

**Employment Pressure and Anxiety Among Final-Year Preschool
Education Students: The Chain-Mediating Role of Social
Support and Psychological Resilience**

by

Shi Jie
(21010255)



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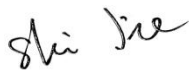
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DECLARATION

I hereby declare that the work presented in this thesis was conducted in full compliance with the regulations of Universiti Malaysia Sarawak (UNIMAS). Except where proper acknowledgment is given, this work is solely the effort of the author. This thesis has not been accepted for the award of any other degree and is not being **concurrently** submitted for any other academic qualification.

Signature



Student Name: Shi Jie

Matric No: 21010255

Date: 15 July 2026

Faculty of Cognitive Sciences and Human Development
Universiti Malaysia Sarawak (UNIMAS)

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Employment Pressure and Anxiety Among Final-Year Preschool Education Students: The Chain-Mediating Role of Social Support and Psychological Resilience

ABSTRACT

Anxiety among college students is on the rise, particularly among final-year students facing employment pressure. In China, the job market for preschool education majors has become increasingly competitive due to a large number of graduates and a post-COVID-19 decline in both birth rates and the number of kindergartens. Meanwhile, the state has emphasized the importance of preschool education through integrated pre- and post-service training aimed at building a high-quality kindergarten teacher workforce. Therefore, addressing the employment pressure and anxiety experienced by final-year students in preschool education is essential. This study surveyed 636 fresh preschool education graduates to examine the chain-mediating roles of social support and psychological resilience in the relationship between employment pressure and anxiety, based on the buffering effect model. A cross-sectional design and questionnaire method was used, employing measurement tools including the Employment Pressure for College Student Scale, Psychological Resilience Scale, Social Support Rating Scale, and Self-Rating Anxiety Scale. Two-stage structural equation modeling revealed that (1) Employment pressure was at a lower-middle level, social support at a medium level, psychological resilience at an upper-middle level, and anxiety at an upper-middle level. (2) Employment pressure was positively correlated with anxiety and negatively correlated with social support and psychological resilience; social support was positively correlated with psychological resilience and negatively correlated with anxiety. (3) Social support and psychological resilience exhibited both independent and chain-mediating effects in the relationship between employment pressure and anxiety. This study verifies and expands existing theories regarding the roles of social support and psychological resilience in stress adaptation and anxiety reduction, thereby enriching research on stress and mental health. It also provides a theoretical foundation for enhancing psychological counseling services for college graduates, improving the effectiveness of interventions, and promoting psychological flexibility.

Keywords: Preschool Education, Employment Pressure, Social Support, Psychological Resilience, Anxiety, AMOS 23.0.

Tekanan Pekerjaan dan Kebimbangan dalam Kalangan Pelajar Tahun Akhir Pendidikan Prasekolah: Peranan Pengantaraan Berantai Sokongan Sosial dan Ketahanan Psikologi

ABSTRAK

Kebimbangan dalam kalangan pelajar universiti semakin meningkat, terutamanya dalam kalangan graduan baharu yang menghadapi tekanan pekerjaan. Di China, pasaran kerja bagi jurusan pendidikan prasekolah menjadi semakin kompetitif disebabkan oleh bilangan graduan yang tinggi serta penurunan kadar kelahiran dan bilangan tadika selepas pandemik COVID-19. Pada masa yang sama, kerajaan menekankan kepentingan pendidikan prasekolah melalui latihan bersepadu sebelum dan selepas perkhidmatan yang bertujuan untuk membentuk tenaga pengajar tadika yang berkualiti tinggi. Oleh itu, menangani tekanan pekerjaan dan kebimbangan yang dialami oleh graduan baharu dalam bidang pendidikan prasekolah adalah sangat penting. Kajian ini melibatkan seramai 636 graduan baharu jurusan pendidikan prasekolah bagi mengkaji peranan pengantaraan berantai sokongan sosial dan daya ketahanan psikologi dalam hubungan antara tekanan pekerjaan dan kebimbangan, berdasarkan model kesan pelindung (buffering effect model). Reka bentuk keratan rentas dan kaedah soal selidik telah digunakan, dengan alat pengukuran termasuk Skala Tekanan Pekerjaan untuk Pelajar Universiti, Skala Daya Ketahanan Psikologi, Skala Penilaian Sokongan Sosial, dan Skala Kendiri Kebimbangan. Pemodelan persamaan struktur dua peringkat menunjukkan bahawa: (1) Tahap tekanan pekerjaan berada pada tahap pertengahan rendah, sokongan sosial pada tahap sederhana, daya ketahanan psikologi pada tahap pertengahan tinggi, dan kebimbangan pada tahap pertengahan tinggi. (2) Tekanan pekerjaan berkorelasi positif dengan kebimbangan dan berkorelasi negatif dengan sokongan sosial dan daya ketahanan psikologi; sokongan sosial berkorelasi positif dengan daya ketahanan psikologi dan berkorelasi negatif dengan kebimbangan. (3) Sokongan sosial dan daya ketahanan psikologi memainkan peranan pengantara secara bebas dan berantai dalam hubungan antara tekanan pekerjaan dan kebimbangan. Kajian ini mengesahkan dan memperluaskan teori sedia ada mengenai

peranan sokongan sosial dan daya ketahanan psikologi dalam penyesuaian terhadap tekanan dan pengurangan kebimbangan, seterusnya memperkayakan kajian dalam bidang tekanan dan kesihatan mental. Ia juga menyediakan asas teori untuk meningkatkan perkhidmatan kaunseling psikologi bagi graduan universiti, mempertingkatkan keberkesanan intervensi, dan memupuk fleksibiliti psikologi.

Kata Kunci: *Pendidikan Prasekolah, Tekanan Pekerjaan, Sokongan Sosial, Ketahanan Psikologi, Kebimbangan, AMOS 23.0*

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LIST OF ABBREVIATIONS

AGFI	Adjusted Goodness-of-Fit Index
AVE	Average Variance Extracted
BP	Behavioral Performance
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Composite Reliability
EED	Employment Emotional Distress
GFI	Goodness-of-Fit Index
IFI	Incremental Fit Index
KMO	Kaiser-Meyer-Olkin
MI	Modification Indices
NFI	Normed Fit Index
O	Optimism
OS	Objective Support
PCFI	Parsimony-Adjusted Comparative Fit Index
PGFI	Parsimonious Fit Index
PNFI	Parsimony-Adjusted Normed Fit Index
PR	Physiological Reaction
PTSD	Post-traumatic Stress Disorder
RMSEA	Root Mean Square Error of Approximation
S	Strength
SAS	Self-rating Anxiety Scale
SEM	Structural Equation Modeling
SPE	Subjective Psychological Experience

SS	Subjective Support
T	Tenacity
USS	Utilization of Social Support

CHAPTER 1:

INTRODUCTION

1.1 Introduction

This study examines the relationship between employment pressure and anxiety, with a particular emphasis on the mediating roles of social support and psychological resilience. This chapter provides a concise overview of the study's background and objectives, articulates the problem statement, outlines the research questions, delineates the research approach, highlights the significance of the study, and defines key terms used throughout the research.

