

Research on Self-adjustment Methods of Graduate Students Under Dual Pressure of Academics and Employment

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Abstract: Helping graduate students alleviate the dual pressures of academics and employment, build psychological resilience, and enhance comprehensive adaptability is an issue that cannot be ignored in current high-level talent cultivation. This article combines the "Blue Book of Mental Health: Report on the Development of National Mental Health in China (2023-2024)" (Institute of Psychology, Chinese Academy of Sciences, 2025), the 2024 Global Graduate Workplace Survey by Nature, and relevant empirical research results from Nature Biotechnology to deeply analyze the core logic of graduate student stress and to sort out and build a multidimensional self-adjustment path. According to relevant research data, the detection rate of depression risk among graduate students in China is about 28–30%, while the risk of anxiety is in the range of 40–43%. This proportion is significantly higher than the detection rate of depression risk among ordinary adults, which is 16.8%. These pressures mainly stem from four aspects: the rigid requirements for academic output, uncertainty in the job market, insufficient economic support, and the imbalance between work and research. Based on this, this article summarizes and provides practical adjustment methods from four dimensions: cognitive reconstruction, behavioral regulation, social support building, and physical-mental collaborative maintenance. These methods not only provide practical guidance for graduate students to overcome stress and achieve the coordinated development of academic and career pursuits, but also provide useful references for universities to improve their mental health education system.

Keywords: Graduate students, Academic and employment pressures, Self-adjustment, Psychological resilience, Mental health.

1. Introduction

With the continuous promotion of the popularization of higher education and the intensification of the internal competition in the job market, the graduate student population is deeply squeezed by the dual pressures of academic excellence and career planning. Psychological health issues have gradually become a pressing issue that needs to be addressed and resolved in the cultivation of high-level talents. Many graduate students are devoted to their research projects and publishing papers, while also worrying about the fierce competition in the job market, and their psychological burden continues to rise. This article combines the "Blue Book of Mental Health: Report on the Development of National Mental Health in China (2023-2024)" (Institute of Psychology, Chinese Academy of Sciences, 2025), Woolston C.'s empirical study on graduate student stress and satisfaction published in Nature (2022), and the empirical study "Behind the graduate mental health crisis in science" published in Nature Biotechnology to deeply analyze the core logic of graduate student stress, and to sort out and build a multidimensional self-adjustment path.

According to authoritative research data from multiple sources, the detection rate of depression risk among Chinese graduate students is about 28–30%, and the anxiety risk is 40–43% [1], significantly higher than the detection rate of depression risk among ordinary adults, which is 16.8% (Institute of Psychology, Chinese Academy of Sciences, 2025). According to a study in Nature [2], only 62% of graduate students worldwide are satisfied with the current state of research, with financial pressure (42%), publication pressure (41%), and uncertain employment prospects (65%) being the main sources of anxiety. 68% of respondents find it

difficult to balance their studies and life, and such negative emotions are prone to forming a vicious cycle, thereby affecting research progress and career choices.

As the core force of the national high-level talent reserve, the physical and mental state of graduate students is directly related to the quality of academic output and long-term career potential. The current academic research on the causes of graduate student stress is relatively sufficient, but there is still a significant lack of systematic and practical sorting out of self-adjustment methods. Based on this, this article combines authoritative data and empirical conclusions to build a scientifically feasible adjustment framework, which has important practical value in helping graduate students overcome stress and achieve healthy growth.

2. The Core Causes of the Dual Pressure of Graduate Academics and Employment

The formation of graduate student pressure is essentially the dual superposition of academic and employment pressures, which has common manifestations among different educational and professional groups, but also varies slightly in emphasis due to disciplinary differences. On the academic level, the "Comprehensive Guide to Humanities and Social Sciences Research in Chinese Universities (2024)" shows that the average acceptance rate of core journals in humanities and social sciences is only 14.8%, and many students have gone through multiple revisions and polishing of their manuscripts but still cannot avoid rejection; The threshold for publishing SCI papers for science and engineering graduate students has tripled or quadrupled compared to 2015. Poor experimental data and technical bottlenecks have become the norm, causing

70% of graduate students to experience long-term research stagnation. 34.2% of respondents actively seek psychological support due to academic anxiety.

