Investigation and Analysis on Academic Behavior of Postgraduate Students in Ten Universities in Sichuan Province

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Abstract—**In recent years, there are a variety of academic anomie problems in postgraduate students. Among all these academic anomie behaviors, some of them were conducted on purpose, and some were caused by postgraduates' negligence of academic norms. Therefore, it is very important to investigate and analyze the academic behavior of postgraduates so that we can understand the cognition degree of postgraduates to the academic behavior and related system construction, as well as the education of academic norm for postgraduates, which will help to strengthen the education of academic norm and put forward relevant policies to support the education.**

Keywords—postgraduate; academic; anomie; academic behavior

I. INTRODUCTION

With the rapid development of higher education, the scale of postgraduate education has rapidly expanded in China, ranking the second largest in the world, right after the United States. As we know postgraduate training quality is not only an important part of training quality guarantee system [1], but also the important means of inspection and assurance of degrees award. [2], especially for the problem of "academic anomie" of graduate students which has gradually become the hot topics discussed by academics.

This article is backgrounded by the expansion of the graduate education scale in China, is cored by the attention to the "academic anomie" In many ways, perhaps the most crucial conundrum evident in both the policy and theoretical derives from the perceived tensions between the establishment by institutions of quality assurance practices on the one hand [3], and the actual demonstration of quality outcomes on the other hand. Braxton [4].

According to some related information shows that the quality of U.S postgraduate education study is concentrated in academic anomie, discipline point etc. [5]. Study in our country, Mr. Wang Zhan Jun, on behalf of postgraduate education experts evaluate the technical and methodological issues for a more comprehensive, extensive and in-depth study, and have achieved important results.

At the same time, the problem of "academic anomie" of graduate students has occurred from time to time. Among all these academic anomie behaviors, some of them were conducted on purpose, and some were caused by postgraduates' negligence of academic norms. Therefore, it is very important to investigate and analyze the academic behavior of postgraduates so that we can understand the cognition degree of postgraduates to the academic behavior and related system construction, as well as the education of academic norm for postgraduates, which will help to strengthen the education of academic norm and put forward relevant policies to support the education.

II. SAMPLE AND METHODOLOGY

This research adopts both surveys and interviews and conducts a questionnaire-based large sample investigation. In order to make the design of the questionnaire more pertinent, we firstly took the postgraduates of Chengdu University of Information Technology as subjects to carry out the interviews and design the questionnaire based on the outline and contents of the interview. Then we conducted an initial investigation on 100 participants who were randomly chosen from postgraduates of this university. In the end, we developed a questionnaire that consists of mainly closed multiple questions with two open questions attached. Focusing on the theme of postgraduates' academic behavior, the questionnaire covered four aspects, that is, the cognition of postgraduates to academic behavior, the current status of academic behavior of postgraduates, the status of academic norms education for postgraduates, the understanding and evaluation of postgraduates on the construction of academic behavioral norms in colleges and universities [6]. A questionnaire survey was carried out targeting master degree students and doctoral candidates in colleges and universities in Sichuan province. A total of 3500 questionnaires were sent out and 2700 were collected, the validity rate was 77%. All the valid questionnaires were formally coded and input in the SPSS16.0 software. Then a frequency statistical analysis and descriptive statistical analysis were conducted.

III. THE BASIC DATA OF THE QUESTIONNAIRE

This survey covered 4 national universities that were members of "211 elite university project" and 6 common universities in Sichuan province. There are 2700 participants in 10 universities. Boys accounted for 63.3% of the total, and girls accounted for 36.7% of the total .the degree structure of samples like this, 81.7% of master degree candidates and 18.3% of doctoral candidates.