1.2 Background of the Study

In recent years, incidents of suicide among college students have become increasingly frequent, with the number of deaths on the rise, raising significant concerns for both universities and society at large (Yang & Han, 2022). According to the World Health Organization, suicide is the third leading cause of death among adolescents aged 15 to 24 years (Arensman et al., 2020). Meng (2023) analyzed 71 suicide cases, revealing a distribution across academic years: 6 first-year students, 17 sophomores, 19 juniors, 25 seniors, one first-year graduate student, and two second-year graduate students. Notably, the number of graduate students who died by suicide exceeded that of undergraduates. The analysis of contributing factors revealed that 37 suicides were linked to family issues, which included dynamics within low-income families, conflicts between parents and children, and family poverty. Additionally, 23 cases were associated with adverse life events, such as emotional problems, employment pressure, stress related to studies, and pressure from postgraduate entrance examinations. Sixteen suicides were attributed to health issues, encompassing both mental and physical illnesses. Finally, eight cases did not show any apparent causes. The factors influencing suicide among college students encompass internal elements, such as personality traits, interpersonal relationships, and emotional states, as well

as external influences, including family, school, and societal pressures. College students undergo significant environmental changes as they transition from adolescence to adulthood, confronting complex psychosocial challenges, including academic pressures and anxiety regarding their careers and future (Kwon & Kim, 2005; Cho et al., 2018). Those who struggle to navigate these challenges may find it difficult to adapt, leading to psychological distress that could culminate in suicidal thoughts or attempts (Choi & Bae, 2020).

In March 2021, the second edition of the “Chinese National Mental Health Development Report (2019-2020)” was released as part of the “Mental Health Blue Book” series compiled by the Institute of Psychology of the Chinese Academy of Sciences. The report surveyed 8,446 college students, revealing that 8.4% exhibited tendencies toward anxiety (Fu et al., 2021). In March 2023, the Chinese Academy of Sciences’ Institute of Psychology, in collaboration with the Social Sciences Literature Press, published the third Blue Book on Mental Health, which included the 2022 report on the mental health survey of college students. This survey indicated that approximately 21.48% of college students are at risk of depression, and 45.28% may be at risk of anxiety (Fu et al., 2023). Anxiety has emerged as a significant risk factor for the mental health of college students, necessitating increased attention to this issue. Numerous studies have indicated that the level of anxiety is highest among recent graduates (Mo, 2019; Li, 2020; Zhou, 2021), highlighting the urgency of addressing this concern.

Final-year students face significant academic pressures, employment challenges, stress from postgraduate entrance examinations, communication difficulties, and familial expectations. The environmental stressors these individuals face are significantly higher than those experienced by their junior counterparts, resulting in greater psychological strain. A multitude of factors contribute to the psychological imbalances observed in college students, fostering heightened anxiety and adversely impacting their mental health. Research indicates that employment-related issues are a primary source of anxiety (Wang, 2010), with employment pressure identified as one of the most critical stressors for college students today (Tian, 2010; Ma, 2016; Wang, 2017; Zhu et al., 2019; Xu, 2019; Li et al., 2020; Tang & Sun, 2021; Li et al., 2022). From a sociocultural perspective, the expansion of higher education has resulted in an unprecedented number of graduates. In 2022, the number of college graduates reached 10.76 million, surpassing the 10 million mark for the first time (Ministry of Education, 2021), and this figure escalated to an astounding 11.58 million in

2023 (Ministry of Education, 2023), 11.79 million in 2024 (National Bureau of Statistics of China, 2025).

Concurrently, factors such as China's decelerating economic growth, the transformation and upgrading of its economy, and the repercussions of COVID-19 (Han, 2022; Yu et al., 2022) have placed immense pressure on various industries, thereby posing significant challenges to the employment prospects of college graduates (Yang et al., 2022). The State Council, the Ministry of Education, and local governments at various levels are actively implementing measures to address the employment challenges college graduates face. These initiatives include preferential employment policies, expanding the recruitment of college graduates by state-owned enterprises and institutions, increasing enrollment in graduate programs and ordinary colleges and universities, expanding the enlistment of college students, enhancing the availability of employment training programs, intensifying the recruitment of college graduate teachers, facilitating online recruitment, and promoting entrepreneurship to generate employment opportunities (Tang & Sun, 2021). Although these policies are designed to function at the macro level, their impact on individual students may be limited, highlighting the need for collaborative efforts across multiple sectors.

According to data from the National Bureau of Statistics, the annual number of births in China declined steadily from 15.23 million in 2018 to 14.65 million in 2019, 12 million in 2020, 10.62 million in 2021, 9.56 million in 2022, and 9.02 million in 2023, before slightly rebounding to 9.54 million in 2024. This sustained decline has directly resulted in a shrinking population of school-age children eligible for kindergarten and early education services. In response, the Ministry of Education (2023) released the 2022 National Education Development Statistical Bulletin, reporting a total of 289,200 kindergartens nationwide in 2022—a decrease of 5,610 institutions, or 1.90%, compared to the previous year. Furthermore, the 2023 Statistical Communiqué on National Education Development, issued by the Ministry of Education on October 24, 2023, revealed that the number of kindergartens had further dropped to 274,400, reflecting a reduction of 14,808 institutions and a sharp decline of 5.12% from 2022. Given the professional orientation of the preschool education major, graduates predominantly pursue careers in early childhood education and related fields (Wang, 2019). Consequently, the significant contraction in the number of kindergartens has created exceptionally high employment challenges for preschool education students, substantially intensifying their employment pressure.

Preschool education is a fundamental component of the national education system (Ministry of Education, 2010). To promote the comprehensive development of preschool education, building a stable and qualified team of teachers is essential, as their mental well-being directly affects children's physical and emotional growth (Chen, 2022). However, recent surveys indicate that the mental health status of Chinese teachers from 2011 to 2020 is below the national adult average (Zhang et al., 2022). Given the integrated pre- and post-service training system for preschool education teachers (Qu & Hao, 2016), it is essential to also focus on the mental health of preschool education students, enabling them to manage stress and anxiety while promoting their overall well-being effectively. Consequently, this study targets recent graduates of preschool education programs.

Addressing the challenge of helping final-year students majoring in preschool education to understand and alleviate employment pressure, thereby reducing anxiety accurately, has become an urgent issue that requires resolution. Conducting such research is conducive to improving the mental health of students majoring in preschool education, thereby laying a solid foundation for cultivating high-quality preschool teachers and providing services in this regard.

1.3 Problem Statement

Suicide represents the most tragic outcome and is the second leading cause of death among young people and college students (Mendez Bustos et al., 2013). The lifetime prevalence of suicidal ideation among college students worldwide is approximately 22.3% (Mortier et al., 2018), indicating that this demographic is at significant risk for such thoughts. As college students transition from adolescence to adulthood, they encounter rapid environmental changes and face complex social and psychological challenges, including pressure to excel academically and anxiety regarding their careers and future (Kwon & Kim, 2005; Cho et al., 2018). Those who struggle to cope with these challenges may experience difficulties in adjustment and psychological turmoil. In severe cases, this distress can lead students to contemplate or attempt suicide (Choi & Bae, 2020). Stressful life events are among the strongest predictors of suicide (Franklin et al., 2017), and individuals with suicidal ideation typically experience significant stress or stressful events in their lives (Kraaij et al., 2002). Prolonged or excessive stress can result in pathological changes in both psychological and physiological states (Che & Jia, 2023).

