

RESEARCH ON THE MOTIVATION AND TRAINING STRATEGY OF CROSS-SPECIALTY MASTER STUDENTS

Guanghai Hou*, Lunxin Chen

School of Business, Guangdong University of Foreign Studies, Guangzhou, China

Abstract

In recent years, cross-major postgraduate entrance examination has become a common phenomenon, the number of cross-major postgraduate students continues to increase, the training units need to adjust the training of this kind of postgraduate students based on the motivation of enrollment, avoid their cross-major weaknesses, enlarge their advantages. Through the investigation of the motivation of cross-specialty postgraduate students to enroll, combined with the analysis of the problems existing in the training mode, this paper puts forward some relevant strategies, such as optimizing the tutorial system mode, reforming the selection method, adjusting the existing curriculum system and focusing on the psychological quality of cross-specialty postgraduate students.

Keywords: Cross-professional; Postgraduate students; Motivation for admission; Mode of cultivation

1. INTRODUCTION

In recent years, the "entrance examination fever" continues to heat up, and the number of postgraduate applicants in 2022 has reached 4.57 million. In addition, with the increasing demand for high-level and compound talents in today's society, it is common to apply for cross-specialty postgraduate students. Makes now the number of cross-professional master graduate students in our country INCREASE increasingly. While the training of cross-specialty master students is constantly meeting the needs of the society, it also faces the challenge of the quality of the training on campus. On the one hand, cross-specialty master students are bound to face great difficulties in the process of scientific research and learning because they do not have the discipline background of the new major. On the other hand, there is a certain blindness in the application of cross-specialty master students, the application motivation will affect the students' learning efficiency and learning attitude in the training stage. In this case, how to avoid disadvantages and give full play to advantages in the training stage of cross-specialty master students will greatly improve the training quality of cross-specialty master students. In this process, it is necessary to integrate the motivation of cross-specialty master students to enroll, so as to better develop corresponding training programs.

2. REVIEW OF RELEVANT LITERATURE

2.1 Research on the motivation of cross-specialty postgraduate admission

The reasons why graduate students choose to cross-major include the external factors such as the attraction of

popular majors, the demand for social talents and the opinions of others, as well as the internal factors such as their own interests, academic pursuit and life value. Tian Rui et al. took agronomy students as an example to analyze the motivation of students' cross-major postgraduate entrance examination, and found that the initial employment environment and low salary of agronomy graduates were poor, and external factors became the main influencing factors for the cross-major of agronomy students[1]. Hua Zhong and Lihua Wang conducted interviews on students from education majors to psychology majors. The motivation for this student to choose cross-major postgraduate entrance examination was mainly influenced by internal factors. At first, he wanted to make up for the deficiency of high school life, and later he changed to enhance his psychological aid ability to help others[2]. Some scholars have found that internal and external factors will affect the willingness of college students to take the cross-major entrance examination by studying the motivation of students in independent colleges to take the cross-major entrance examination. Students in independent colleges are not only discriminated against by social background and major, but also choose to take the cross-major entrance examination due to the pursuit of higher quality education and self-realization needs[3]. At the same time, the recognition of undergraduate major is also an important factor affecting the cross-major of graduate students, and the external evaluation of the major is a very important factor[4]. The dive study found that the level of professional recognition will significantly affect

whether college students take the cross-major postgraduate entrance examination[5]. Xin Jungeng and Chen Li took cross-specialty master students of preschool education as research objects and found that the factors affecting these students are mainly external trends, their own interests and future employment prospects[6].

