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# Research on the Improvement Path of Academic Postgraduates' Scientific Research and Innovation Ability

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**Abstract:** Against the backdrop of China's accelerated efforts to build an innovative country and the growing demand for top-tier innovative talents, postgraduate education serves as a crucial link in cultivating innovative talents. Among them, academic postgraduates, as the main force in scientific research and a key reserve force for original innovation, play a vital role in the cultivation of their scientific research and innovation capabilities. Through research, this paper finds that the cultivation of academic postgraduates' scientific research and innovation ability is currently facing problems in multiple aspects. In terms of enrollment methods, the assessment mainly focuses on textbook knowledge, lacking the evaluation of potential in scientific research and innovation. Influenced by social cognitive biases, candidates make blind choices when applying for postgraduate programs. Meanwhile, training institutions have limited autonomy in adjusting enrollment plans, and supervisors are overloaded with work. During the training process, the academic dissertation review system is not rigorous, with the phenomenon of "lowering standards" being prevalent. The low elimination rate leads to insufficient innovation motivation among students. Additionally, the correlation between "small theses" and academic dissertations is low, making it difficult to effectively evaluate scientific research and innovation ability. At the supervisor level, their academic level and guidance quality directly affect students' scientific research and innovation ability, and supervisors with insufficient capabilities cannot provide effective guidance to students. To address the above issues, this paper proposes corresponding solutions: giving full play to the role of ideological and political education, cultivating students' innovative thinking and healthy personality with the help of Marxist world outlook and methodology; improving enrollment methods by breaking the "dichotomy" framework of degree types, adjusting the enrollment structure, expanding the independent enrollment rights of training institutions and supervisors, and focusing on evaluating students' scientific research ability; optimizing training methods by clarifying the innovation standards for academic dissertations, introducing "practical supervisors" to implement a two-way blind review system, and strengthening the correlation between "small theses" and academic dissertations; and strengthening the construction of the supervisor team by raising the quality requirements for supervisor admission and standardizing supervisors' guidance behaviors in accordance with relevant guidelines.

**Keywords:** Academic Postgraduates; Scientific Research and Innovation Ability; Enrollment Methods; Training Methods; Supervisor Team Construction; Ideological and Political Education; Academic Dissertation Review

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## 1. Introduction

Innovative talents are the core driving force for national scientific and technological progress and high-quality social

development. Against the backdrop of increasingly fierce global competition in science and technology and accelerating industrial transformation and upgrading, the supply of high-level innovative talents has become a key indicator for measuring the level of educational development and national comprehensive competitiveness. At present, China is in a critical period of building a modern socialist country in all respects, and the demand for high-end talents with solid theoretical foundations and outstanding scientific research and innovation capabilities keeps rising. How to systematically improve the quality of innovative talent training has become an important issue that urgently needs in-depth research and solution in the field of higher education<sup>[1]</sup>.

Postgraduate education occupies the "top" position in the education system and is an extremely important part of China's education cause. Some scholars believe that education can be divided into two levels: "The low-level activities are prepared for those who are still learning how to learn; the high-level activities are prepared for those who already know how to learn and how to create new knowledge." Here, the "low-level activities" refer to education at the undergraduate level and below, while the "high-level activities" refer to postgraduate education beyond the undergraduate level. The cultivation of innovation ability is not only a distinguishing feature of postgraduate education from undergraduate education but also the fundamental task of postgraduate education.

China's postgraduate education has always attached great importance to the cultivation of innovation ability. As early as 2004, the Ministry of Education issued the Education Vitalization Action Plan (2003-2007), which clearly proposed the implementation of the "Postgraduate Education Innovation Plan". In 2005, the Degree Regulations promulgated by the Ministry of Education also emphasized the innovation ability of postgraduates<sup>[2]</sup>. In 2017, the State Council issued the National Education Development Plan during the 13th Five-Year Plan Period, which pointed out the need to strengthen the original innovation ability of postgraduates. Against the background of high-quality development, postgraduate education has become the core main position for training high-level innovative talents, and its strategic supporting role in boosting scientific and technological innovation and social progress has become increasingly prominent across the country<sup>[3]</sup>.