IV. THE ANALYSIS OF RESULTS

A. *The cognition degree of postgraduates to academic behavioral norms*

TABLE I.   THE UNDERSTANDING DEGREE OF POSTGRADUATES TO ACADEMIC BEHAVIOR

Know clearly	Know	Know little	Know nothing about
9.4%	58.2%	24.6%	7.8%

TABLE II.   HOW TO UNDERSTAND THE "ACADEMIC BEHAVIOR"

Searching references	Conduct academic experiment, survey, etc.	Writing or publishing academic paper
5.5%	51.2%	43.3%

TABLE III.   THE UNDERSTANDING DEGREE OF CITATION NORMS, RESEARCH APPROACHES AND LITERATURE RETRIEVAL

Know clearly	Know	Know something	Know little	Know nothing	No answer
8.3%	49.5%	34.9%	5.7%	1.0%	0.6%

TABLE IV.   THE ATTITUDES TO PLAGIARIZING

Strongly dislike	Dislike	Acceptable	Strongly agree	Indifferent	No answer
26%	45.9%	21.1%	4.1%	2.6%	0.4

TABLE V.   THE VIOLATION OF ACADEMIC NORMS

	Yes, a lot.	Yes, many times.	Yes, sometimes.	Yes, but seldom.	No
Did you ever cite information from other people's works without noting the citation source? (%)	10.2	31.5	22.3	35.6	0.4
Did you ever cite information from the Internet without noting the citation source? (%)	Yes, a lot.	Yes, many times.	Yes, but seldom.	No	No answer
	10.1	35.6	40.5	13.8	0.1
Did you ever list false literature in your reference? (%)	Yes, a lot.	Yes, many times.	Yes, sometimes.	Yes, but seldom.	No
	7.6	16.5	17.8	32.3	25.8

TABLE VI.   THE VIOLATION OF ACADEMIC ETHICS

	Yes, a lot.	Yes, many times.	Yes, but seldom.	No.
Did you ever piece together other people's papers into your own papers? (%)	24.9	20.7	40.6	13.8
Did you ever forge or tamper with experimental data? (%)	Yes, a lot.	Yes, many times.	Yes, but seldom.	No.
	6.3	8.8	20.1	64.8
Your attitudes to the act of modifying experimental data (%)	Experimental data absolutely cannot be modified.	Experimental data can be modified appropriately.	Experimental data absolutely can be modified.	Don't know. / Cannot tell.
	46.3	32.6	6.5	14.6
Did you ever read the references of papers? (%)	Read all of them carefully.	Read most of them carefully.	Read some of them.	Read none of them.
	10.2	46.3	31.8	11.7

B. *The status of academic norms education for postgraduates*

TABLE VII.   THE INFLUENCE AND EDUCATION OF MENTORS AND TEACHERS ON POSTGRADUATES' ACADEMIC NORM EDUCATION

	Very good	Good	Medium	Bad	Very bad
Mentors' demonstration effect in paper writing (%)	35.3	40.8	19.5	18.3	1.2
Did your class teacher provide academic norms of guidance for your semester paper? (%)	Yes	Sometimes	Never		
	33.6	45.9	20.5		
Did your mentor organize discussions of research methods, citation rules, etc. in your field? (%)	Three or more than three times of discussions	One or two times of discussion	Never		
	20.5	46.3	33.2		
Is there any act of mentors publishing postgraduates' achievements in the name of mentors themselves? (%)	A lot	Some	Sometimes, but not many	Seldom	Never
	5.3	6.3	14.1	24.1	50.2

TABLE VIII.   THE AVAILABILITY OF ACADEMIC NORMS RELATED COURSES

Academic writing norms	Specialty-related research approaches	Academic ethics	No related course
20.6%	20.9%	15.3%	43.2%

TABLE IX. THE UNDERSTANDING AND EVALUATION OF POSTGRADUATES ON THE CONSTRUCTION OF ACADEMIC BEHAVIORAL NORMS IN UNIVERSITIES

Have your university-issued relevant regulations (%)	Yes	No	Do not know / cannot tell		
	45	19.8	35.2		
How much did you understand the academic behavioral regulations issued by your university? (%)	Understand very much	Understand mostly	Understand normally	Understand little	Do not understand
	5.2	20.6	28.9	34.5	10.8

V. CONCLUSION AND SUGGESTIONS

According to the survey results, the overall academic behavior of postgraduates is generally good, but the existence of problems is obvious, which should arouse great attention to postgraduate cultivating departments.