Final-year students often face heightened academic, employment, and emotional pressures, with some studies indicating that employment-related stress is a primary source of distress (Tian, 2010; Ma, 2016; Wang, 2017; Zhu et al., 2019; Xu, 2019; Li et al., 2020; Tang & Sun, 2021; Li et al., 2022). Consequently, it is crucial to address the employment pressures faced by recent graduates. Existing research demonstrates that as symptoms of anxiety and depression intensify, individuals are more likely to develop suicidal ideation and may engage in suicidal behaviors (Wang et al., 2022; Wang, 2021). Research has further demonstrated that anxiety symptoms often co-occur with depression, compounding their detrimental effects. Specifically, the suicide risk for individuals suffering from depression with anxiety symptoms was 3.18 times higher than for those without anxiety symptoms (Seo et al., 2011; Xin et al., 2015). Consequently, it is essential to address not only depression but also anxiety in mental health interventions. Furthermore, employment is consistently identified as the primary source of anxiety among recent graduates (Wang, 2010). Therefore, given the profound psychological impact of unemployment and job insecurity, it is crucial to thoroughly examine the employment-related pressures and anxiety that final-year students experience.

This study specifically focuses on anxiety for several key reasons. First, anxiety typically represents a more immediate and pervasive response to the acute, future-oriented stressors—such as employment uncertainty—that characterize the post-graduation transition period. Second, as previously indicated, employment pressure serves as a primary driver of psychological distress in this population and demonstrates a stronger, more direct association with anxiety in terms of symptomatology. Finally, by concentrating on anxiety—a highly prevalent yet potentially more malleable psychological state—this research aims to identify earlier and more actionable intervention nodes, thereby enabling effective psychological intervention before such concerns escalate into more severe depressive disorders.

The detection rate of anxiety symptoms among college students was 21.9% prior to the epidemic and increased to 24.2% during the epidemic, indicating a higher prevalence during this period (Zhai et al., 2022). Subsequent research conducted after the epidemic revealed that the anxiety detection rate among college students remains notably elevated (Hou et al., 2023). Studies assessing anxiety levels in graduates have shown that they experience levels of anxiety that are significantly above the norm (Lu, 2011; Fu, 2013; Du, Li & Sun, 2020; Zhou, 2021). Conversely, other studies suggest that college students'

anxiety levels are within normal ranges (Lu, 2012; Kochuvilayil et al., 2021). There is a paucity of research focusing on the anxiety level stages of college students following the epidemic, indicating a need for further investigation.

In recent years, the significant increase in the number of college students and those seeking employment has created considerable employment pressure for this demographic (Ministry of Education, 2021, 2022). Existing research indicates that the employment pressure levels among college students are relatively low (Shin, 2010, 2012); however, these findings primarily stem from studies conducted in Korea. In contrast, more extensive research in China has revealed that college students experience employment pressure at a medium level (Nie & Xu, 2018; Chen, 2022), with some studies categorizing it as lower-middle (Fu, 2013; Wang & Yao, 2020; Guo, 2021) or upper-middle (Lu, 2011; Wu & Liang, 2012; Liu, 2015; Chen, 2020; Chen, 2022). It is essential to note that not all of these studies focus specifically on recent graduates, which limits their ability to reflect the employment pressures this group faces accurately. Given the substantial decline in the birth rate during the epidemic (National Bureau of Statistics, 2022), coupled with a reduction in preschool educational structures post-epidemic (Ministry of Education, 2023), alongside the ongoing increase in the number of graduates (Ministry of Education, 2022), this study examines explicitly the employment pressure experienced by final-year students majoring in preschool education.

Excessive employment pressure or lasting too long in time can lead to severe psychological and mental disorders. These conditions may also trigger a range of behavioral issues, such as nightmares, insomnia, and even suicidal tendencies (Han et al., 2014). Prolonged anxiety can lead to several chronic diseases and negatively affect an individual's quality of life. It may also contribute to issues such as alcoholism, increase school dropout rates, heighten self-injurious behavior by 1.84 times, and even provoke suicidal thoughts (Zhao et al., 2021; Xin et al., 2015). This highlights the importance of conducting an in-depth study on the relationship between employment pressure and anxiety. Given the extensive and severe individual and social harms that may result from such pressure and anxiety, it is particularly important to delve into the mechanisms and relationships between employment pressure and anxiety for the purposes of prevention, intervention, and health promotion. Existing research indicates a positive correlation between employment pressure and elevated anxiety levels among college students approaching graduation, with

employment pressure serving as a positive predictor of anxiety (Lu, 2011; Lin et al., 2005; Cui, 2011; Cui, 2013; Liu, 2019; Wu, 2023). While this study aims to confirm these findings to some extent, its primary focus is identifying variables that alleviate employment pressure and anxiety.

Research grounded in the social-psychological model (Han & Zhang, 2014) consistently identifies social support and psychological resilience as critical, interacting protective factors against stress. Scholars categorize social support as an environmental resource (Zhou & Lin, 2016; Huang et al., 2016; Celik et al., 2021) and psychological resilience as an internal, personal asset (Oishi & Roth, 2009). Their relationship is dynamic and reciprocal: robust social support functions as a crucial external factor that fosters the development of psychological resilience (Wu & Cai, 2023; Cai et al., 2021), while higher resilience can also enable individuals to seek out and cultivate stronger support networks (Wang & Chen, 2022; Peng, 2023; Liu et al., 2024). Together, they form a buffering system that mitigates stress, reduces negative emotions (Zhang et al., 2017; Min et al., 2013), and enhances overall well-being (Wang et al., 2019; Han et al., 2023; Chen et al., 2020).

This interactive “external resource-internal asset” system is pivotal in understanding how stressors lead to adverse outcomes. Empirical studies on mediation often position psychological resilience as a key mediator through which social support exerts its positive effects on various outcomes (Lian, 2022; Wu & Cai, 2023; Mahdian & Ghaffari, 2016). Conversely, other evidence highlights social support’s role as a mediator in the relationship between resilience and subsequent results, underscoring their complex, potentially reciprocal, intermediary functions (Wang & Chen, 2022; Peng, 2023; Liu et al., 2024). Applied to the context of graduate transition—a period marked by significant employment pressure—this framework is highly relevant. Prior research confirms employment pressure as a salient source of anxiety (Shu & Tang, 2008; Liu, 2015; Chen & Yue, 2020; Wei, 2022). Aligning with the interaction theory of internal and external factors and social-ecological systems theory, this study therefore posits that the relationship between employment pressure and anxiety is not merely direct but is significantly influenced by the mediating roles of both social support (the external factor) and psychological resilience (the internal factor). By examining their joint mediating roles, this investigation aims to clarify the underlying psychological mechanism and provide actionable insights for developing targeted counseling and mental health education interventions for final-year students.

1.4 Research Objectives

The objectives for this research can be categorized into general and specific objectives.