With the development of China's economy, the social demand for high-end talents has become diversified, and the original single master's degree system can no longer adapt to the development of social situation. Since the 1990s, China's postgraduate degree types have been divided into two categories: academic degrees and professional degrees. The cultivation target of academic degrees is scientific researchers engaged in theoretical research, requiring the trained personnel to have a solid theoretical foundation; the cultivation target of professional degrees is mainly professionals engaged in practical work in various industries, requiring the trained professionals to be able to engage in specific practical work. There are differences in the requirements for "innovation" between academic postgraduates and professional postgraduates. Relatively speaking, academic postgraduates pay more attention to the innovation of scientific research ability. Therefore, academic postgraduates are not only the main force of China's scientific research but also the key reserve force for promoting China's original innovation. The cultivation of their innovation ability is related to the improvement of China's overall scientific research level and the realization of the goal of building an innovative country<sup>[4]</sup>.

## **2. Main Problems Faced in the Cultivation of Academic Postgraduates' Scientific Research and Innovation Ability**

### **2.1. The Impact of Current Enrollment Methods on Academic Postgraduates' Scientific Research and Innovation Ability**

At present, the enrollment of academic postgraduates in China mainly adopts two approaches: one is the recommendation of a small number of outstanding fresh undergraduate graduates without examination, and the other is the unified national postgraduate enrollment examination. Usually, the latter method of unified examination and enrollment is the main one.

The unified national postgraduate enrollment examination is still an extension of the traditional assessment method, with the main assessment content basically focusing on textbook knowledge, lacking the evaluation of potential in scientific research and innovation. Therefore, under this assessment method, academic postgraduates are not essentially distinguished from professional postgraduates, and the only difference between them lies in their scores in the preliminary examination. Such an enrollment method is obviously backward compared with the goal of cultivating innovative scientific research talents<sup>[5]</sup>.

Although the training objectives and methods of academic and professional postgraduates are different, they need to take the same examination subjects in the preliminary examination. In addition, the society generally has an inaccurate understanding of academic and professional postgraduates, and there is even an extreme situation where professional postgraduates are simply regarded as inferior. Therefore, candidates also have deviations when choosing degrees, and most students blindly choose to apply for academic postgraduate programs.

Therefore, from the perspective of the main enrollment methods for academic postgraduates, the evaluation of students' scientific research and innovation ability is insufficient. This selection method will obviously bring difficulties to the cultivation of academic postgraduates' innovation ability.

Although the unified enrollment examination largely ensures the fairness of education enrollment, in the face of such an enrollment method, various training institutions actually have great difficulty in independently arranging enrollment plans according to their own discipline construction status. The inability to adjust enrollment plans in real time based on the discipline situation will lead to the "powerlessness" of training institutions. The expansion of postgraduate enrollment scale for consecutive years has made postgraduate supervisors in various universities generally overloaded with work, and they are even more unable to do their best in cultivating students' innovation ability. As a result, the quality of scientific research ability cultivation has dropped significantly, and the cultivation of students' innovation ability has been greatly affected.

## **2.2. Problems in the Training Process of Academic Postgraduates**

### **2.2.1. Unstrict Academic Dissertation Review System**

The review and defense of master's dissertations is a comprehensive assessment and evaluation of the degree applicants' mastery of basic theories and professional knowledge, as well as their scientific research and innovation ability. It is an important link to ensure the quality of master's degree awarding and the final monitoring link of the master's degree quality assurance system. However, at this important checkpoint, there is often a serious phenomenon of "lowering standards", and the dissertation review and defense are seriously irregular. The dissertation reviewers and members of the defense committee are usually determined by the departments, and the invited experts are often colleagues and acquaintances. During the review and dissertation defense, even if they clearly think that the quality of the dissertation is poor, they will still have the situation of "unanimous approval" out of consideration for "human feelings" and "face". Even if the "blind review system" is implemented for the review, its effect is greatly reduced due to the phenomenon of "countermeasures against policies".

