and 3 items in each dimension respectively, and a total of 11 items.

Sub-Section 6

In order to ensure the accuracy of the conclusions of the paper, the researchers designed a semi-structured interview and truthfully recorded the conversation content of the interviewees. The characteristics of semi-structured interviews are convenient quantification, reliable control results and high recovery rate. Therefore, the researchers conduct qualitative interviews based on human capital, organizational learning, and organizational performance, and the opinions and suggestions obtained will be part of the conclusions of this study. The research questions of this paper are as follows(Problem sample):

- 1.How do you think the level of human capital in your department can make a difference?
- 2.How do you perceive the human capital impact on the organizational performance of university?
- 3.How do you think organizational learning affects college staff and teacher's performance?

Please give an example

4.In your professional experience, what are some of the primary obstacles to fostering human capital development, organizational learning, within a university environment? How can these impediments be effectively addressed?

The above interview questions are designed to understand the actual thoughts of the participants from another level, including the extension of some specific questions, to dig into the detailed thoughts of the interviewees, so as to explore the complex relationship between human capital, organizational learning, and organizational performance. Of course, there will be some subjective factors in the respondents' answers, but these answers can contribute to the author's research and inform the overall results of the study. In order to fully investigate the causal relationship between direct and indirect effects, the researchers interviewed mainly staff, directors and teachers of the universities.

CONCLUSION AND FUTURE WORK

By measuring the samples, relevant data can be obtained to support the author's research hypothesis, and the ultimate goal is to explore the relationship between various variables and the degree of mutual influence. Through interviews, the attitudes of interviewees can be understood to assist in the verification of research hypotheses. In the future, the design will be further optimized, and the measurement results will be analyzed in detail.

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