1.4.1 General Objective

This study aims to investigate the relationship between employment pressure and anxiety among final-year students in preschool education. Additionally, it analyzes the mediating roles of psychological resilience and social support in the relationship between employment pressure and anxiety.

1.4.2 Specific Objectives

The specific research objectives derived from the main objectives are as follows:

- i. To assess the levels of employment pressure, anxiety, psychological resilience, and social support among final-year students majoring in preschool education.
- ii. To assess the relationships between employment pressure, anxiety, social support and psychological resilience among final-year students majoring in preschool education.
- iii. To investigate the mediating effect of social support on the relationship between employment pressure and anxiety among final-year students majoring in preschool education.
- iv. To investigate the mediating effect of psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education.
- v. To investigate the chain-mediating effects of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students in preschool education.

1.5 Research Questions

The research questions established for this study are as follows:

- i. What are the levels of employment pressure, anxiety, psychological resilience, and social support among final-year students majoring in preschool education?
- ii. Is there a significant relationship between employment pressure, anxiety, psychological resilience, and social support among final-year students majoring in preschool education?
- iii. Is there a mediating effect of social support between employment pressure and anxiety for final-year students majoring in preschool education?
- iv. Is there a mediating effect of psychological resilience between employment pressure and anxiety among final-year students majoring in preschool education?
- v. Is there a chain-mediating effect of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education?

1.6 Research Hypotheses

Based on the research objectives established in this study, the following research hypotheses are proposed:

- H1: Final-year students majoring in preschool education experience employment pressure and anxiety at an upper-middle level, while their social support and psychological resilience are at a middle level.
- H2: There exists a significant correlation among employment pressure, anxiety, social support, and psychological resilience among final-year students majoring in preschool education.
- H3: There is a mediating effect of social support between employment pressure and anxiety for final-year students majoring in preschool education.

H4: There is a mediating effect of psychological resilience between employment pressure and anxiety among final-year students majoring in preschool education.

H5: There is a chain-mediating effect of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education.

1.7 Significance of Study

1.7.1 Theoretical Significance

This study examines the employment pressures faced by final-year students majoring in preschool education. It compares these findings with results from similar studies, revealing heightened employment pressures for college students, particularly those with more specialized majors and advanced degrees. These findings underscore the unique vulnerability of students in specialized fields such as preschool education, where employment prospects are closely tied to demographic shifts and policy changes. Furthermore, this research offers valuable insights for comparing employment pressures among students from diverse academic backgrounds. Overall, this study enhances the theoretical understanding of employment pressures experienced by college students.

This study validates and enhances existing theories regarding the roles of psychological resilience and social support in the relationship between employment pressure and health adaptation. It contributes to the theoretical framework surrounding the connection between employment pressure and mental health while also serving as a valuable supplement and enhancement to empirical research in health psychology, positive psychology, and personality psychology.

This research examines the roles of psychological resilience and social support in coping with employment-related pressures, highlighting the mediating effect of individual mental health. The investigation aims to enhance our understanding of the principles and mechanisms that govern social support and psychological resilience. Additionally, it seeks to clarify the psychological mechanisms that contribute to the development of anxiety among college students. Ultimately, the findings aim to provide practical strategies to help students

reduce their anxiety levels.

1.7.2 Practical Significance

This study utilizes a questionnaire survey of preschool education final-year students to gather first-hand information regarding their mental health levels. The findings can be shared with the psychological counseling center at Weifang Institute of Technology, enabling the center's educators to understand better the employment pressures college students face and implement targeted mental health education. This research holds practical significance and offers valuable insights into mental health education within colleges and universities.

The empirical study examines the employment pressure, psychological resilience, social support, and anxiety levels among graduates of preschool education programs. Investigating the role of social support (an external environmental factor) and psychological resilience (an internal factor) establishes a scientific foundation for enhancing the psychological well-being of college students. It examines how the psychological resilience of these graduates affects their ability to manage employment pressure while maintaining their mental health. This analysis provides a theoretical framework for psychological counseling to address the employment challenges college graduates face, thereby improving the relevance and effectiveness of such counseling initiatives. Educators can coordinate with head teachers for employment guidance when advising students and subsequently engage with parents and roommates to foster social support. Furthermore, in guiding non-graduates through their employment journey, addressing the significant employment pressures associated with this field is essential. By enhancing employment guidance through head teachers, parents can gain a better understanding of their children's employment prospects. In summary, this research offers a reference for practical interventions to enhance the psychological resilience of college non-graduates.

1.8 Definition of Terms

This section clarifies the key terms relevant to the study, providing both conceptual and operational definitions. The conceptual definitions articulate the general terms utilized in this research. In contrast, the operational definitions convert abstract concepts into specific behaviors or indicators that can be measured or manipulated by the objectives of this study.

1.8.1 Employment Pressure

1.8.1.1 Conceptual Definition

Lazarus and Folkman (1984), in their cognitive theory of stress, conceptualize it as a dynamic psychological process—that is, a continuous transaction and adaptation between the individual and the environment, which evolves over time and across contexts, rather than an isolated, static entity. Building on this process-oriented view, research on the concept of “employment pressure” builds upon the broader understanding of “pressure”, which can be analyzed from two distinct perspectives depending on the specific context. The first perspective considers the pressure individuals experience due to the uncertainty associated with securing employment and future work opportunities. The second perspective addresses the pressure stemming from external factors. This study specifically examines the pressure that preschool education students encounter in the context of employment, which aligns with the latter perspective, namely “the pressure experienced by job seekers prior to securing employment”.

In this study, “employment pressure” is defined as the psychological, physical, emotional strain, and behavioral responses experienced by final-year students in preschool education as they engage in employment preparation and related activities. This pressure arises from both internal and external environmental factors within the current employment context.

1.8.1.2 Operational Definition

In this study, employment pressure is operationally defined and assessed through a questionnaire survey. Specifically, it refers to the scores obtained from the Employment Pressure Scale for College Students, developed by Zhang and Qiu (2007).

1.8.2 Anxiety

1.8.2.1 Conceptual Definition

The Danish psychologist Kierkegaard was the first to describe anxiety. According to the psychological dictionary, anxiety is defined as an emotional state characterized by nervousness and fear stemming from an individual’s lack of self-esteem and self-confidence, which exacerbates feelings of failure and guilt (Zhu, 1989). Bekker et al. (2003) defined

anxiety as a negative emotion experienced by individuals in uncertain situations, leading to feelings of nervousness and distress, along with physiological and behavioral changes. Luo et al. (2010) described anxiety as a complex subjective experience of fear and tension encountered in the presence of threats. Spielberger proposed the state-trait anxiety theory, which distinguishes between trait anxiety and state anxiety (Huang, 2003). Trait anxiety refers to a relatively stable individual difference in personality characteristics. In contrast, state anxiety pertains to temporary fluctuations in emotional states, including subjective awareness of tension, worry, and fear, which are influenced by the activation of the autonomic nervous system.

In this study, anxiety is conceptualized as state anxiety, defined as a complex emotional state characterized by tension, fear, worry, and annoyance in response to impending situations perceived as dangerous or threatening (Huang, 2003).