In the current review and defense of academic dissertations, there is an abundance of praise, while few shortcomings are pointed out; the defense atmosphere is becoming more and more relaxed, and the elimination rate of academic dissertations is almost zero. The serious irregularities in the review and defense of master's dissertations have also had a serious negative impact on master's students, making them lack motivation for innovation in learning and scientific research. At the same time, the low elimination rate of academic dissertations has also encouraged students' laziness and perfunctory attitude. The models of dissertations are the same, without any innovation. Against this background, some postgraduates do not carry out theoretical innovation or methodological innovation, but instead take previous graduates' dissertations as a model and write their own dissertations according to a fixed "routine". The content of the dissertations is modeled, the structure is formatted, and the conclusions are fixed. Even the writing of the "innovative points" in the academic dissertations has become formulaic.

### **2.2.2. Low Correlation between "Small Theses" and Academic Dissertations**

"Small theses" refer to the theses that some universities specifically require academic postgraduates to publish in journals of a certain level before graduation. The original intention of this system is not problematic, and this is even the most significant difference between academic postgraduates and professional postgraduates. However, the actual effect of this system has deviated during the implementation process.

The "small thesis" system is intended to evaluate the scientific research and innovation ability of academic postgraduates. However, in the actual operation process, students often choose to publish "small theses" (where "small" is relative to their academic dissertations) just to meet the graduation requirements. In order to meet the graduation requirements within the study period, many of the "small theses" written by students are not in the research direction of their academic dissertations, and there is even no correlation at all. As a result, "small theses" cannot effectively evaluate the scientific research and innovation ability of academic postgraduates; instead, they encourage the perfunctory attitude of some students.

### **2.3. The Impact of Supervisors on Academic Postgraduates' Scientific Research and Innovation Ability**

In the process of postgraduates' education, supervisors are at the forefront of contacting postgraduates, and the influence of supervisors is almost throughout the entire study and life of postgraduates. Supervisors not only need to impart knowledge to students but also timely guide them when they are confused; they not only need to guide postgraduates to build a knowledge system but also play an irreplaceable guiding role in cultivating postgraduates' innovation awareness.

The academic level of supervisors determines the starting point of students' academic dissertations, which is mainly reflected in the selection of the topic of the academic dissertation. "The quality of the supervisor is first reflected in the selection of the topic - capable scientists or scholars have many resources for issues worthy of research, while incompetent supervisors generally only find trivial issues. Good supervisors can cultivate and develop students' abilities; on the contrary, incompetent researchers can only make students engage in substandard research. This difference is manifested at the beginning of the research, because capable researchers can not only distinguish between important issues and issues with little research value but also teach students how to conduct research." In other words, if the supervisor has not reached the academic frontier and there is no supervisor's judgment on the student's research topic, the chance that the student's academic dissertation can reach the academic frontier is quite small<sup>[6]</sup>.

The improvement of students' scientific research and innovation ability cannot be separated from the guidance of supervisors. Since postgraduates are novices in scientific research, the training of their scientific research ability cannot be separated from the guidance of supervisors. The guidance of supervisors is considered decisive and central, and at the same time, it is also considered particularly difficult. In this process, supervisors play an important role in transferring explicit and implicit knowledge. Only under the guidance of supervisors can postgraduates improve their innovation ability in a short period of study and life. High-level supervisors can provide guidance to postgraduates that is "to the point" and "effective with little effort". The teacher-student relationship in the postgraduate training process is a kind of mentorship. The supervisor's guidance to postgraduates is not only limited to the teaching of professional theories but also includes the influence on postgraduates' way of thinking, scientific spirit, and guidance on academic research. The growth history of a large number of high-level talents proves that at the postgraduate education level of "mentoring", the scientific research and innovation ability of postgraduates is related to the academic level of their supervisors, and it can even be said that "postgraduate supervisors are the key factor determining the scientific research and innovation ability of postgraduates"<sup>[7]</sup>.

## **3. Solutions**

### **3.1. Giving Full Play to the Role of Ideological and Political Education in the Cultivation of Innovative Talents**

The so-called innovative talents must first have the awareness of independent innovation; second, they should also have a

positive attitude and a healthy personality.

