

Psychological Mechanism of Graduate Students' Academic Values: Influencing Factors and Internal Motivation Analysis

Kun Zhang

College of Education Sciences, Yining, Xinjiang, China

Abstract: In national education, graduate students are professional talents trained by ordinary higher education institutions, and they shoulder the responsibility of promoting technological progress and advancing social progress. Academic values are also fundamental viewpoints and attitudes towards research objectives, significance, methods, etc., which can have a profound impact on personal growth and the overall construction and development of academic ecology. This article elaborates on the influencing factors and internal motivation analysis of the psychological mechanism of graduate students' academic values, and explores strategies to promote the correct formation of graduate students' academic values.

Keywords: graduate students, psychological mechanism, influencing factors, intrinsic motivation

Introduction

In recent years, due to the frequent exposure of academic misconduct in universities, it has attracted widespread attention from all sectors of society. As the main body of academic innovation in universities, graduate students' academic values directly affect their personal academic reputation, as well as the scientific research level of the country and the construction of an innovative country. The "Several Opinions of the Ministry of Education on Further Strengthening and Improving Ideological and Political Education for Graduate Students" clearly points out that the current ideological and political work for graduate students is generally in a positive and healthy state, but there are also some academic misconduct phenomena that cannot be ignored. Therefore, in-depth exploration of the psychological mechanism of graduate students' academic values, understanding their cognitive blind spots, is of great significance for guiding graduate students to establish correct academic values and effectively respond to and govern academic misconduct.

1. Factors affecting the academic values of graduate students

1.1 Cognitive factors

Cognitive factors refer to the psychological processes and ways of thinking exhibited by individuals in the process of understanding, recognizing, and processing information. In the graduate stage, it is necessary to have a solid theoretical foundation and a broad knowledge perspective. Enriching the knowledge framework helps graduate students to understand and evaluate academic achievements, cultivate independent judgment and critical abilities, and establish scientific academic values. Due to the insufficient knowledge structure, graduate students may also lose direction in the exploration process, making it difficult for them to form stable academic concepts. Different cognitive styles have varying impacts on the formation of academic values among graduate students. Cognitive style refers to the tendency and habit of people to process information. The differences in cognitive styles among graduate students during the learning process have a certain

impact on their understanding, comprehension, and problem-solving methods. This difference leads to different value orientations among graduate students in academia. The improvement of metacognitive level also plays an important role to a certain extent. Metacognition is the ability to self monitor and regulate, which includes higher-level thinking activities. In academic research, graduate students need to reflect on their research methods and achievements, and make corresponding adjustments to their research strategies.

1.2 Emotional factors

The academic value orientation of graduate students is influenced by various factors, and emotional factors are an important factor that cannot be ignored. They have a profound impact on the learning behavior and attitude of graduate students. Emotional factors include an individual's emotional state, emotional investment, etc. These factors interact and to some extent affect the academic achievements of graduate students. Positive emotions such as enthusiasm and confidence can promote graduate students' desire for exploration and innovation, thereby enabling them to demonstrate strong initiative in scientific research. Graduate students tend to have a high level of enthusiasm for scientific research during their studies. On the contrary, negative emotions such as anxiety and setbacks can weaken the learning motivation of graduate students, leading to phenomena such as "avoidance" in academic research. In an academic environment, graduate students may experience psychological tension. Moderate pressure can promote students' development, while excessive tension can hinder their academic thinking, thereby reducing the quality and efficiency of scientific research. Long term high pressure can also cause physiological problems such as sleep disorders, thereby affecting academic research results. In an atmosphere of mutual support and trust, graduate students are more willing to exchange ideas, participate in seminars, and promote academic collaboration and innovation.

1.3 Personality factors

Personality factors have a direct impact on the academic values of graduate students and have a profound influence on their academic behavior and attitudes. Students with an open personality have a strong curiosity, a tendency to explore unknown things, and a willingness to accept new perspectives and methods. Therefore, they have strong creativity and a thirst for knowledge in learning. This type of graduate student often breaks through traditional disciplinary boundaries, conducts interdisciplinary research, and makes breakthroughs in their own professional field. Sense of responsibility, as a personality trait, also has a certain impact on the learning behavior of graduate students. In academic grooves, responsible graduate students will conduct rigorous and meticulous research on scientific research achievements. It is this sense of responsibility that drives them to work harder academically, persevere in the face of difficulties and challenges, and ultimately achieve their goals. Academic research is characterized by uncertainty and challenges, and for graduate students, it is even more of a test. A resilient personality enables students to quickly adjust their state, regroup, and move forward when encountering failures and setbacks.