1.8.2.2 Operational Definition

The operational definition of anxiety in this study is measured and assessed using the questionnaire method, specifically the total score of the Self-Rating Anxiety Scale compiled by Zung (1971).

1.8.3 Social Support

1.8.3.1 Conceptual Definition

The concept of social support first emerged in psychiatric research during the 1970s. Domestically and internationally, scholars have proposed various definitions of social support from different perspectives; however, a precise definition remains elusive.

Sarason et al. (1991) define social support as an individual's perception of the external support they desire or can access. Malecki and Demary (2002) describe social support as general or specific supportive behaviors from individuals within social networks that can mitigate or protect individuals from adverse consequences. Li (1998) characterizes social support as the influence of a person's social connections, which can alleviate psychological stress responses, reduce mental tension, and enhance social adaptability.

The definition of social support employed in this study is based on Xiao Shuiyuan's formulation from 1994. He posits that the social support system encompasses three

dimensions: objective support, subjective support, and the utilization of support. Objective support refers to tangible material assistance; subjective support pertains to an individual's feelings, including the emotions and satisfaction derived from being respected, supported, and understood; and utilization of support indicates the individual's ability to utilize available social support (Xiao, 1994) effectively.

1.8.3.2 Operational Definition

In this study, the operational definition of social support is measured and evaluated by the questionnaire survey method, specifically, the Social Support Rating Scale score compiled by Xiao (1994).

1.8.4 Psychological Resilience

1.8.4.1 Conceptual Definition

Psychological resilience refers to an individual's capacity to maintain psychological functioning despite severe stress and adversity (Nie & Xu, 2018). Currently, academic discourse on resilience encompasses three primary dimensions:

1. Results: This dimension emphasizes individual development outcomes, specifically how individuals continue to thrive even when confronted with significant stress and adversity (Masten, 2015).
2. Process: Psychological resilience is viewed as a dynamic developmental process (Luthar et al., 2000).
3. Trait: This perspective defines psychological resilience as an inherent ability or trait that enables individuals to effectively cope with adverse life events, including stress and adversity (Lazarus, 1993).

In the present study, researchers adopt the trait theory of psychological resilience, defining it as an individual's capacity to exhibit stable and positive psychological characteristics and skills in the face of challenges, adversity, stress, or difficulties.

1.8.4.2 Operational Definition

The operational definition of psychological resilience in this study is measured and

assessed by the questionnaire method, specifically, the total score of the Chinese version of the Connor-Davidson Resilience Scale (CD-RISC), which was revised by Yu and Zhang in 2007.

1.8.5 Final-year Students

1.8.5.1 Conceptual Definition

A final-year student is an individual enrolled in the last academic year of their program, positioned at the critical transition from education to professional employment or advanced studies. This cohort remains officially registered as students, primarily engaged in completing their thesis/final project or remaining coursework, while actively pursuing career opportunities, postgraduate entrance examinations, or other post-graduation pathways.

1.8.5.2 Operational Definition

The final-year students in this study are from the class of 2024, comprising junior college students (enrolled in 2021), students upgrading from junior college to undergraduate status (enrolled in 2022), and undergraduate students (enrolled in 2020).

1.9 Chapter Summary

The first chapter addresses the fundamental conditions of the study. It covers various topics, including the research background, problem statement, research objectives, research questions, research hypotheses, the study's significance, and definitions of key terms. The subsequent chapter is titled "Literature Review".

CHAPTER 2:

LITERATURE REVIEWS

2.1 Introduction

This chapter primarily introduces the key variables of this study and their associated research. The main variables include employment pressure, social support, psychological resilience, and anxiety. A theoretical model encompassing these four variables, along with relevant studies, is presented. Additionally, the chapter discusses the relationships among these variables to establish a foundational basis for this research.

2.2 Employment Pressure

Employment pressure refers to the sense of oppression experienced by individuals as they confront employment-related challenges, prepare to enter the job market, and encounter various threatening stimuli during their career search (Liu, 2020). Research indicates that employment pressure is among the most significant stressors faced by college students today (Tian, 2010; Ma, 2016; Wang, 2017; Zhu et al., 2019; Xu, 2019; Li et al., 2020; Tang & Sun, 2021; Li et al., 2022).

2.2.1 Past Studies on Employment Pressure

With the development of China's economy and the continued enhancement of its education system, the number of college students in China has been increasing annually (Liu, 2020). The complexity of job selection and the intensifying competition for employment have placed unprecedented pressure on the employment prospects of college students, making the employment challenges faced by these students a significant concern for both society and universities (Ma, 2016; Wang, 2017; Zhu et al., 2019). While extensive research has been conducted on the employment pressure experienced by college students, there is a notable scarcity of studies focusing specifically on graduates in preschool education. This

study examines the levels of employment pressure among college students, with a particular focus on those majoring in preschool education.

In recent years, the sharp increase in college graduates and accumulated job seekers has intensified employment pressure among university students, making it a widely discussed issue. Existing research shows varying assessments of this pressure, with some studies indicating relatively low or moderate levels. For example, Shin (2012) found that students with high campus life satisfaction experienced lower employment pressure, while female students reported significantly higher pressure than males. Shin (2010) further highlighted that students with lower satisfaction in family economic status, academic ability, interpersonal relationships, and campus life exhibited markedly elevated pressure. Song, Kim, and Shin (2021) observed that the 20–22 age group experienced less employment pressure compared to other cohorts. Domestically, Nie and Xu (2018) compared undergraduate and junior college students and found no significant difference, with overall pressure at a medium level. Chen (2022) reached a similar conclusion in a study on recent graduates. Fu (2013) and Wang and Yao (2020) both reported that employment pressure among final-year students was at a lower-middle level, consistent with Guo's (2021) research.

On the other hand, many studies suggest that employment pressure among college students is moderate to high or relatively severe. Lu (2011) surveyed final-year undergraduate students and classified their employment pressure as medium to high. Similarly, Wu and Liang (2012) reported that college students faced moderate to high employment pressure. Liu (2015) studied university graduates and concluded that overall employment pressure was relatively high, with many students experiencing a significant sense of pressure. Chen (2020) assessed the average employment pressure score among college students and determined it to be at an upper-medium level. Chen (2022), focusing on master's students in Chinese International Education, also found their employment pressure to be moderate to high. Furthermore, some studies indicate that employment pressure is particularly pronounced among students. Wang (2008) surveyed graduates in Huaian, northern Jiangsu Province, and found that 57.2% of respondents perceived their employment pressure as high, with more than half reporting elevated stress levels. Tian (2010) similarly concluded that college students faced considerable employment pressure overall.

In summary, the level of employment pressure among college students varies across countries. Compared to many other countries, Chinese university students face more pronounced employment pressure, likely due to the large student population and specific sociocultural factors. Domestic researchers often categorize students by type and education level to examine differences in employment pressure among various student groups.