2.2 Relevant research on training strategies for cross-specialty graduate students

Compared with non-cross-specialty master's students, cross-specialty master's students lack systematic and standardized learning and training of professional knowledge[7], and the biggest problem is the weakness of basic professional knowledge. On the one hand, cross-specialty master's students tend to have high psychological anxiety and worry that they can't keep up with the learning progress, which affects their learning enthusiasm[8]. On the other hand, most tutors are not willing to guide students with weak foundation, which makes it impossible for cross-specialty master students to choose ideal tutors and affects their own psychological state[9]. In addition to the differences in professional knowledge, there are also great differences in the thinking mode of disciplines. Some scholars have proposed that the improvement can be achieved through differentiated training[10] or through the construction of teachers[11], so that students can integrate the previous thinking mode with the thinking mode of the current major. In this process, the collision of the two modes of thinking helps postgraduates to explore problems from different perspectives, stimulate new innovative points[12], and enrich the research[7]. In addition to its own reasons, a reasonable curriculum system setting and appropriate training program are also crucial. Most colleges and universities fail to fully consider the advantages and disadvantages of cross-major master students in curriculum setting, ignore the practical needs of cross-major students, and arrange almost the same courses for non-cross-major master students and cross-major master students[13]. Therefore, Li Zhongliang proposed differentiated training through remedial basic courses, open elective course system and other measures[14], so as to promote the positive transfer of students' knowledge and give play to the advantages of cross-specialty master students. In addition, Hu Yan pointed out that postgraduate supervisors usually immerse themselves in one field for many years, and it is difficult to involve all disciplines. Therefore, it is difficult to be familiar with the pre-major of each cross-specialty postgraduate student, so it is difficult to help students to connect relevant knowledge and construct cross-specialty knowledge system[16].

Through the review of the above literature, it is not difficult to find that the existing studies have a certain consensus: first of all, for the cross-major master students, external factors are the main reasons for them to choose cross-major, among which the employment orientation has a great influence, which leads to the students' strong utilitarian study in school; Secondly, the advantages and disadvantages of cross-specialty master students coexist. Colleges and universities should

develop their strengths and avoid their weaknesses when training students. Finally, the cultivation strategies of cross-specialty master students should be distinguished from those of non-cross-specialty master students, and differentiated cultivation should be done between them. Although there are some research achievements in all aspects of these literatures, there are still some shortcomings: First of all, there are few researches on the enrollment motivation of cross-specialty postgraduate students, and these literatures only study the enrollment motivation, failing to put the enrollment motivation into the on-campus training of cross-specialty postgraduate students. The training of postgraduate students is a process with a long cycle, and the enrollment motivation will largely affect students' future choice and learning attitude. Secondly, qualitative research is more than quantitative research in the past, and the views obtained lack of data support, so the research is not in-depth enough. Therefore, based on questionnaire survey and supported by data, this study will analyze the motivation for cross-specialty postgraduate students to enroll, and combine the optimization strategies for talent training in colleges and universities, so as to improve the quality of talent training and provide more high-level compound talents for the society.

3. ANALYSIS OF THE MOTIVATION FOR CROSS-SPECIALTY POSTGRADUATE STUDENTS TO ENROLL

In this study, the motivation of cross-specialty postgraduate students to enroll was investigated by sending questionnaires to the current postgraduate students in a university in Guangdong Province. A total of 43 questionnaires were sent out, and 27 valid questionnaires were obtained.

3.1 Analysis of questionnaire results

In the survey of the question "why do you choose different majors", 18.5% of respondents are not interested in undergraduate major, 33.4% choose curiosity, 7.4% choose rich knowledge system, 14.8% choose bad employment situation, 7.4% choose parental pressure, 7.4% choose herd mentality, 11.1% choose competition pressure of undergraduate major entrance examination. This question is mainly to judge the internal and external motivations for cross-specialty postgraduate admission. The first three options are internal motivations, and the last four options are external motivations. 63% of the respondents said yes and 37% said no to the question "whether students who have joined the same major while preparing for the exam have thought about giving up the exam if they have found a good job?" In the question "What is your plan for graduate school?", 40.7 percent chose to graduate and find a job, while 59.3 percent chose to study or pursue further education. In the survey of "Have you tried to change your major during undergraduate study?", 48% said yes and 52% said no.

3.2 Analysis of enrollment motivation

The generation of all human actions will be based on certain prime motivity, one is the internal motivation that

can make the individual get satisfaction, the other is the external motivation that makes the individual satisfied due to the result. According to Maslow's hierarchy of needs theory, individual needs can be divided into physiological, security, social, respect and self-actualization[17]. The first four needs are essential for human survival, while the last one may never be met, but the individual's pursuit of the unknown will magnify the need for self-actualization.