2. Analysis of the intrinsic driving force influencing graduate students' academic values

2.1 Intrinsic interest and curiosity

In the graduate study career, intrinsic interest and curiosity are its most enduring driving forces. If graduate students develop a strong interest in a certain discipline, they will have a strong desire to explore and internal motivation, which will prevent them from giving up easily when encountering academic research bottlenecks and seek solutions with a positive attitude. Therefore, in long-term academic life, especially in academic research, personal interests are essential. Curiosity is like a beacon, illuminating the path of academic exploration for graduate students. Curiosity drives graduate students to constantly ask new questions. Driven by a thirst for knowledge, graduate students actively seek new research avenues, attempting to test existing theories from multiple perspectives and daring to propose new insights to authorities. This process can not only improve one's own knowledge system, but also provide new perspectives and theoretical breakthroughs for academic research.

2.2 Achievement motivation and self-efficacy

Achievement motivation and self-efficacy are internal factors that influence the academic value of graduate students.

Achievement motivation and self-efficacy can stimulate graduate students' achievement motivation, as well as encourage them to constantly surpass their own limits and pursue higher academic achievements. When graduate students face difficult research topics and profound academic theories, their motivation drives them to move forward courageously, persevere, and strive for breakthroughs in academia. Self efficacy refers to an individual's subjective judgment of successfully completing a task. In academic research, graduate students with strong self-efficacy have strong self-confidence, can overcome difficulties, solve problems, and thus achieve success. Their confidence comes from past successful experiences, as well as from understanding and affirming their own abilities. The learning motivation and ability of graduate students are important factors that affect their academic performance. In the process of academic research, graduate students will gain more successful experiences, and each successful experience can improve their self-efficacy, thus forming a virtuous cycle.

2.3 The need for self actualization

Maslow's hierarchy of needs holds that the highest level of human needs is the need for self actualization. This need is more prominent among the graduate student community and has become an internal driving force for its sustained development. Graduate students can not only acquire knowledge but also realize their own value and maximize their potential when conducting academic research. The need for self actualization inspires graduate students to constantly challenge themselves and break through their limits in the process of learning. Graduate students are no longer satisfied with the knowledge and theories learned in courses, but need to conduct in-depth research, explore the corners of the discipline that have not yet been touched upon, and propose new perspectives and theories. The exploration of unknown things and innovation is precisely the concrete manifestation of the need for self realization in academic research. It is not easy for graduate students to conduct academic research. They need a solid theoretical foundation, a keen sense of problem-solving, rigorous argumentation methods, and persistent perseverance. Faced with these challenges, Shi Kongsheng can continuously surpass himself in academic research, thus achieving a qualitative leap in his abilities.

3. Strategies for promoting the correct formation of academic values among graduate students

3.1 Improving the educational environment for graduate students

Teachers should establish a graduate education system that is led by academic research and guided by comprehensive development. In the construction of the curriculum system, it is necessary to closely focus on the cultivation of academic research abilities, including both theoretical knowledge of the discipline and practical courses such as research methods and data analysis. To cultivate the practical ability of graduate students, courses such as "High throughput sequencing data analysis" can be offered in their master's program. By regularly holding specialized seminars and inviting experts from various fields to give presentations, graduate students can broaden their horizons and enrich their knowledge structure. For example, establishing an "interdisciplinary research forum" to promote creative thinking among graduate students by inviting experts from different departments to exchange ideas. Through school enterprise cooperation and the establishment of internship bases, graduate students have the opportunity to apply their theoretical knowledge to practice and improve their ability to solve practical problems. The university has jointly established a "joint laboratory" with renowned enterprises, allowing graduate students to participate in the company's research and development plans and personally experience the entire process from the laboratory to the market.

3.2 Strengthening the academic cultivation of graduate students

In graduate education, universities should include academic cultivation in their training plans and cultivate students' moral concepts and awareness. This course not only covers academic standards, intellectual property protection, but also discusses the impact of plagiarism, falsification of experimental results, and other related topics. Through group discussions and other methods, graduate students can recognize and prevent academic misconduct in a specific environment, and improve their critical thinking abilities. For example, a well-known university has offered a course on "Academic Ethics and Academic Honesty" for graduate students. By analyzing cases of academic misconduct at home and

abroad, students deepen their understanding of academic integrity through communication and apply it to practice. Universities should also regularly invite renowned scholars and experts from home and abroad to give special lectures and exchange ideas on the problems they encounter in academic research, which can serve as a demonstration for graduate students.