Compared to the general student population, research on employment pressure among preschool education majors remains limited. International studies have focused more on occupational stress among preschool teachers (Kelly & Berthelsen, 1995; Koch & Farquhar, 2015; Duc & Tam, 2023), a trend that may be related to the high standards for preschool education quality and relatively stable birth rates in many countries. Domestically, research on employment issues among preschool education majors is also scarce, with most studies concentrating on employment intentions. For instance, Mao (2020) explored employment intentions and influencing factors, Zuo and Ding (2022) investigated employment intentions among undergraduate preschool education majors, and Chen (2022) developed an employment competency model for students in this field.

Very few studies have directly addressed employment pressure among preschool education majors. Liu (2012) surveyed 350 junior college graduates and found that 79% reported experiencing significant employment pressure. However, due to the lack of empirical data, it remains difficult for researchers to accurately assess the actual level of employment pressure faced by these students or to make meaningful comparisons with other majors, thereby limiting a comprehensive understanding of the specific challenges they face.

Against the backdrop of current social realities, including the policy orientation toward “integrating early childhood care and education,” the notable decline in newborn populations, and the downsizing of early education institutions, this study aims to systematically examine the employment pressure faced by preschool education graduates. By addressing the research gap in this area, this study seeks to provide insights relevant to both academic and practical contexts.

2.2.2 Harm of Employment Pressure

Rice (1992) posited that “positive stress can deepen our awareness, increase our psychological vigilance, and often lead to enhanced cognitive and behavioral performance”.

In other words, positive stress represents a challenge that stimulates growth, fosters personal development, and promotes career advancement. Similarly, Tian (2010) asserts that pressure is an essential and beneficial factor for individuals.

Excessive employment pressure can have a detrimental impact on the physical and mental health, as well as the overall subjective well-being, of college students (Liu, 2011; Deng et al., 2015; Liu, 2019; Jin et al., 2020). Long-term observations by Schafer confirm that negative stress can lead to both physical and psychological disorders (Lu, 2017). Excessive employment pressure may induce symptoms such as anxiety, depression, low self-efficacy, feelings of inferiority, and irritability, which in turn can impair cognitive functioning and personality traits, reduce learning efficiency, and diminish work capabilities. Furthermore, it can lead to physiological issues such as insomnia, headaches, chest tightness, and gastrointestinal discomfort, thereby harming students' overall health (Tian, 2010). Prolonged or excessive employment pressure can also result in severe psychological conditions, including depression, confusion, neurosis, and behavioral issues such as nightmares and insomnia, which may escalate to suicidal thoughts (Han et al., 2014). The aforementioned research indicates that excessive employment pressure inflicts both physical and psychological harm on college students.

2.2.3 Employment Pressure Measurement Tool

In measuring employment pressure, most scholars use a self-compiled employment pressure questionnaire specifically designed for college students.

Chen (2005) developed the Employment Pressure Questionnaire for College Students, which comprises 59 questions across six distinct dimensions: (1) competition in the employment environment, (2) evaluation of professional quality, (3) psychological expectations regarding employment, (4) self-awareness and positioning, (5) the mismatch between professional supply and demand, and (6) the lack of job-hunting assistance. This questionnaire employs a 5-point scoring scale, with higher scores indicating greater employment pressure. The reliability of this questionnaire and its various dimensions exceeds 0.70, demonstrating high stability.

In 2019, Chen published a revised and updated version of the questionnaire to reflect contemporary changes and incorporate recent research findings on the employment

pressures faced by college students. This revised version consolidates and moderates certain aspects of the original questionnaire, resulting in five dimensions: career positioning, professional needs, comprehensive quality, employment expectations, and job support. This revised questionnaire provides an effective measure of employment pressure.

Wu and Lu (2006) developed the Employment Stressors Questionnaire targeting ordinary college students. The scale consists of 24 items and employs a 5-point Likert scoring method across five dimensions: individual, family, society, peers, and school and professional contexts. The overall reliability coefficient of the questionnaire is 0.868, with dimension reliability coefficients ranging from 0.60 to 0.73.

The Employment Pressure Scale for College Students, developed by Zhang and Qiu (2007), comprises 26 items organized into four dimensions: subjective psychological experience (12 items), emotional distress related to employment (eight items), physiological reactions (three items), and behavioral performance (three items), thereby supporting a four-factor model of employment pressure.

The College Students' Employment Pressure Questionnaire, developed by Chen (2008), comprises 36 items organized into six dimensions: self-condition, career expectations, job-hunting experience, family factors, school factors, and physiological factors, thereby supporting a six-factor model of employment pressure.

Tian (2010) developed a Questionnaire for Measuring College Students' Employment Pressure, which surveyed graduates from nearly ten universities in Hunan Province. This questionnaire consists of 38 items that examine and analyze the employment pressure faced by contemporary college students, focusing on aspects such as career expectations, employment environment, social support, and professional prospects.

Several scholars have employed relevant indicators to measure the employment pressure experienced by college students indirectly. For instance, Wang (2007) utilized the total score of the revised Symptom Self-evaluation Scale as an index to gauge the level of employment pressure among college students, thereby reflecting their employment-related stress.

Following a comprehensive evaluation of existing measurement instruments, this study ultimately selected the Employment Pressure Scale for College Students developed by

Zhang and Qiu (2007). This decision was primarily based on the following considerations. First, regarding target population alignment, the scale is specifically designed for graduating students, which closely matches the final-year student population central to this investigation, offering greater specificity compared to instruments targeting the general undergraduate population (e.g., Chen, 2005). Second, in terms of theoretical construct consistency, the scale's conceptualization of employment pressure aligns with the operational definition adopted in this study, which is grounded in the cognitive transactional model of stress, thereby demonstrating superior construct validity relative to tools based on divergent theoretical frameworks (e.g., Wu et al., 2006). Finally, concerning measurement efficiency, as a dedicated instrument for assessing employment pressure, it is more concise and focused than broad mental health inventories (e.g., the SCL-90 used by Wang, 2007), enabling more direct and effective capture of the target variable. Consequently, the scale satisfies the design requirements of this study in terms of population relevance, theoretical coherence, and measurement parsimony.

2.3 Anxiety

Anxiety is a complex emotional state characterized by tension, uneasiness, and worry, often triggered by an individual's anticipation of situations that may pose a danger or threat (Huang, 2003). Research has demonstrated that the level of state anxiety among college students significantly increases, whereas the level of trait anxiety remains relatively stable (Huang & Yan, 2009). In this study, anxiety refers specifically to state anxiety, which is a psychological and physiological transient response directly associated with a particular moment. The intensity and magnitude of this response are not fixed; instead, they fluctuate over time and in response to varying situations (Hackfort & Spielberger, 2021).

2.3.1 Past Studies on Anxiety

As of March 2025, a search of articles in psychology and pedagogy on the theme of “college students + anxiety” in the China National Knowledge Infrastructure database yielded 1,828 articles, while a search on the theme of “graduate + anxiety” resulted in 403 articles. Therefore, the study of graduate anxiety is far less than the anxiety of general college students. However, in recent years, the study of anxiety caused by the epidemic has been increasing year by year, and anxiety has once again become a topic of attention.

