

The Influence of Medical Student Voluntary Service on Employment
Competitive Advantage: A Case Study of Shandong Province, China
อิทธิพลของการบริการอาสาสมัครของนักศึกษาแพทย์ต่อความได้เปรียบทางการแข่งขัน
การจ้างงาน: กรณีศึกษา มณฑลซานตง ประเทศจีน

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Received: November 12, 2021

Revised: January 6, 2022

Accepted: January 7, 2022

Abstract

The purpose of this paper is (1) to clarify the relationship between medical students' voluntary service and employment competitive advantage (2) to investigate how professional volunteer services for medical students have a significant impact on employment competitiveness, and to clarify the critical role of volunteer services for medical students in enhancing their competitive advantage in employment (3) to improve the current state of professional volunteer services for Chinese medical students, to solve problems in the service process, and to effectively enhance the competitive advantage of employment. This study used quantitative research with the help of a questionnaire, to investigate the medical college graduates in Shandong province. To collect data sampling approach from 538 people. In the study, the independent variable selects four factors to investigate their relationship with job competitiveness: social responsibility, professional knowledge and skill level, problem-solving ability, and frustration tolerance.

Keywords: Medical students, Voluntary service, Employment competitive advantage

บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อ (1) ศึกษาความสัมพันธ์การบริการอาสาสมัครของนักศึกษาแพทย์ต่อความได้เปรียบทางการแข่งขันในการจ้างงาน (2) สำรวจบริการอาสาสมัครอย่างมืออาชีพของนักศึกษาแพทย์มีผลกระทบอย่างมีนัยสำคัญต่อความได้เปรียบทางการแข่งขันในการจ้างงาน และบทบาทสำคัญของการบริการอาสาสมัครของนักศึกษาแพทย์ในการเพิ่มความได้เปรียบทางการแข่งขันในการจ้างงาน (3) ปรับปรุงสถานะของการบริการอาสาสมัครของนักศึกษาแพทย์ในการแก้ไขปัญหากระบวนการบริการในปัจจุบัน และเพิ่มความได้เปรียบทางการแข่งขันของการจ้างงานได้อย่างมีประสิทธิภาพ เป็นการวิจัยเชิงปริมาณโดยการสำรวจ และใช้แบบสอบถามในการเก็บรวบรวมข้อมูล จากบัณฑิตวิทยาลัยการแพทย์ ในมณฑลซานตง กลุ่มตัวอย่างจำนวน 538 คน ตัวแปรอิสระในการวิจัยครั้งนี้ มีจำนวน 4 ด้าน เพื่อหาความ

สัมพันธ์ที่มีต่อความสามารถในการแข่งขันการจ้างงาน ได้แก่ ความรับผิดชอบต่อสังคม ระดับความรู้ และทักษะทางวิชาชีพ ความสามารถในการแก้ปัญหา และความอดทนต่อความคับข้องใจ ผลจากการวิจัย พบว่า การเป็นอาสาสมัครของนักศึกษาแพทย์มีผลดีต่อการส่งเสริมการพัฒนาความได้เปรียบทางการแข่งขันการจ้างงานของนักศึกษาแพทย์ ปัจจัยที่มีอิทธิพลต่อความได้เปรียบในการแข่งขันการจ้างงานประกอบด้วย 4 ด้าน คือ (1) ความรับผิดชอบต่อสังคม (2) ระดับทักษะความรู้ทางวิชาชีพ (3) การแก้ปัญหา และ (4) ความอดทนต่อความไม่พอใจของผู้รับบริการ

คำสำคัญ: นักศึกษาแพทย์, บริการอาสาสมัคร, ความได้เปรียบทางการแข่งขันการจ้างงาน



Introduction

The fundamental task of education in China is to “build morality and cultivate people.” “Cultivating People” is the person who cultivates “all-round development, sustainable development, and harmonious development” (Guohong, Weihua, & Chao, 2018). Students in college have a high level of independence, professionalism, and professional knowledge and skills. Voluntary services that organically combine service with learning, dedication, and development can effectively transform professional knowledge and skills learned into the ability to serve society and the masses for college students. Promote learning, promote professional learning through volunteer service, improve the moral level, sense of responsibility, service awareness, and psychological quality exercise comprehensive capabilities such as teamwork communication and expression expansion and innovation problem solving, etc (Huaqin, 2018). Medical students are a distinct subset of college students. This peculiarity is primarily.