3.3 Inspiring graduate students' enthusiasm for learning

Graduate education should pay more attention to the autonomy of graduate students. Schools and mentors should provide sufficient guidance and counseling to graduate students, so that they have a clear understanding of their interests and strengths, and determine their research direction based on their abilities and career plans. By organizing academic lectures and other activities, graduate students can stay informed about the latest developments in various disciplines and cultivate their interest in academic research. Universities can establish a "Research Direction Development Fund" to support graduate students in conducting exploratory research at the beginning of their enrollment and expand their ability to make independent choices. To meet the diverse research needs of graduate students, university laboratories must have experimental equipment, library materials, and computing resources, and build an open and shared information resource platform to achieve the integration of multiple disciplines. Establish a "Graduate Innovation Program" fund to support independent applications for research projects by graduate students, providing financial support and technical guidance. For example, a certain university has established the "Graduate Innovation Program", which allocates a certain amount of education funds every year to support graduate students to conduct independent research, thereby greatly mobilizing the enthusiasm of graduate students for academic research. The school has established scholarships, excellent research teams and other awards to recognize and reward students who have made outstanding contributions in the field of scientific research. Scholarships should be awarded based on the academic level, academic attitude, and innovative consciousness of graduate students. By regularly organizing graduate student academic achievement display activities, graduate students can fully showcase their academic achievements and invite experts from both inside and outside the university to evaluate them, enhancing their confidence.

3.4 Cultivating graduate students' social responsibility

To promote the correct formation of academic values among graduate students, teachers must cultivate their sense of social responsibility. By regularly holding seminars, lectures, and inviting experts from different fields to conduct in-depth analysis and discussions on current hot issues such as environmental protection and sustainable development. For example, inviting environmental experts and scholars to exchange ideas on global climate change issues and propose corresponding strategies to enhance graduate students' sense of responsibility and urgency. At the same time, it is also necessary to encourage graduate students to read more relevant books, reports, etc. in their spare time, broaden their horizons, and deepen their understanding of social hot issues. Establish reading groups to enhance communication and sharing among graduate students, and explore how to integrate academic research with social issues. Establish a multidisciplinary integration research plan and encourage graduate students with different disciplinary backgrounds to form research groups to solve practical problems. For example, establishing interdisciplinary research groups such as traffic engineering and environmental studies to provide solutions to urban traffic congestion problems from multiple perspectives, offering academic forums and exchange platforms for graduate students, providing opportunities for them to showcase their research achievements, strengthening their ability and experience in interdisciplinary collaboration, and solving social problems from multiple disciplinary perspectives. Establish a good collaboration mechanism with government departments, enterprises, etc., and provide opportunities for graduates to engage in social practice and internships.

4. Conclusion

In summary, the psychological mechanism of graduate students' academic values has positive significance. Analyzing the influencing factors and intrinsic motivation of graduate students' academic values can help them form a positive psychological mechanism. By improving the educational environment, strengthening academic cultivation, stimulating graduate students' learning enthusiasm, and cultivating their social responsibility, we aim to help graduate students

establish correct academic values and contribute to creating a good academic environment.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Wang Dewu, Wu Wanying, Yan Rui. Research on the cultivation of graduate students' academic innovation ability [J]. *Modern Commerce and Industry*, 2024, 45(18): 149-151.
- [2] Zhang Baowei, Li Qingyun. Research on Cultivating Academic Values of Graduate Students from the Perspective of Moral Education and Talent Cultivation: Guided by "Writing Papers on the Land of the Motherland" [J]. *Journal of Xinxiang University*, 2023, 40(08): 62-64.
- [3] Peng Zeping, Zou Nanfang. The Conceptual Interpretation and Cultivation Strategy of Academic Spirit of Graduate Students in the New Era [J]. *Modern Education Management*, 2023, (04): 54-65.
- [4] Zhu Bichun, Li Xiaoping, Cheng Ping. Reflection on the phenomenon of academic drift in military professional degree graduate education [J]. *Journal of Higher Education Research*, 2022, 45(03): 36-40+108.
- [5] Peng Zeping, Zou Nanfang. Towards History and Innovation: The Development Trajectory and Logical Evolution of Chinese Graduate Education over the Past Century - A Review of "The History of Chinese Graduate Education" [J]. *Journal of Ningbo University (Education Science Edition)*, 2022, 44 (04): 133.
- [6] Luo Xiaofen. Analysis of the citation problem in the introduction of graduate scientific papers [J]. *Technology Communication*, 2022,14(06): 19-22.

About the author

Zhang Kun (1991.05-), female, Han nationality, Kuitun City, Xinjiang Xinjiang Uyghur Autonomous Region, master's student, lecturer, research direction: social psychology, psychological measurement, and mental health education.

Fund project

General Research Project of Yili Normal University in 2019 (No. 2019YSDX021)