In the ideological and political education of postgraduates, the education of Marxist world outlook and methodology is conducive to the generation of innovative thinking. On the one hand, Marx's view that things are universally connected is conducive to the continuity and transferability of thinking, expanding the space of thinking and increasing the flexibility of thinking. Marx's dialectics tells us that things are universally connected, and connections exist universally<sup>[8]</sup>. The whole world is an organic network of connections, and every thing is in obvious or inherent universal connections and cannot be isolated from connections. It is the universal connection, mutual influence, and mutual restriction between things that constitute the integrity and order of the world. Therefore, using the view of universal connection is conducive to us comparing the common points and differences between things, thereby finding the inherent connections between seemingly unrelated things, thinking boldly, and making innovations. On the other hand, the view that things are in motion and development in Marx's dialectics is conducive to awakening people's innovation awareness and stimulating their innovation desire. Marx pointed out that dialectics, while making an affirmative understanding of things, also implies a negative judgment. Every thing follows the established law from emergence to extinction, and our understanding of things is to capture relative stillness in the continuous movement. Therefore, it is very necessary for us to always maintain a critical and questioning attitude towards things. We should take the negative view of dialectics as the philosophical basis, encourage students to think carefully, dare to question, not be superstitious about authority, not be constrained by dogma, and learn to analyze problems rationally and objectively from multiple perspectives. At the same time, we should also encourage students to actively use intuitive thinking to imagine boldly. "The world will not satisfy people, so people are determined to change the world through their own actions." Academic postgraduates should actively use logical thinking and analytical thinking to reason and demonstrate, apply the knowledge they have learned flexibly, and change the world.

Ideological and political education for postgraduates plays a role in shaping a healthy personality. It is hard to imagine that people with personality defects and psychological problems can produce innovative achievements that are beneficial to social development. Innovative talents should not only have the courage and ability to challenge academic authority but also have the confidence and courage to overcome academic difficulties. A sound personality is a catalyst for innovative behavior, and without a healthy personality, it is impossible to complete the process of academic innovation. The ideological and political education of postgraduates needs to go through several necessary stages in the process of improving personality: the first step is to guide postgraduates to correctly understand themselves. They should understand their own personality characteristics and academic background, affirm themselves, enhance self-confidence and a sense of pride through the comparison between the past and the present, and evaluate themselves objectively without underestimating or overestimating themselves. The second step is to accept oneself. Postgraduates should have a clear understanding of their own strengths and weaknesses, treat themselves with a tolerant and calm attitude, be optimistic, positive, and proactive. They should not blindly exaggerate their strengths but also analyze their weaknesses objectively and learn to develop their strengths and avoid their weaknesses. The third step is to be humble and willing to share. Postgraduates are prone to self-isolation when facing heavy academic research tasks. Therefore, they should have an open mind, communicate more with others, pay attention to current affairs, integrate into the collective, and form a sense of teamwork. After all, a person's energy is limited, so they should learn from others with an open mind. Only when individuals integrate into society can they maximize their own value, and most innovative achievements are the crystallization of collective wisdom. Finally, it is necessary to adjust expectations reasonably. The set goals should not be too high or beyond one's ability, which will lead to excessive pressure and blind self-denial. Moreover, the goals should be consistent with the direction of social development and have the value and significance of realization.

### **3.2. Improvement of Enrollment Methods**

Since the differences between academic postgraduates and professional postgraduates have not been truly clarified in theory, there are many deviations in people's understanding of them in reality. People often position professional postgraduates as a lower talent level than academic postgraduates. Therefore, when applying for postgraduate programs, the "herd effect" is inevitable, and many people blindly choose to apply for academic postgraduate programs without

considering their own actual situation.

The degree of "master" was first awarded by the University of Paris in the 12th century. Initially, this degree was a pass to obtain a teaching position in a university, and many people worked as teachers in universities after graduation. In China, the situation where a master's degree serves as a stepping stone to a teaching position in a university continued until the early 21st century. In fact, university teaching positions themselves are also a kind of profession, and a highly specialized one at that, which has extremely high requirements for the knowledge level, teaching skills, and scientific research and innovation ability of practitioners. Therefore, the current standard for distinguishing between professional degrees and academic degrees has great limitations, at least in terms of the overly narrow understanding of "profession" and "application". In other words, essentially, both professional degrees and academic degrees are professional and application-oriented. The only difference is that the training goal of academic degrees in some basic disciplines is not specifically targeted at a certain professional field, while the training goal of professional degrees is often targeted at a specific professional field.