Talents will be the driving force behind the country’s core competitiveness in the future. With China’s economic development, it is necessary to pay attention to the combination of knowledge and ability theory and practice in talent cultivation and cultivate application-oriented talents

(Ruiyang, 2015). “Insist on focusing on ability optimizing knowledge structure enriching social practice strengthening ability training, focusing on improving students’ learning ability practical ability innovation ability and promoting College students take the initiative to adapt to society,” stated the Outline of the National Medium and Long-Term Education Reform and Development Plan in 2010. Minister of Education Yuan Guiren stated unequivocally in 2013 at the National Education Work Conference: “To improve the relevance and effectiveness of moral education, we must strengthen the practice of educating people and increase college students’ participation in public welfare activities and volunteer services. Encourage the holistic development of students’ moral, intellectual, and physical beauty.”

Research Objectives

1. To clarify the relationship between medical students’ voluntary service and employment competitive advantage.

2. To examine how professional volunteer services for medical students have a significant impact on employment competitiveness, and clarify the important role of voluntary services for medical students in enhancing their competitive advantage in employment.

3. To improve the current status of professional volunteer services for Chinese medical students, solve the problems in the service process, and effectively enhance the competitive advantage of employment.

Literature Review

In the past ten years, with the holding of large-scale events and expositions such as the Beijing Olympic Games, Shanghai World Expo, and Guangzhou Asian Games, the special needs of professionalism, service, and time have gradually made student volunteers the main force of the volunteer team. The volunteer work in colleges and universities has made great progress. In the process of serving society, volunteers actively respond to social needs and expand new service areas. Among them, professional volunteers not only shared the tasks of full-time staff but also compensated for the lack of government and market functions to a certain extent. It can be seen from the literature research that the Voluntary service of medical students abroad has received the attention and attention of the government, universities, and hospitals, and has different promotion measures in education, system construction, and social access. Wei Xiaofei and Chen Xuan mentioned in “Canada Hospital Volunteers and the enlightenment to China’s Medical Care Work” that many Canadian universities require that students enrolled must be engaged in volunteer work for a specified number of hours in hospitals or pension institutions, and attach great importance to volunteer Rights and training for them, some volunteers also need to have a job certificate. Since 1998, various local governments in Japan have formulated regulations to promote and promote citizen activities (or non-profit public welfare activities), providing legal support

for volunteers and volunteer services.

Dan (2014) believes that “volunteer service for college students is a college student with a certain cultural level and ideological awareness, who loves public welfare and social services. Using his spare time and combining his professional knowledge and skills, he voluntarily chooses to participate in volunteer service activities to promote All-round development itself and provide services to society Ruiyang (2015) believes that volunteering for college students is under the guidance of ethical standards, and uses the knowledge and skills they have to selflessly provide assistance to those in need and encourages them to grow from” small “I am a big self” to consolidate and improve the service activities of professional ability development Xingyan (2015) believes that college student volunteer service refers to college students with certain ideological consciousness and enthusiasm for public welfare. When they are studying, they use their professional knowledge and skills to volunteer to provide free services to others and society, and they can exercise their ability and improve themselves