A. Establish norms.

Norms are the basis for carrying out the education of academic norms for postgraduates. In recent years, more and more attention has been paid to the construction of academic ethics in China. A series of documents have been released, such as Suggestions for Strengthening the Construction of Scientific Research Norms by the Chinese Academy of Sciences, Several Proposals of Strengthening the Construction of Academic Ethics, Academic Norms for the Study of Philosophy and Social Science in Colleges and Universities (Trial), etc. However, for postgraduates, these policy documents are only written rules and regulations. They have no idea of how to follow these norms in actual academic activities.

Although many colleges and universities in China have already added some academic norms and guidelines to postgraduate workbooks or regulations, in contrast, some of the existing postgraduate academic regulations are still more general and less practical in terms of contents. Therefore, while learning from the good experiences of foreign universities, Chinese colleges and universities should take the national regulations on the construction of academic ethics as the guidance and establish relevant operable rules that emphasize serious penalties for misconduct based on their actual conditions, so as to regulate and deter postgraduates' academic behaviors.

B. Carry out the education of academic norms.

Education is the theme of academic norms for postgraduates. To carry out the education of academic norms for postgraduates, the purpose is to let postgraduates know, master and apply academic norms. The ancients have always attached more importance to "ethics" than to "papers". Therefore, mentors should not only impart scientific knowledge and technology to the students, but also cultivate students' strict and truth-seeking scientific spirits with their rigorous scholarship and noble charisma. Specifically, the first is to help postgraduates understand the purposes of academic research at the ethical level and tell them that academic research should not be affected by external factors. The famous American higher education thinker Flexner once said: "Research is a quiet and arduous task aimed at seeking the truth… The research topic must be serious or have serious meanings. No matter how direct effects of research results on wealth, income or desire, researchers much keep an objective attitude." The second is at the practical level. Mentors can use their own scientific research capabilities and experiences to give postgraduates directions regarding to how to choose the topic, how to retrieve and reference others' research achievements, how to follow academic norms, and how to make a point, so that postgraduates can develop the practical and rigorous, realistic and pragmatic attitudes towards scientific research during the practice of academic research.

C. Strengthen supervision.

Supervision is the guarantee of postgraduate academic behavior. Similar to other social behaviors, academic behavior needs both self-discipline and external regulations. The purpose of educational activities such as impacts and examples is to help postgraduates to form self-discipline behavior in academic research. It is a direction. But directions are not always reliable. Therefore, a supervising mechanism needs to be established. All colleges and universities should vigorously publicize that scientific research is a noble and respected career, with zero tolerance to false conduct. As stated by the State Councilor Liu Yandong at the symposium on scientific research integrity and learning atmosphere held in March 2010: "Scientific research is a career based on integrity and credibility, which has put the pursuit of truth and revealing the objective laws as the purpose since its birth."

At present, most of postgraduates are young. And a majority of them have been living in the ivory tower of schools for a long time. They have no sufficient social experiences, which may lead to the fact that some of them are vulnerable and could not handle the tough environment or frustrations. Therefore, it is very important to strengthen the career pursuit of postgraduates, especially doctoral candidates, who are going to play a major role in the scientific development of China in the future. Colleges and universities should take the responsibilities as follows: guide postgraduates to conduct scientific research to satisfy their curiosity about science and pursue for the truth; make postgraduates understand that they must follow the objective laws and conduct scientific research step by step in order to make achievements; help postgraduates develop the spirit of devotion to science, encourage them to live with loneliness, and properly handle the relationship between scientific research and fame and fortune.

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