It can be seen that the current classification of postgraduate degree types in China's postgraduate education is not conducive to the development of postgraduate education. The classification of postgraduate degree types must break away from the "dichotomy" framework as soon as possible. At the same time, under the premise of enrolling students according to degree types, China's existing postgraduate enrollment structure should also be significantly adjusted. The academic master's degree should be a transitional degree for continuing to pursue a doctoral degree, rather than a terminal degree. Its enrollment scale should be greatly reduced, and its enrollment methods should also be reformed accordingly.

As early as January 2010, the Ministry of Education had already adjusted the postgraduate structure, "reducing the number of academic master's enrollment quotas and increasing the number of professional master's enrollment quotas. In the following years, the ratio of full-time professional masters to full-time academic masters reached 7:3". This change also pointed out the direction for the talent cultivation of colleges and universities: academic postgraduates are innovative talents, and academic masters will become the reserve force for academic doctoral talents in the future. Therefore, when enrolling academic postgraduates, more attention should be paid to the evaluation of students' scientific research ability, and the independent enrollment rights of training institutions and supervisors should be appropriately expanded. Only in this way can the quality of academic postgraduate students be improved at the source, and the attitude of academic postgraduates towards pursuing degrees be corrected.

### **3.3. Improvement of Training Methods**

#### **3.3.1. Improving the Academic Dissertation Management System**

The theoretical and innovative nature of academic dissertations is an important symbol of academic postgraduates. To ensure the innovation of academic postgraduates' dissertations, it is necessary to clarify whether there are new viewpoints, new arguments, new methods, and new applications in the writing of the dissertations.

New viewpoints are manifested in: putting forward viewpoints that have not been put forward by predecessors, including controversial viewpoints; completely or partially correcting the viewpoints put forward by predecessors; conducting a comprehensive and systematic comparison of the viewpoints of predecessors (including domestic and foreign ones), so that people can have a clearer, more comprehensive, and systematic understanding of the viewpoints of predecessors. New arguments are manifested in: putting forward brand-new arguments for the already confirmed viewpoints, filling the gaps in arguments; developing or supplementing the arguments put forward by predecessors, making people more convinced of the conclusions put forward by predecessors; completely or partially correcting the arguments put forward by predecessors; conducting a comprehensive and systematic comparison of the arguments put forward by predecessors (including domestic and foreign ones), thereby forming a set of new argument systems. New methods are manifested in: adopting brand-new research methods or partially adopting new research methods; completely or partially correcting the wrong or unscientific research methods adopted by predecessors; developing or supplementing the research methods adopted by predecessors; conducting a comprehensive and systematic comparison of the research methods adopted by predecessors, so that people can have a clearer and more complete understanding of research methods. New applications are manifested in: re-understanding and applying the viewpoints of predecessors in

combination with the new situation and new characteristics of the new era; partially applying the viewpoints put forward by predecessors to understand and solve problems in the new situation; comparing the past applications of predecessors' viewpoints, thereby putting forward applications in the new situation.

When reviewing dissertations, experts should also use these standards to evaluate the quality of dissertations. At the same time, to prevent academic dissertations from being divorced from reality in the name of innovation, when reviewing dissertations, we can try to submit the academic dissertations of academic postgraduates to the corresponding "practical supervisors" for review. The introduction of "practical supervisors" is not to emphasize the application-oriented orientation in the cultivation of academic postgraduates, but to scientifically evaluate the innovation ability of academic postgraduates. Marx once pointed out, "The philosophers of the past only interpreted the world, but the problem lies in changing the world." Marx used this sentence to expound his new world outlook, which is a materialist world outlook without absolute "metaphysical" concepts. Therefore, when conducting scientific research and innovation, academic postgraduates must not only pursue "innovation" and deviate from the position of materialism, making their academic dissertations lose practical value.

There are five ways to select "practical supervisors": first, select personnel with senior professional titles in the "Enterprise Postgraduate Workstations" to enter the "Practical Supervisor Database" through qualification certification; second, select personnel with titles such as "Professor-level Senior Engineers", "Professor-level Senior Economists", "Professor-level Senior Accountants" or similar titles to enter the "Practical Supervisor Database"; third, select "part-time professors" employed by the university who are engaged in on-site practical work to enter the "Practical Supervisor Database"; fourth, select from the "entrepreneur team"; fifth, select from personnel with senior professional titles in the practical field.