According to literature research, the following problems still exist in the Voluntary service of domestic hospitals: Guan and Wang (2017) and others’ survey and analysis of the status of volunteer services in the top three hospitals as an example: Although 97.1% of the surveyed hospitals have launched Voluntary service projects, most of them It is still in its infancy. “The lack of protection of volunteers ‘rights and interests”, “insufficient funds”, “volunteers’ mobility”, and “unclear legal responsibilities involved in volunteer services” have become the main difficulties for hospital volunteer service activities. Gao (2013) and others pointed out that “conflict between

service time and personal life and work” and “understanding and disagreement of service targets” are also difficulties often encountered by medical volunteers in the service process. After sorting out the existing literature, we find that there are many studies on volunteer service in China, but the focus is on volunteers, that is, there are not many articles that specifically study the impact of volunteer services on volunteers. Especially for the group of medical students in the group of college students, there are very few. Most of the existing research emphasizes the moral education function of volunteer service, taking volunteer service as the carrier of ideological and political education in colleges and universities, and emphasizing its role in improving the moral education quality of college students. Another part of the research has noted the important role of volunteering in improving volunteers’ personal abilities, healthy personality formation, and professional quality, but research is still lacking, and most of them stay at the general level and lack in-depth discussions. The research on the relationship between volunteer services and college students’ employment is also lacking. Although most scholars affirmed the positive impact of volunteer services on college students’ employment, they focused more on how to use volunteer services to enhance the competitive advantages of college students’ employment and employment. Few studies have mentioned how volunteering affects volunteers’ competitive advantage in employment, mostly suggesting strategies, and lacking process and path research.

The research on employment competitive advantage is very rich, and most of them focus on the discussion of connotation, concept, and

structure. Looking at the domestic research on the competitive advantages of employment, the author found that most domestic scholars rely on the group of college students to carry out discussions, which also shows that the employability of college students has received attention from the academic community. The lack of a strong competitive advantage in employment for college students is one of the important reasons for the difficulty in employment. Many scholars have discussed the strategies to solve the difficulty in employment for college students by improving their competitive advantage in employment.

In summary, there are three outstanding problems in the previous research: one is that the research is more on the macro level and less on the micro-level; the second is that the research is mostly on the theoretical level, mostly on the experience summary, and is more focused on Policy-oriented, very few studies have distinguished the structure of employment competitive advantage and made specific explorations. Third, the research group is too broad and not targeted, especially for medical students, a special group of research is extremely lacking. This study takes medical students as the main research body scientifically divides the structure of employment competitive advantage, and adopts qualitative and quantitative research methods to conduct in-depth discussions on volunteer service experience from four aspects of ideological and moral qualities, professional literacy, work skills, and psychological qualities. The influence of medical students’ competitive advantage in employment complements and deepens the previous research results.

Research Conceptual Framework

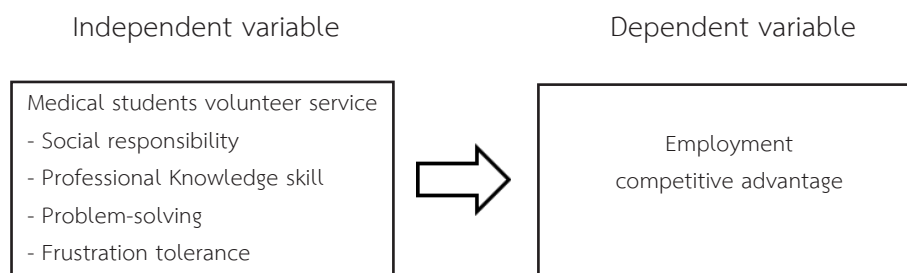


Figure 1 *Research Conceptual Framework*

Research Hypothesis

H_1 : The stronger the sense of social responsibility of the medical student in voluntary service, the stronger their competitive advantage in employment.

H_2 : The higher the level of professional knowledge and skills of a medical student in voluntary service, the stronger their competitive advantage in employment.

H_3 : The stronger the ability of medical students to solve problems in the medical student in voluntary service, the stronger their employment competitive advantage.

H_4 : The stronger the frustration tolerance of medical students in, the medical student in voluntary service, the stronger their competitive advantage in employment.

Research Methodology

This study uses the method of quantitative research, with the help of a questionnaire, to investigate the medical college graduates in Shandong Province.

Population The research object is students within three years (2017-2019) of medical schools in Shandong Province, with a total number of 183,200 (Shan, 2019).