On the employment level, according to statistics from the Ministry of Education in 2024, 55.3% of master's students and 68.7% of doctoral students have employment anxiety [3]. Involvement in the recruitment of traditional high-quality positions continues to intensify, and young teachers in ordinary undergraduate colleges are generally required to hold a doctoral degree and have published 2 or more papers in TOP journals. The corresponding R&D positions in enterprises also put forward practical requirements for scientific research achievements and practical abilities. The shortage of high-quality positions has shrunk, leaving many graduate students deeply concerned about "unemployment upon graduation". Economic difficulties and imbalanced living further amplify this sense of pressure. According to the "Annual Report on Graduate Education Quality (2024)" by the Degree and Graduate Education Development Center of the Ministry of Education, the average monthly subsidy for engineering doctoral students is generally between 2500–3500 yuan, while the subsidy for humanities and social sciences graduate students is even lower, making it difficult to cover rent and daily expenses. Some students also have to bear the cost of research consumables, resulting in layered economic pressure; 68.1% of the respondents are unable to balance scientific research and personal life, and 72.3% of them spend more than 40 hours per week on scientific research, constantly in a high-pressure standby state, physically and mentally exhausted but unable to extricate themselves [4].

In addition, 18.6% of graduate students have encountered academic communication barriers, insufficient guidance from supervisors, and other problems. They want to seek advice on scientific research problems but do not receive timely responses, and their negative emotions have nowhere to vent. Graduate students are already in a relatively closed research environment, lacking natural emotional counseling channels. The existence of such problems further accumulates pressure, ultimately trapping them in a vicious cycle of "pressure accumulation → declining state → intensified pressure".

3. Cognitive Reconstruction: Breaking the Stress Cognitive Bias

Graduate students often fall into the extreme mindset of perfectionism and black-and-white thinking, which can easily lead them into a vortex of self-doubt when experimental data is not ideal, papers are repeatedly rejected, and job interviews fail [5]. They may even completely negate their research abilities and career value. An empirical study conducted by the School of Psychology at Beijing Normal University in 2024 on cognitive intervention for graduate students in universities showed that through systematic rational cognitive guidance, 80.5% of the participants' negative emotional intensity and perceived stress both decreased significantly.

To break free from cognitive misconceptions, the first step is to accept the uncertainty in academic and employment, and clarify that academic research is a process of continuous trial and error and gradual exploration. The success or failure of a paper or experiment cannot define the scientific research value, and there is no absolute optimal solution for employment choices. Only by abandoning excessive obsession with results can we reduce the anxiety of

"making mistakes at every step". Secondly, blind peer comparison should be avoided. Comparing the progress of academic papers and job offers between peers during the graduate stage can easily lead to anxiety. Everyone's professional foundation, research pace, and career pursuit are inherently different. By combining one's own characteristics, ability shortcomings, and career demands, personalized goals should be formulated, instead of blindly copying others' academic paths or employment standards, in order to form a development pace that suits oneself. Finally, it is necessary to establish a positive attribution model, attributing paper rejection to research methods that still have room for optimization and writing ideas that need to be adjusted, and attributing job failures to insufficient job matching and interview experience accumulation, rather than personal ability deficiencies.

The empirical research of mindfulness-based cognitive therapy also provides practical methods for cognitive adjustment. By adhering to 15 minutes of mindfulness-based emotional awareness training every day, such as using mindfulness breathing to sort out emotions and simply checking in with negative feelings, the anxiety scale score can be significantly reduced for 8 consecutive weeks, helping graduate students to view stressful events more calmly. The duration of this intervention effect can last for more than six months, helping graduate students gradually establish a stable cognitive system for coping with stress [6].