The standards for "practical supervisors" to review dissertations mainly include: whether the dissertation is connected with reality; whether the content of the dissertation conforms to reality; whether the practical data in the dissertation is true and reliable; whether the dissertation has practical value. The theoretical basis for adopting the two-way blind review system of "academic supervisors" and "practical supervisors" is: education should serve the modernization drive; theory should be combined with practice; scientific research achievements should be transformed into productive forces; empirical research is a supplement or auxiliary to normative research.

### **3.3.2. Strengthening the Correlation between "Small Theses" and Academic Dissertations**

The adjustment of the postgraduate enrollment structure by the Ministry of Education indicates that the training method of academic postgraduates will develop towards the direction of reserve innovative talents in the future. Therefore, in the training process of academic postgraduates, the "small thesis" system must be adjusted accordingly. Academic dissertations are the key to measuring the scientific research and innovation ability of academic postgraduates. However, most of the "small theses" produced under the current "small thesis" system have little connection with students' academic dissertations. The publication of "small theses" is mainly to meet the rigid requirements put forward in the training plan, and most "small theses" cannot play a positive role in students' academic careers. In order to publish "small theses", academic misconduct may even occur. Therefore, it is necessary to explore a flexible mechanism between "small theses" and academic dissertations. As analyzed earlier, there are differences between academic postgraduates and professional postgraduates, and it has also been pointed out that the proportion of academic postgraduates in the total number of postgraduates in China is decreasing. Academic postgraduates are transforming into the national reserve innovative force and are increasingly becoming an important source of doctoral students. The "small theses" and academic dissertations must be correlated; otherwise, they will lose their significance to a large extent.

The solution to this problem is to incorporate "small theses" into the scope of academic dissertations and strengthen the continuity of academic postgraduates' activities during their stay at school. Although the study time of academic postgraduates at school is relatively longer than that of professional postgraduates, it is still relatively short for major scientific research issues. Therefore, if the correlation between "small theses" and academic dissertations is insufficient, it may lead to insufficient research time, failure to produce research results in a timely manner, and delay in graduation.

### **3.4. Strengthening the Construction of the Supervisor Team**

Supervisors are the first responsible persons for postgraduate training and shoulder the lofty mission of cultivating high-level innovative talents. Strengthening the construction of the supervisor team includes two requirements: first, attaching importance to the quality of supervisors when selecting postgraduate supervisors and raising the entry threshold; second, standardizing the guidance behavior of supervisors to ensure the quality of talent cultivation.

#### **3.4.1. Improving the Quality of Supervisors**

The academic level of supervisors and their guidance are closely related to the improvement of academic postgraduates' scientific research and innovation ability. To cultivate an academic postgraduate who meets the requirements of the times and has a certain scientific research and innovation ability, supervisors must have the following qualities: (1) Having profound academic knowledge and a rigorous attitude towards academic research; (2) Having a strategic vision for academic development and being able to grasp the development trend of the discipline and related research fields; (3) Being active in the front line of scientific research, having a comprehensive understanding of the new development trends and the latest cutting-edge research fields of the discipline at home and abroad; fully understanding which aspects are most worthy of research and where breakthrough results may be achieved, and being able to help students select appropriate research topics that are expected to make breakthroughs; (4) Being able to obtain important national-level projects, provide students with high-level cutting-edge research topics; and provide the necessary research funds and equipment environment for students to complete their research work; (5) Being able to teach students in accordance with their aptitude, fully paying attention to students' academic individuality, and helping academic postgraduates select better research directions; (6) Having profound academic and research accumulation, and guiding students to further deepen their research on the basis of the supervisor's scientific research; (7) Being able to support postgraduates to participate in international and national academic conferences, creating conditions for students to participate in high-level academic discussions, discuss with well-known experts and professors at home and abroad, broaden their academic horizons, and activate their academic thinking; (8) Attaching great importance to the cultivation of postgraduates' innovation ability and encouraging postgraduates to innovate boldly; (9) Caring about and guiding postgraduates, often discussing and communicating with postgraduates, understanding the progress of research work and providing timely guidance, and having high standards and strict requirements for postgraduates.