3.2.1 Internal motivation analysis

The results of the questionnaire show that 59.3% of the cross-major graduate students take the cross-major examination because they are not interested in the undergraduate major, their curiosity and enrich the knowledge system. They make the cross-major choice mainly to satisfy their pursuit of the unknown, and the changes of the external environment can hardly affect their choice. In addition, 75% of these students plan to make up for their lack of knowledge or study hard for further study in the postgraduate stage. In the postgraduate stage, they aim to explore their potential and improve their ability. They enjoy the process of cross-specialty postgraduate study and their sense of achievement is satisfied in the process of constantly enriching their knowledge system. Therefore, these students choose cross-majors out of their self-actualization needs, which are also called growth needs. This kind of needs will become stronger as individuals meet more demands for knowledge and understanding. Meanwhile, in order to improve themselves, nearly 90% of the cross-major graduate students who are enrolled based on internal motivation are willing to spend time to make up for their lack of professional knowledge. It can be seen that their identification of cross-major does not need to take into account the external recognition of the major. In their opinion, whether other needs can be met is not the key to be considered. The most important thing is that their self-actualization needs are met, and they're willing to keep pursuing them even if they're never met.

3.2.2 External motivation analysis

Corresponding to the internal motivation is the external motivation, which is easily affected by external factors. These factors come from multiple sources. For cross-professional graduate students, the external motivation may come from others, the society, or the school. According to the survey data, 40.7% of the students choose to cross-major because of their parents' pressure, employment situation, herd mentality and the pressure of competition for postgraduate entrance examination of their major. According to Maslow's hierarchy of needs theory, these students cross-major because of lack, that is, physiological, safety, social and respect needs. Some of them are to meet the social demand for talents or the expectations of their parents and family members. Others are due to a fear of putting themselves in stressful situations. Nowadays, under the impact of the novel coronavirus epidemic, many students choose to take the entrance exam of cross-major for postgraduate study because of the current grim employment situation. Among these students, 64% said

that they would give up taking the entrance exam when they found an acceptable job with the same major. It can be seen that cross-major postgraduate students who are mainly enrolled by external motivation are generally employment-oriented. 64% of them said that the plan for graduate school is to graduate and find a job can also prove this. Accordingly, with employment as the ultimate goal, these students will not spend a lot of time to supplement their professional knowledge. Instead, they regard the postgraduate study as a springboard to help them gain certain advantages in the future employment.

4. ANALYSIS OF THE CURRENT SITUATION OF CROSS-SPECIALTY POSTGRADUATE TRAINING

Nowadays, with the development of society, more and more undergraduates choose cross-major when taking the postgraduate entrance examination, which is in line with the trend of social development. Many problems in today's society involve the integration of multiple levels, fields and factors, and it is difficult for talents with a single professional background to solve such problems. In addition, cross-major is exactly in line with the needs of students' personal development. The interest in new majors can stimulate students' interest in learning to a large extent, and the interest-oriented approach enhances students' learning motivation. In addition, cross-major postgraduate entrance examination is another choice for many undergraduates who do not have a clear understanding of themselves in high school. Although many graduate training institutions have achieved certain results in the training of cross-specialty master students, there are still many problems to be solved:

4.1 The basic knowledge of professional theory of cross-specialty master students is relatively weak

Compared with non-cross-major graduate students, cross-major graduate students lack the study of professional courses and professional knowledge during the undergraduate period, resulting in the lack of the theoretical framework of knowledge. This problem causes cross-major graduate students to face greater learning pressure after admission. Due to their weak professional foundation and in order to reduce the gap between them and non-cross-major graduate students, Cross-specialty graduate students need to spend a lot of time to supplement their undergraduate professional knowledge. Otherwise, in the early learning process, they do not have a good understanding of professional terms, resulting in unclear language expression and definition in the paper writing, which will have a negative impact on the cross-specialty graduate students' learning enthusiasm and cause obstacles in the future study.