Figure 2 *Shandong Medical College Graduates in the past three years*

Due to the large population (according to the graduate data provided by the Shandong University Student Employment Guidance Center, there were 183,200 medical graduates in 2017-2019, this study uses the Yamane formula to calculate the sample size.

This study takes students within three years of graduation from a medical school in Shandong Province as a sample, using the 5% sample size formula of Yamane error and 95% reliability coefficient (Yamane, 1967) for calculation. In order to gain a broader and deeper understanding of the status of medical students' volunteer service and its impact on enhancing employment competitiveness, this study selected 600 students within five years of graduation from five medical colleges in Shandong Province as the survey object. A total of 600 questionnaires were distributed through the questionnaire network platform. Among them, Shandong University of Traditional Chinese Medicine, Weifang Medical College, Zibo Vocational College, and Shandong Medical College all issued 100 questionnaires, and Weifang Nursing Vocational College issued 200 questionnaires. 538 valid questionnaires

were recovered, with an effective recovery rate of 89.7%.

Reliability refers to the consistency or stability of the measurement results. The most commonly used reliability estimation method

is the alpha coefficient developed by Cronbach (1951), and the reliability of the questionnaire is measured by the size of Cronbach's Alpha coefficient.

Table 1
Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on standardized items	Number of items
.857	.862	15

Volunteer service is a practical way for college students to put theoretical knowledge into service practice and enhance their personal competitive advantage in practice. How to cultivate and enhance the necessary qualities of college students in voluntary service and promote the development of competitive advantage in employment is a question worth exploring. The refore, it is of great significance to study the relevance of college students 'voluntary service and employment competitive advantage, pay at tention to the substantial effect of volunteer service on college students' employment compe titive advantage, and promote college students to exert their "learning" traits. Especially for medical students, their future work requires them to have higher abilities and qualities, and this is precisely what can be greatly exercised and promoted in professional volunteer services.

The number of hospitals and colleges in Shandong Province and the number of students are among the highest in the country. In recent years, the Education Department of Shandong Province has always adhered to the educational philosophy of "taking virtue as the basis of lea rning" and insisting on building high-level

applied medical colleges. The goal is to advocate "five-entry" (entering classrooms, entering libraries, entering experimental training rooms, entering stadiums, and entering society). Among them, "to enter the society" is based on the volunteer service of medical students as an activity carrier to build a platform for students' self-education and self-growth, which encourages students to broaden their horizons in practice, correct professional values, enhance professional skills, sharpen hardships, and exercise comprehensive capabilities. Efforts to become high-quality skilled and applied talents. Shandong, as the hometown of Confucius and the birthplace of Confucian culture, is known as the "land of etiquette". The spirit of mutual help and solidarity has also laid a good social foundation for the extensive development of volunteer services. Therefore, this study selected students from medical colleges in Shandong Province as the research object, and conducts a questionnaire survey through questionnaire star, the largest academic survey platform in China, to test the theoretical model and research hypothesis of the relationship between medical students 'voluntary service and employment competitive advantage.

Research Results

Hypothesis test and Inferential test results

Hypothesis 1: The stronger the sense

of social responsibility of medical students in voluntary services, the stronger the competitive employment advantage.

Table 2

Correlation analysis of medical students' social responsibility and competitive advantage in employment in voluntary service

		Sense of responsibility	Participation frequency
Sense of responsibility	Pearson correlation	1	0.244 **
	Significance(bilateral)		0.000
	N	538	538
Participation frequency	Pearson correlation	0.244 **	1
	Significance(bilateral)	0.000	
	N	538	538

** . Significantly correlated at .01 level (both sides).

It can be seen from Table 2 that the correlation coefficient between responsibility awareness and participation frequency is $0.244 > 0$, and the p-value of the correlation coefficient significance test = $0.000 < 0.05$, indicating that both responsibility awareness and participation frequency show a significant positive correlation. This shows that the stronger the sense of responsibility and the higher the frequency of participation of medical students in voluntary services, the stronger their sense of social responsibility, which is consistent with the research conclusions of Hamilton and Fenzel (1988) There is a one-to-one correspo

ndence between the sense of social responsibility in volunteer service and the sense of responsibility in competitive employment advantage. Therefore, in volunteer service, the stronger the sense of social responsibility of medical students, the stronger the competitive advantage in the employment of medical students. The analysis is consistent.