#### **3.4.2. Standardizing the Guidance Behavior of Supervisors**

In November 2020, the Ministry of Education formulated the Guidelines for the Guidance Behavior of Postgraduate Supervisors, with the specific guidelines as follows:

(1) Adhering to the correct ideological guidance. Adhere to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, take the lead in practicing socialist core values, strengthen the ideological and political education of postgraduates, guide postgraduates to establish a correct world outlook, outlook on life, and values, enhance their sense of mission and responsibility, and act as both academic mentors and life mentors. They shall not have words or deeds that violate the Party's theories, lines, principles, and policies, violate national laws and regulations, damage the image of the Party and the country, or deviate from socialist core values.

(2) Participating in enrollment in a scientific and fair manner. Strictly abide by relevant regulations when participating in enrollment promotion, proposition and marking, re-examination and admission, and other work, and select talents in a fair, just, and scientific manner.

(3) Devoting oneself to guidance with great efforts. Adopt various training methods to stimulate the innovation vitality of postgraduates. They shall not neglect the supervision and guidance of postgraduates' academic progress and the academic problems they face.

(4) Fulfilling the guidance responsibilities correctly. Abide by the laws of postgraduate education and the laws of talent growth, and teach students in accordance with their aptitude; reasonably guide postgraduates' learning, scientific research, and practical training activities; comprehensively consider the assessment results of key nodes such as the proposal and mid-term assessment, and put forward suggestions on the diversion and withdrawal of postgraduates.

(5) Strictly abiding by academic norms. They shall not have behaviors that violate academic norms or damage the academic and scientific research rights and interests of postgraduates.

(6) Controlling the quality of academic dissertations. Strengthen the management of the training process, guide postgraduates to do a good job in the selection of dissertation topics, proposal, research, and writing in accordance with the training plan and time node requirements; strictly implement the requirements for degree awarding and strictly control the quality of postgraduates' academic dissertations. They shall not submit academic dissertations that do not meet the academic norms and quality requirements for review and defense.

(7) Strictly managing the use of funds. Encourage postgraduates to actively participate in scientific research, social practice, and academic exchanges, provide corresponding fund support for postgraduates in accordance with regulations, and ensure the legitimate rights and interests of postgraduates. They shall not falsely report, fraudulently claim, embezzle, or occupy scientific research funds or other funds in the name of postgraduates.

(8) Building a harmonious teacher-student relationship. Implement the fundamental task of fostering virtue through education, strengthen humanistic care, pay attention to postgraduates' academic pressure, employment pressure, and mental health, and establish a good teacher-student interaction mechanism. They shall not insult the personality of postgraduates or have improper relationships with postgraduates.

## Disclosure statement

The author declares no conflict of interest.

## References

- [1] Ni G D, 2022, Status, Hot Spots and Trends of Innovative Talent Training Research in China: A Visual Analysis Based on CSSCI Journal Literatures. *Research in Higher Education of Engineering*, (01): 145-152.
- [2] Shi XG, 2001, *An Outline of the Thoughts of American Universities*. Beijing: Beijing Normal University Press, 49.
- [3] Wang Z J, Chang L, Zhang Z H, 2022, High-Quality Development of Postgraduate Education: Historical Background, Logical Implication and Path Selection. *Academic Degrees & Graduate Education*, (02): 13-20.
- [4] Wang DH, 2005, *Study on the Quality Management of Academic Dissertations*. East China Normal University, 44.
- [5] Lenin, 1993, *Philosophical Notebooks*. Beijing: People's Publishing House, 244.
- [6] Yuan BT, 2016, Reflections on the Classification of Postgraduate Degree Types in China. *University Education Science*, (06): 24.
- [7] Zhu XY, 2012, Cultivation of Scientific Research Ability for Top Innovative Talents of Academic Masters. *Graduate Education Research*, (04): 50-53.
- [8] Marx K, Engels F, 2009, *Collected Works of Marx and Engels: Volume 1*. Beijing: People's Publishing House, 502.

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