4. Behavioral Regulation: Building a Scientific Life and Learning Model

Proactive behavioral adjustment is the key to implementing the idea of relieving cognitive stress, and the core is to find a dynamic balance that matches the physical and mental state in the rhythm of academic progress. In terms of time management, the priority matrix method can be used to break down daily tasks, categorizing project tackling, paper writing, and job preparation according to the "urgent-important" dimension. Small goals can also be broken down by stage to avoid fear of difficulties caused by overly large tasks. Many graduate students often rush to complete papers, submit resumes, and conduct experiments at the same time, which often causes anxiety and fluster. However, this method can make task organization clearer, and 70.8% of graduate students reported a significant reduction in time pressure after using it. In terms of research pace, we need to break the misconception of "long immersive standby time" and follow the rhythm of "1.5 hours of work+15 minutes of rest". During rest, avoid scrolling through mobile phones; instead, get up and walk around, and look out the window to relieve the tense brain. We also reserve two to three fixed personal time slots every week, which can be used for daydreaming and chatting with friends, allowing the tense nerves to truly relax, clarifying the boundary between research and life, and avoiding the continuous internal friction caused by role ambiguity [7]. In terms of exercise regulation, research in the Journal of Exercise Physiology has already confirmed that regular moderate-intensity exercise can effectively promote the secretion of endorphins, alleviate negative emotions, and 75.2% of graduate students have reported that exercise can quickly relieve physical and mental fatigue caused by scientific research. It is recommended to engage in exercise for more than 30 minutes three times a week, without pursuing high intensity, just slightly sweating. Campus night

runs, rope skipping on the playground, and simple yoga in laboratory breaks are all acceptable. These easy-to-operate methods are more suitable for graduate students' daily lives. At the same time, reduce excessive dependence on electronic devices, control the daily screen usage time, especially frequent browsing of job search software and prolonged viewing of literature on the screen, which can easily keep the brain in a state of sustained fatigue. Reasonable time management can improve offline learning and research focus.

5. Social Support: Building a Diverse Psychological Support Network

A comprehensive social support system can build a stress buffer for graduate students, alleviate the loneliness of facing scientific research and job hunting alone, help them overcome the "research island" dilemma, and avoid negative emotions accumulating in their hearts. At the level of communication between teachers and students, a survey on graduate education at Tsinghua University shows that 90.3% of respondents believe that effective communication with mentors can quickly solve academic difficulties, without waiting for problems to accumulate and become difficult to solve before speaking up. Even short online messages or ten-minute offline discussions can make communication more efficient. Proactively reporting on scientific research progress, providing honest feedback on experimental bottlenecks or job confusion, clarifying academic requirements and guidance needs, reducing pressure caused by expected deviations, and receiving targeted advice and positive feedback from mentors can often quickly ease research and career concerns [8]. In terms of peer assistance, 70.6% of graduate students said that peer communication is the most suitable channel for emotional counseling. Students in the same research group or major can understand each other's difficulties better. They can form academic assistance groups, job search information communities, online sharing of subject tackling skills, offline exchange of interview experience, occasional pressure-relief talks, relaxed offline dinners, and also release tense emotions. In the process of empathy communication, they can not only obtain emotional comfort, but also achieve resource complementarity and information sharing. At the level of professional support, data from university psychological counseling centers shows that targeted psychological interventions have an effective rate of over 81% in relieving graduate students' stress. Most universities have set up offline counseling rooms and 24-hour online psychological hotlines, and counselors will customize personalized adjustment plans based on personal situations, which is more effective than relying solely on oneself [9]. When there are persistent insomnia, low mood for more than two weeks, and other difficult-to-self-regulate situations, it is important to seek professional help in a timely and proactive manner. This is not a sign of weakness. In addition, taking the initiative to talk to family about one's financial pressure and career planning dilemma, openly expressing one's inner anxiety and unease, without deliberately concealing one's difficulties. Family members' tolerance, understanding, and support are the warmest backing, which can completely dispel underlying worries and enable graduate students to face the dual challenges of academic and employment with ease.