4.2 It is difficult to change the thinking mode of the original major

Due to the lack of systematic study of professional knowledge during the undergraduate period, it is difficult for cross-specialty graduate students to use professional skills to quickly get started in academic research, and the corresponding discipline quality has not been developed,

resulting in difficulties in exploring hot topics of the major, mainly manifested in the inability to put forward their own opinions from a professional perspective. At the same time, the training program of the original major accepted by the cross-major graduate students during the undergraduate period makes it difficult to change the cognition and thinking mode of the original major to the current major, which will cause the cross-major graduate students poor academic ability and study pressure. In addition, it is difficult to connect the knowledge between the former major and the current major. The knowledge background of the former major cannot be well integrated into the current major, and the in-depth study of the current major will easily lead to the forgetting of the original professional knowledge, resulting in the loss of the composite advantage of cross-major graduate students.

4.3 There are drawbacks in the postgraduate entrance examination system, and the talent selection is insufficient

The training process of the postgraduate students can be seen as a product process. The entrance examination of postgraduate students is the screening of raw materials. However, the inspection of professional knowledge of entrance examination of postgraduate students in our country is at a basic level at present. The focus of the preliminary examination of Chinese graduate examination is often the students' mastery of the knowledge points in the bibliography. As a result, students only need to spend time to recite a lot of the knowledge points in the book and then learn the corresponding test-taking skills so as to obtain high scores. However, these knowledge points are not of great relevance to the future research and learning of the graduate. In addition, it is difficult to realize flexible transformation in application because of the mechanical and rigid memorization of knowledge points. The second interview after the initial examination also has certain limitations. Due to the short inspection time, the examiner can not conduct a comprehensive inspection of a candidate's professional quality and academic potential in a short time. The cross-specialty graduate students selected from this form tend to have a limited understanding of professional knowledge in books, and have poor innovation ability in the face of practical problems.

4.4 Poor differentiation of interdisciplinary graduate students and graduate students of their own major in the curriculum

Although graduate training institutions have been recruiting cross-major graduate students, they are no different from their own major graduate students in the course setting. Especially in the aspects of compulsory courses and specialized courses, there are no targeted courses for cross-major graduate students, which makes it difficult for teachers to grasp the difficulty and depth of teaching in class. Due to the large gap between the two types of students in the basis of the major, the content of the professor is too difficult to make cross-major graduate students find it difficult to keep up with the pace of the teacher, while the content is too

simple, students with good foundation will have no harvest, and the knowledge acquired is not much different from that during the undergraduate period. Knowledge in the postgraduate stage should be the deepening of knowledge in the undergraduate stage. For cross-major postgraduate students, due to the lack of professional study in the undergraduate stage, electives are needed to perfect the construction of knowledge system. However, the curriculum system of colleges and universities does not fully consider the professional background of cross-major postgraduate students, and fewer electives are arranged. This greatly affects the cross-disciplinary advantages and training quality of cross-professional graduate students.

4.5 The single tutor system is difficult to achieve the advantages of cross-disciplines

The biggest advantage of cross-major graduate students is the spark of innovation generated by the collision of thinking modes of different disciplines. However, the single supervisor system has limited this advantage. Most tutors are experts and leaders in their own fields, and they can guide the graduate students of their own major with their rich experience, so it will not be difficult to guide them. However, due to the lack of understanding of their professional field, they may not be able to connect their professional background with their current major, and cannot provide authoritative guidance. As a result, the professional vision of the cross-major graduate students is limited, the disciplinary thinking of multi-majors cannot interact, and it is difficult to give full play to the advantages of the cross-major graduate students. The cross-specialty graduate students can only follow their supervisor's own research direction, and cannot conduct research according to their interests. As a result, the academic research of cross-specialty graduate students is difficult and the training effect is not very ideal.

5. CROSS-SPECIALTY POSTGRADUATE TRAINING STRATEGIES

Cross-specialty graduate students are a special part of the group of graduate students, and their advantages and disadvantages are very obvious in the process of training. The training unit should make use of the situation, overcome the disadvantages of cross-specialty graduate students in a short time, and at the same time give play to their advantages, so as to better cultivate the compound talents needed by the society. The existing problems of cross-specialty graduate students require the training units to adjust the training mode and promote the reform and innovation of the training system, so as to optimize the training quality of cross-specialty graduate students.

