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 an important means of inspection and assurance of degrees [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].

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

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

TABLE IV. THE ATTITUDES TO PLAGIARIZING

| Did you ever cite information from other people’s works without noting the citation source? (%) |
|--------------------------------------------------------------------------------------------------|
| Yes, a lot.                                       | Yes, many times.             | Yes, sometimes.          | Yes, but seldom.       | No            |
| 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.       |
| 7.6                                              | 16.5                          | 17.8                      | 32.3                     |

B. The status of academic norms education for postgraduates

TABLE V. THE VIOLATION OF ACADEMIC NORMS

| Did you ever piece together other people's papers into your own papers? (%) |
|---------------------------------------------------------------------------|
| Yes, a lot.                                  | Yes, many times.             | Yes, but seldom.       | No                          |
| 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.       |
| 6.3                                              | 8.8                          | 20.1                    |

| Your attitudes to the act of modifying experimental data (%) |
|-------------------------------------------------------------|
| Experimental data absolutely cannot be modified.            | Experimental data must 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                        |

TABLE VI. THE VIOLATION OF ACADEMIC ETHICS

| Mentors’ demonstration effect in paper writing (%) |
|--------------------------------------------------|
| Very good                                        | Good                  | Medium                 | Bad                  | Very bad |
| 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                 | Seldom                 | Never                       |
| 5.3                                                                                                    | 6.3                  | 14.1                   | 24.1                        | 50.2       |

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

| Academic writing norms | Specialty-related research approaches | Academic ethics | No related course |
|------------------------|---------------------------------------|-----------------|------------------|
| 20.6%                  | 20.9%                                 | 15.3%           | 43.2%            |
their own scientific research capabilities and experiences to wealth, income or desire, researchers much keep an objective meanings. No matter how direct effects of research results on truth… The research topic must be serious or have serious "Research is a quiet and arduous task aimed at seeking the American higher education thinker Flexner once said: research should not be affected by external factors. The famous research at the ethical level and tell them that academic is to help postgraduates under stand the purposes of academic rigorous scholarship and noble charisma. Specifically, the first students' strict and truth -seeking scientific spirits with their Therefore, mentors should not only impart scientific 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.

REFERENCES

[1] D’Cunto M, Rosenhan S H. How Students Research: Implications for the Library and Faculty[J]. 2015, 55(7):562-576.
[2] Winshurst, Kerry, Wortley, Richard, Bates, Merrellyn, etc. The impact of institutional factors on student academic results: implications for ‘quality’ in universities[J]. Higher Education Research & Development, 25(2):131-145.
[3] Buzzelli D E. The Definition of Misconduct in Science: A View from NSF[J]. Science, 1993, 259(5095):584-5, 647-8.
[4] Thelin J, Wells A E. Reworking the Student Departure Puzzle[J]. 2005, 104(1):72-75.
[5] Dervitsiotis, Kostas N. The objectives matrix as a facilitating framework for quality assessment and improvement in education[J]. Total Quality Management, 1995, 6(5):563-570.

[6] Wamba S, Carter L. Social Media Tools Adoption and Use by SMES: An Empirical Study[J]. 2014, 26(2):1-17.

[7] He, Yuan, Huang, Ping, Xu, Hong. Simulation of a dynamical ecotourism system with low carbon activity: A case from western China[J]. Journal of Environmental Management. 2018, 206: 1243-1252.