Hypothesis 2: The higher the level of professional knowledge and skills of medical students in volunteer services, the stronger the competitive employment advantage.

Table 3

Correlation analysis of professional knowledge and skills of medical students in volunteer service and employment competitive advantage

		Frequency of application of professional knowledge and skills	professional results
Frequency of application of professional knowledge and skills	Pearson correlation	1	0.120 *
	Significance(bilateral)		0.018
	N	538	538
professional results	Pearson correlation	0.120 *	1
	Significance(bilateral)	0.018	
	N	538	538

*. Significantly correlated at the 0.05 level (both sides).

From the correlation coefficient table in Table 3, we can see that in volunteer service, the correlation coefficient between the frequency of professional knowledge skills and professional performance is $0.120 > 0$, and the p-value of the correlation coefficient significance test = $0.018 < 0.05$, indicating professional knowledge There is a significant positive correlation between skill application frequency and professional performance. That is to say, in volunteer services,

the higher the frequency of application of professional knowledge and skills of medical students, the better the professional performance, and the higher the level of professional knowledge and skills, the more significant the impact on the competitive advantage of employment.

Hypothesis 3: The stronger the ability of medical students to solve problems in volunteer services, the stronger the competitive employment advantage.

Table 4

Correlation analysis between medical students' ability to solve problems in voluntary service and their competitive advantage in employment

		Service experience	Communication skills
Service experience	Pearson correlation	1	0.265 **
	Significance(bilateral)		0.000
	N	538	538
Communication skills	Pearson correlation	0.265 **	1
	Significance(bilateral)	0.000	
	N	538	538

**. Significantly correlated at .01 level (both sides).

It can be seen from Table 4 that involuntary service, the correlation coefficient between service experience and communication ability is $0.265 > 0$, and the p-value of the correlation coefficient significance test = $0.000 < 0.05$, indicating that both service experience and communication ability are presented Significant positive correlation. That is to say, in volunteer service, the

more medical students' service experience, the better their communication ability, the stronger their problem-solving ability, and the test results support the analysis of research hypothesis 3.

Hypothesis 4: The stronger the frustration tolerance of medical students in volunteer service, the stronger the competitive employment advantage.

Table 5

Correlation analysis between medical students' ability to withstand setbacks and competitive advantage in employment in volunteer service

		Frustration frequency	Coping with mentality
Frustration frequency	Pearson correlation	1	.126 *
	Significance (bilateral)		.014
	N	538	538
Coping with mentality	Pearson correlation	.126 *	1
	Significance (bilateral)	.014	
	N	538	538

*. Significantly correlated at the 0.05 level (both sides).

It can be seen from Table 5 that involuntary service, the correlation coefficient between frustration frequency and coping mentality is $0.126 > 0$, and the p-value of the correlation coefficient significance test = $0.014 < 0.05$, indicating that frustration frequency and coping mentality are two The authors showed a significant positive correlation. In other words, the higher the frustration frequency of medical students in volunteer service, the better the coping mentality and the higher their frustration tolerance, which verified the analysis conclusion of research hypothesis 4.