5.1 Adopt the tutor group guidance mode for cross-specialty graduate students

The knowledge of the original major accumulated during the undergraduate period makes the cross-specialty graduate students have the innate advantages in cross-specialty training. In the process of training, tutors play a very important role as the guide for cross-disciplinary research of cross-specialty graduate students. However, it is difficult for a single tutor to have

high academic attainments in multiple fields. The guidance mode of single tutor system will become an obstacle for cross-specialty graduate students to give full play to their advantages. The supervisor group, as the name implies, is a guidance group composed of several tutors. It introduces tutors from multiple professional fields through cross-college approach and jointly designates training plans for cross-professional graduate students. After students are enrolled, the school will assign two tutors in corresponding professional fields to the cross-major graduate students, so that the professional knowledge of the two tutors can be fully brought into play, the training plan can be formulated in line with the actual situation of the graduate students, and the cross-major graduate students can be given more scientific and detailed guidance. At the same time, the existence of the tutor group is also convenient for postgraduates to communicate with tutors in other fields, broaden their vision, improve their comprehensive ability, and more conducive to the cultivation of interdisciplinary talents.

5.2 Optimize the selection mechanism of graduate students

The change of the selection mechanism should start from the preliminary and reexamination of the postgraduate entrance examination, so as to select the talents with real research potential. On the one hand, pure theoretical topics should be reduced in the professional course selection in the preliminary exam, so as to avoid the situation that students can get high scores only by simple memorization without in-depth understanding. The setting of topics should be combined with social hot spots, so that cross-professional students can use their professional knowledge to conduct multi-angle analysis, and focus on examining students' understanding of knowledge and comprehensive ability. On the other hand, hot cross-professional questions should be added to the questions in the second interview, so as to examine students' cross-professional thinking ability, guide students to analyze the questions from multiple levels and perspectives, and examine students' comprehensive ability. It is also possible to throw out a hot topic in the process of investigation, so that students can explore valuable research questions and test students' innovation ability. At the same time, in the annual enrollment brochure, the major and future research direction of the cross-major students that can be accepted by each major are explained in detail, so as to reduce the situation of blind enrollment and improve the enrollment quality.

5.3 Reform the existing curriculum system and teaching model

Due to the lack of basic professional knowledge of undergraduate students, the training units should set up relevant courses for the cross-major graduate students as the connecting courses of postgraduate courses, so as to make up for the lack of professional knowledge for cross-major graduate students. In addition, the number of elective courses should be increased so that all graduate students can choose courses flexibly according to their own interests and the advice of their supervisors. In order to break the barriers between disciplines, improve

Eurasia Journal of Science and Technology

general education, and lay a foundation for future cross-professional research while broadening the horizon of graduate students, training institutions should add some cross-professional courses when arranging courses. In terms of teaching mode, it is necessary to reform diversified teaching mode and change the traditional classroom teaching mode. In the postgraduate stage, emphasis should be placed on cultivating students' self-learning ability and thinking ability. In class, the teacher first explains the basic theory, and then puts forward hot issues for students to think in class and after class. In addition, in order to promote interdisciplinary exchanges, academic exchanges are held between colleges and universities, so that cross-major graduate students can deeply connect the characteristics of the two majors and spark innovation.

5.4 Pay attention to cross-specialty graduate psychological quality training

Both cross-major research and non-cross-major graduate students will face psychological pressure and anxiety. However, cross-major graduate students are more likely to have academic pressure because they are new to a professional field and are too unfamiliar with the new field. In addition, cross-major graduate students choose cross-majors due to either external or internal reasons, leading to different psychological states [18]. Therefore, attention should be paid to psychological counseling for cross-major graduate students, so that they can recognize and accept their professional weaknesses, but believe in their strengths and potential, and understand the differences between themselves and non-cross-major graduate students. Good psychological quality is also an important feature of inter-disciplinary talents. Postgraduate supervisors play an important role in cultivating the psychological quality of cross-professional postgraduates. They should constantly stimulate students' learning enthusiasm and research interest and cultivate their academic confidence. This is the key for cross-specialty graduate students to adapt to a new major.

ACKNOWLEDGEMENT

The research is supported by the Teaching Quality and Teaching Reform in Guangdong Province in 2020, "Random Field Experiment and Optimization Strategy of Key Events for Precise Cultivation to Improve College Students' Participation in scientific Research from" Identity Language "to" Action Language ", and the Graduate Education Innovation Program funded by Guangdong University of Foreign Studies: Investigation on the Motivation of Cross-major Graduate Students' Admission and Optimization Strategy of Key Events for Precise Training.