A substantial body of research suggests that college students frequently experience elevated anxiety levels relative to general population norms. Fu (2013) observed heightened anxiety among master's graduates compared to national averages, a finding consistent with Du et al. (2020), who reported significantly elevated scores on anxiety self-rating scales among college graduates. Contextual factors appear to exacerbate this pattern, as Zhou (2021) documented that pandemic-related stressors significantly increased anxiety levels among students across 28 Chinese regions. Similarly, Lu (2011) noted that undergraduate graduates typically exhibit above-average anxiety levels.

However, the literature reveals notable inconsistencies. Lu (2012) reported anxiety scores within expected parameters for recent graduates, while Kochuvilayil et al. (2021) found mean anxiety scores below clinical thresholds in Australian and Indian nursing students. These discrepancies highlight a significant methodological concern: the lack of standardized assessment tools and uniform cutoff values across studies, as demonstrated by the varying applications of instruments like the State-Trait Anxiety Inventory (Melissa et al., 2021). This methodological heterogeneity substantially limits direct comparability across findings and suggests that current understanding of anxiety prevalence remains fragmented.

Developmental patterns emerge more consistently, with multiple studies indicating that academic transition periods precipitate increased anxiety. Mo (2019) documented progression from average to mild-moderate anxiety among preschool education seniors approaching employment, while Zhou (2021) and Cao (2022) both reported elevated anxiety among graduates relative to non-graduates. Qian and Chen (2022) further reinforced this pattern by observing anxiety fluctuations across different academic stages during pandemic restrictions. Nevertheless, the mechanisms underlying these developmental trajectories remain inadequately explored, particularly regarding how academic transitions interact with specific employment pressures.

The prevalence data further illustrates the field's conceptual challenges. Reported detection rates vary considerably, ranging from 12.94% in medical students (Feng et al., 2018) to 29.9% in broader collegiate samples (Hou et al., 2023). This variability persists even among similar populations, as evidenced by the divergent rates reported by Yang et al. (2020; 26.9%) and Du et al. (2020; 25.91%). Notably, Zhai et al. (2022) demonstrated anxiety's contextual sensitivity by documenting a significant increase from pre-pandemic (21.9%) to pandemic (24.2%) periods. These variations underscore the critical influence of

sampling characteristics, temporal factors, and measurement approaches—factors that have rarely been systematically examined in existing literature.

The limited research on preschool education majors reveals particularly concerning patterns. Li (2020) reported alarming detection rates (63.88% among graduates), while Cao et al. (2020) documented more moderate but still substantial rates. This population exemplifies a critical research gap: the intersection of specific employment pressures (including institutional downsizing and evolving qualification requirements) with mental health outcomes remains virtually unexamined, despite the sector's particular vulnerability to demographic and policy shifts.

In summary, while existing research establishes college students as an at-risk population for anxiety disorders, significant limitations persist. The field lacks: (1) methodological consistency in assessment approaches; (2) mechanistic understanding of developmental trajectories; (3) systematic investigation of context-specific risk factors; and (4) adequate attention to vulnerable subpopulations like preschool education majors. These gaps collectively highlight the need for more nuanced, methodologically rigorous investigations that can account for the complex interplay between developmental stage, professional context, and measurement approach in shaping anxiety manifestations among college students.

2.3.2 Harm of Anxiety

Anxiety is a prevalent and significant psychological disorder among college students. Prolonged anxiety can result in various chronic health issues, negatively impact the subjective quality of life, contribute to alcoholism, increase the likelihood of dropping out of school, and elevate self-injury behaviors by a factor of 1.84. In severe cases, it may even lead to suicide (Zhao et al., 2021; Xin et al., 2015).

Anxiety can be likened to a double-edged sword; moderate levels of anxiety can exert a specific motivational influence. It prompts individuals to seek improvement rather than remain complacent with the status quo, thereby fostering a commitment to hard work, enhancing task performance, and facilitating personal growth. Consequently, mild to moderate anxiety serves a significant purpose, alleviating boredom and preventing stagnation while also stimulating our minds to remain alert and encouraging us to advance

with courage (Liu, 2016).

Excessive anxiety has emerged as a significant concern in the realm of medical treatment, particularly in relation to anxiety disorders (anxiety neurosis). Patients experiencing anxiety often report a range of symptoms, including dizziness, chest tightness, palpitations, dyspnea, dry mouth, frequent urination, urgency, sweating, and tremors; their levels of anxiety are frequently disproportionate to the actual circumstances they face. This condition not only poses serious risks to both physical and mental health but is also associated with severe disturbances in sleep, concentration, and energy levels, leading to confusion. Consequently, excessive anxiety can hinder individuals from functioning effectively in their studies, daily lives, and workplaces, and in extreme cases, may lead to suicidal thoughts (Xu & He, 2011). Furthermore, students suffering from anxiety disorders can adversely affect their peers, causing concern among parents and teachers and significantly impacting the successful transition of students from graduation to the workforce. This situation undermines the objective of cultivating high-quality talent in higher education institutions (Guo, 2022).

For recent graduates entering the job market, a moderate increase in anxiety is a common experience. This level of anxiety can be beneficial, as it instills a sense of urgency that encourages students to prepare effectively, tap into their potential, and leverage their strengths in the face of employment challenges. However, some students may struggle with high levels of anxiety due to insufficient physical and mental preparation, which can adversely impact their academic performance, work, and overall well-being, ultimately harming their physical and mental health. Such excessive anxiety is detrimental to the employment process. If left unaddressed, this heightened anxiety can hinder job prospects. It may lead some students into a cycle of distress, potentially resulting in more severe psychological issues, including depression and other disorders.

Anxiety can be prevented and intervened through various measures (Xu et al., 2023; He, 2022). As educators, it is essential to recognize the anxiety experienced by recent graduates and assist them in managing their anxiety effectively. This goal can be achieved by encouraging students to concentrate on their individual strengths and positive attributes, as well as by fostering collaboration among schools and families to provide both material and emotional support. Such initiatives can play a significant role in moderating anxiety and promoting a more positive mindset when facing employment challenges.

2.3.3 Anxiety Measurement Tool

Currently, the widely used anxiety assessment tools are the State-Trait Anxiety Inventory, the Hamilton Anxiety Scale, the Beck Anxiety Inventory, and the Self-Rating Anxiety Scale. The four scales have distinct characteristics and varying application scopes.

The State-Trait Anxiety Inventory, first published in 1970 and translated into Chinese in 1988, consists of two subscales: the State Anxiety Subscale and the Trait Anxiety Subscale. The State Anxiety Subscale includes the first 20 items and utilizes a 4-point scoring method. Of these items, half describe negative emotions, while the other half describe positive emotions. Conversely, the Trait Anxiety Subscale comprises the final 20 items and assesses more stable anxiety and characteristics related to nervous personality traits. Participants respond based on their experiences over the past two months. Notably, ten items on the questionnaire are scored in reverse, with higher scores indicating a more pronounced state of anxiety (Dai, 2010).

The Self-Rating Anxiety Scale (SAS), developed by Zung (1971), consists of 20 items and employs a 4-point scoring method that assesses symptom frequency across four defined levels. The total score on the SAS is calculated with a standard score of 50, where higher scores indicate more severe anxiety symptoms. It is widely recognized as a psychometrically sound tool with acceptable internal consistency reliability, making it suitable for measuring anxiety levels in both clinical and research settings.