6. Physical-Mental Synergy: Building a Solid Physiological Foundation for Stress Resistance

The coordinated stability of physical and mental states is the core guarantee for graduate students to enhance their ability to withstand pressure. The health status of the body directly affects their psychological resilience and emotional regulation ability. The imbalance of body and mind under high pressure will only double psychological stress. In terms of sleep management, long-term pressure from scientific research and job hunting can easily lead to difficulties falling asleep and a decline in sleep quality. Lack of sleep can in turn exacerbate anxiety. Many graduate students stay up late to catch up on research projects, seemingly rushing to make progress, but their research efficiency drops sharply the next day. It is recommended to establish a fixed daily routine, avoid staying up late for research, and ensure seven to eight hours of effective sleep every day, so that the brain and body can get sufficient rest, in order to improve cognitive function and emotional regulation ability. In terms of dietary regulation, pay more attention to balanced nutrition in daily diet, reduce high-sugar, high-oil, and high-salt fast food, and supplement with grains rich in vitamin B and protein, lean meat, and fresh fruits and vegetables appropriately. Even if a small amount of nuts and fresh-cut fruits are prepared in the laboratory, it can timely supplement energy and avoid irritability and depression caused by hunger or low blood sugar [10]. Deliberate supplementation is unnecessary. A balanced three-meal diet is sufficient to reserve physical fitness for high-intensity scientific research and job hunting, and fundamentally reduce the probability of emotional fluctuations caused by physical fatigue. In terms of relaxation training, research from the School of Psychology and Cognitive Sciences at Peking University has shown that progressive muscle relaxation training has an effective rate of 70.2% in relieving anxiety among graduate students. This training is easy to operate and can be done while lying down before going to bed. It only takes 10 minutes a day to tighten and relax muscles one by one; A simple abdominal deep breathing training can reduce stress levels by 20% in just 5 minutes. It can be used to quickly calm emotions when research is stalled or when feeling nervous before a job interview. In addition, universities often offer free positive psychology group counseling, which can effectively improve self-acceptance and psychological resilience. After intervention, the average perceived stress level of graduate students decreases by 30%, and the effect can last for more than 4 weeks [11]. Communicating and sharing with graduate students at the same school can also provide more practical adjustment methods through interaction.

7. Conclusion

Graduate students can alleviate the dual pressure of academic and employment by actively adjusting themselves, integrating multidimensional strategies such as cognitive restructuring, behavioral regulation, social support, and physical-mental collaborative care, in order to build a comprehensive and practical stress adjustment system. The current pressure on graduate students is both universal and interwoven, with factors such as publication requirements, job market competition, and economic constraints overlapping. A single adjustment method is difficult to

fundamentally resolve the complex pressure. Cognitive restructuring is a prerequisite for breaking cognitive biases caused by stress, and avoiding self-amplification of stress from the root; Behavioral regulation is the key to relieving stress and helping to build a scientific learning and living model; Social support is an important foundation for buffering stress and helping graduate students overcome their research isolation; The coordination of body and mind strengthens the physiological foundation for stress resistance, providing solid physical support for psychological resilience, and forming a virtuous adjustment loop through the linkage of the four dimensions. These methods, supported by authoritative empirical evidence, are both scientific and practical, and can effectively enhance the psychological resilience of graduate students, helping them cope with academic and job challenges more calmly. Alleviating graduate students' pressure is not a solo endeavor. In addition to actively practicing it, universities need to improve mental health services, optimize training and employment guidance mechanisms, families should provide emotional understanding and support, and collaborate with schools to make the adjustment effect more significant. This study has limitations: it does not provide detailed adjustment plans for the pressure differences among graduate students in different majors of arts, sciences, and engineering. Subsequent empirical research can be conducted by specialty to optimize strategies based on the characteristics of scientific research and employment in various disciplines, enriching the application scenarios of the research findings.

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