Discussions and Conclusions

Volunteer service is an important form for medical students to enter society and serve society. It is the process of adhering to the volunteer spirit, using their professional knowledge and skills

to provide professional services for the society, and objectively providing a service Task-oriented, the opportunity to optimize knowledge, enhance skills, and improve the way of doing things has created a real situation for the development of medical students' competitive advantage in employment. This process can better cultivate the moral quality and social responsibility of medical students, promote medical students to improve professional learning and professional skills, and promote their ability to communicate, social adaptation, teamwork, thinking and problem-solving, and withstand setbacks. From the above survey data and related analysis, we can see that Voluntary service has a more significant role in promoting the personal development of medical students in terms of professional knowledge, self-positioning, improving practical

ability, problem-solving ability, communication, and expression ability, psychological growth, etc. It mainly includes the following points: First, it is conducive to improving the ideological qualities of medical students such as values, social responsibility, and the spiritual realm; Second, it is conducive to improving the degree of understanding and mastering of professional knowledge and professional skills for medical students; Third, it is helpful to cultivate Medical students' practical ability, adaptability, social ability, communicative ability, comprehensive knowledge application ability, problem-solving ability, and other specific work abilities; Fourth, promote medical students' psychological growth in all aspects of psychological needs, self-awareness, and psychological endurance. The specific impact of Voluntary service on the self-development and growth of medical students will vary from person to person, but their basic effects are consistent.

This research is based on the analysis of the overall correlation between medical students' voluntary service and employment competitive advantage. Taking medical students in Shandong Province as the research object, a questionnaire survey was conducted on the association between medical students' voluntary service and employment competitive advantage. Through the processing and analysis of the data, the following conclusions are drawn:

Conclusion 1: Medical students' sense of responsibility in volunteer service and the correlation coefficient of participation frequency P -value of significance test = $0.000 < 0.05$, which is significantly related, that is, medical students include responsibility awareness and social responsibility in the frequency of volunteer service. The stronger it is, the greater its competitive advantage in employment.

Conclusion 2: The correlation coefficient of the significance test of medical students' professional performance in volunteer service and the frequency of application of professional knowledge is $0.018 < 0.05$, which is significantly related, that is, medical students include professional knowledge application frequency and professional in volunteer service. The higher the level of professional knowledge and skills, the greater the competitive advantage in employment.

Conclusion 3: The correlation coefficient of the significance test of the correlation coefficient between the service experience of medical students in volunteer service and communication ability = $0.000 < 0.05$, which is significantly related, that is, the medical students include service experience and communication ability in volunteer service to solve problems. The stronger the ability, the greater its competitive advantage in employment.

Conclusion 4: Medical students' frustration frequency in volunteer service and the correlation coefficient of coping mentality significance test P -value = $0.014 < 0.05$, showing a significant correlation, that is, medical students include frustration frequency in volunteer service and coping with the frustration of mentality. The stronger the power, the greater the competitive advantage in employment.

Recommendations

1. The link between medical students' voluntary work and their career competitive advantage, must be used in the study to promote maximum employment competitive advantage in the study; on the other hand, combined with the development needs of society, communities, and universities, let medical students be creative. Carry out service work, effectively solve medical

and health-related problems, and train applied medical students (Guozhong, 2015). Therefore, combining the development of medical students 'Voluntary service in China and the positive impact of medical students' Voluntary service on social responsibility, professional knowledge and skill level, problem-solving ability, and frustration tolerance, give full play to the main role of medical students and promote their active participation in Volunteer service practice is committed to solving the problems of low social responsibility, low professional knowledge and skills, insufficient problem-solving ability, and low frustration tolerance of medical students in volunteer service, and continuously improve their competitive advantage in employment

2. To examine how professional volunteer services for medical students have a significant impact on employment competitiveness and clarify the important role of voluntary services

for medical students in enhancing their competitive advantage in employment, Therefore, it is necessary to continuously strengthen the four-way linkage between the government, society, schools, and students, closely link the four aspects of social responsibility, professional knowledge and skill level, problem-solving ability, and frustration tolerance, (Linjie, 2014; Pengfei, 2015).

3. To improve the current status of professional volunteer services for Chinese medical students, solve the problems in the service process and effectively enhance the competitive advantage of employment. The Association of the whole society to medical students' volunteer service and employment competitive advantage. Recognize and build a volunteer service platform for medical students to promote the continuous improvement of employment competitive advantage. (Pengfei, 2015).



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