REFERENCES

- [1] Tian Rui, Zhao Na, Zhang Jingqian. Analysis on the phenomenon of cross-major entrance examination of Agricultural college students [J]. *Modern Rural Science and Technology*, 2016(19):56-57. (in Chinese)

- [2] Hua Zhong, Lihua Wang. Narrative Research on cross-major Postgraduate Entrance Examination of Normal University students [J]. Chongqing Higher Education Research, 2014, 2(04): 63-67.
- [3] Guan Shaohua, Shi Wanyu. Analysis on the reasons and Advantages of cross-major postgraduate entrance examination for Independent College students [J]. Educational Theory and Practice, 2019, 39(06): 9-11. (in Chinese)
- [4] Li Lihong, Zhou Shihou. Investigation and Analysis on the Influencing Factors of Major Selection of "Cross-study Master Students" in Pedagogy -- A Case study of Y University [J]. Western Quality Education, 2018, 4(4): 143-144.
- [5] Yu Yue. Research and Reflection on the Relationship between College Students' Professional Identity and Interdisciplinary Postgraduate Entrance Examination [J]. Western Academic Journal, 2021(23): 117-120.
- [6] Xin Jungeng, Chen Li. The dilemma and path of cultivating Master's degree in pre-school Education under the background of cross-specialty examination [J]. Ethnic Higher Education Research, 20, 8(06): 58-64.
- [7] Zhao Hongrui, Tang Zhongshi, Liu Zhao. Research on some problems of interdisciplinary postgraduate training [J]. Science of Surveying and Mapping, 2010, 35(S1): 237-238. (in Chinese)
- [8] Teng Xiangzhu, Tang Di. Mooc-based cross-specialty postgraduate learning model [J]. China Educational Informatization, 2016(14): 36-39. (in Chinese)
- [9] Yu Qing, Shi Ling. Major Mental health problems and countermeasures of cross-specialty master students [J]. Journal of Chongqing Jiaotong University (Social Science Edition), 2015, 15(03): 114-116.
- [10] Wang Han. Research on Differentiated Cultivation of Cross-specialty Master Students in Land Resource Management -- A Case Study of Guangxi University [J]. Journal of Lanzhou University of Education, 2015, 31(02): 73-75.
- [11] Xie Kai, Fang Xianwen. Thoughts on the Cultivation of cross-specialty postgraduate students [J]. Cultural and Educational Materials, 2014(16): 135-137. (in Chinese)
- [12] Yu GUI E, Liu Hongbin. Optimization of Curriculum System Design and Improvement of Interdisciplinary Graduate Innovation Ability: A Case Study of Zhejiang Sci-Tech University [J]. China Higher Education Research, 2009(06): 48-50.
- [13] Zhang Liang. Current Situation analysis and countermeasures of Interdisciplinary Graduate Training in Universities [J]. Graduate Education Research, 2012(04): 11-15. (in Chinese)
- [14] Li Zhongliang. Cross-specialty Postgraduate Education: Problems and Strategies [J]. Educational Development Research, 2013, 33(Z1): 104-108. (in Chinese)
- An empirical study on the Professional Identity of Interdisciplinary Education Master students [J]. Degree and Graduate Education, 2018(06): 57-61.
- [16] Hu Yan. Discussion on training methods of interdisciplinary master students in Archival Science [J]. Beijing Archives, 2009(12): 22-23.
- [17] Maslow A H . A Theory of Human Motivation [J]. Psychological Review, 1943, 50: 370.
- [18] He Yunxin, Li Zhongyang. Research on the Differentiated Cultivation of Cross-specialty and Self-specialty postgraduate Students [J]. Higher Agricultural Education, 2010, (1).

Hou Guanghui is living in Guangzhou who was born in 1973. He got PhD in Management from Sun Yat-sen University in 2006. In 2011, he became a professor in Business School from Guangdong University of Foreign Studies. His main research area is innovation management.

Chen Lunxin is living in Guangzhou who was born in 1999. He is a postgraduate in Guangdong University of Foreign Studies and majors in Business Management.