The Hamilton Anxiety Scale consists of 14 items and employs a 5-point scoring method that encompasses two dimensions: corporeality and spirituality. The total score on the Hamilton Anxiety Scale is more indicative of the severity of the anxiety state. It is widely regarded as one of the most commonly utilized scales in psychiatric clinics.

The Becker Anxiety Inventory comprises 21 items and employs a 4-point scoring system. It serves as a concise measure of anxiety, particularly focusing on somatic symptoms associated with anxiety (Julian, 2011).

Based on a careful comparison of the objectives of this study and the characteristics of each scale, the Self-Rating Anxiety Scale developed by Zung (1971) was ultimately selected as the measurement tool. This decision was based on the following comprehensive considerations: unlike the Hamilton Anxiety Scale, which has a clinical diagnostic orientation, the State-Trait Anxiety Inventory's focus on situational anxiety, or the Beck

Anxiety Inventory's emphasis on somatic symptoms, this study required an instrument suitable for non-clinical student populations, capable of effectively assessing general anxiety levels, and feasible for group administration. The selected scale not only demonstrates sound psychometric properties but its self-report format and moderate length also align with the requirements for measuring large-scale student samples. Therefore, in terms of applicability, specificity, and practicality, it best meets the design needs of this research.

2.4 Social Support

Social support encompasses various forms of assistance and help provided by family, friends, and others. This study conceptualizes social support as a social resource, representing all external support available to individuals. Final-year students experience a transitional phase as they transition from academia to the workforce, navigating the shift from studying to employment. During this period, they devote significant time to contemplating interpersonal relationships, job prospects, and academic pursuits, often encountering feelings of distress and anxiety. Consequently, they require social support and encouragement from others to foster self-reliance and facilitate personal growth.

2.4.1 Past Studies on Social Support

Research on the levels and sources of social support among college students reveals a complex and often contradictory landscape. Multiple studies indicate suboptimal support levels, with Qiu and Dai (2014) finding non-graduate students' scores significantly below national norms, a pattern consistent with research on recent graduates (Liu, 2019) and college graduates (Liu, 2015). However, this perspective is not universal. Li and Ge (2017) reported above-average support among Mongolian and Han students, while Zhang and Ma (2016) documented medium support levels among Tibetan postgraduates. The classification approach adopted by Qi et al. (2020) further complicates this picture, revealing that only 24.6% of adolescents reported high support versus 70% at moderate levels. These disparate findings suggest a significant methodological gap: the absence of standardized assessment frameworks that account for cultural, regional, and institutional variations across student populations.

The relationship between demographic factors and social support reveals additional complexities. Gender differences remain particularly contested, with substantial evidence

indicating female students report higher support levels across multiple dimensions (Ding & Wang, 2000; Duan, 2010; Cao et al., 2015). This pattern is reinforced by meta-analytic findings (Zhang et al., 2015) and corroborated by international research (Yang et al., 2016; Grey et al., 2020). However, contradictory evidence from Cui et al. (2005) and Luo et al. (2023) challenges any definitive conclusion, highlighting a critical theoretical gap in understanding whether measured differences reflect actual variations in support networks or gendered patterns in support perception and reporting.

Geographical origins present another area of inconsistent findings. While Hu and Zheng (2008) and Guo (2016) suggest an urban advantage in support access, Duan (2010) reported opposite patterns. These contradictions are especially concerning given the dramatic demographic shift that has seen rural student proportions decline from over 30% to 17.7% between the 1980s and 2021. The field lacks longitudinal research that can track how these changing demographics interact with support systems, representing a crucial knowledge gap regarding an increasingly marginalized population.

The mental health implications of these support patterns are well-established but mechanistically underspecified. The college years represent a period of heightened mental health vulnerability (Beiter et al., 2015; Barclay, 2014), where social support serves as a significant protective factor (White, 2009; Zhang et al., 2018; Harandi et al., 2017). Substantial evidence demonstrates inverse relationships between support and anxiety (Mo, 2019; Mai et al., 2021; Qi et al., 2020), with support enhancing adaptive capabilities (Cao et al., 2015), emotional regulation (Gu et al., 2024), and buffering against severe outcomes including suicidal behaviors (He et al., 2019). The stress-buffering hypothesis receives strong support across multiple studies (Sharon et al., 2016; Roohafza et al., 2016; Harandi et al., 2017), with Grey et al. (2020) quantifying a 63% reduction in depression risk associated with high perceived support.

However, this extensive evidence base regarding outcomes contrasts sharply with limited understanding of underlying mechanisms. While social support consistently correlates with mental health outcomes, the specific pathways through which different types of support (cognitive, emotional, instrumental) operate across diverse student populations remain inadequately specified. Furthermore, the interaction between support deficiencies and specific stressors—such as employment pressure unique to certain majors—constitutes a significant research gap. The field has established that support matters, but now requires

more nuanced investigation into how, why, and for whom it matters most, particularly for at-risk populations like preschool education majors facing sector-specific employment challenges.

2.4.2 Measurement Tools for Social Support

The Social Support Questionnaire comprises 27 items, divided into two dimensions: subjective (satisfaction with the social support received) and objective (number of social support resources) (Sarason et al., 1983).

The Understanding Social Support Scale, initially developed by Blumenthal, was utilized to assess the degree of understanding and self-perception. Jiang Qianyuan introduced this scale in China and confirmed its strong construct validity (Meng, 2017). Yan Biaobin and Zheng Xue subsequently made modifications to enhance its applicability for college students (Xie, 2019). The scale consists of 12 items across three dimensions: family support, friend support, and other support. It employs a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The maximum total score on the scale is 60, with higher scores indicating a greater perceived level of social support. The overall Cronbach's α coefficient was calculated to be 0.985. The family support dimension includes four items with an α coefficient of 0.887; the friend support dimension also comprises four items with an α coefficient of 0.888; and the other support dimension contains four items with an α coefficient of 0.880. The Cronbach's α coefficients for the subscales ranged from 0.880 to 0.887, demonstrating good reliability and validity.

The Social Support Rating Scale developed by Xiao (1994), is a 10-item instrument used to assess social support. It measures three dimensions: objective support (3 items), subjective support (4 items), and support utilization (3 items). Items are scored on a scale of 1–4 or through source counting, with total and dimensional scores obtained by summing relevant items. The Social Support Rating Scale is widely applied to evaluate perceived social support levels in various populations.

Based on a review and comparison of existing social support measurement instruments, this study selected the Social Support Rating Scale developed by Xiao Shuiyuan (1994) as the measurement tool. The selection was primarily based on the following comprehensive considerations. First, in terms of cultural applicability, compared to most

scales developed abroad (e.g., the Social Support Questionnaire by Sarason et al.), this scale was constructed within the Chinese socio-cultural context, making it better aligned with the patterns of interpersonal interaction and support systems in China, and thus more capable of accurately reflecting the social support status of Chinese student populations. Second, regarding structure and efficiency, the scale consists of only 10 items and features a clear three-dimensional structure (covering objective support, subjective support, and support utilization), which ensures comprehensive assessment while significantly reducing respondent burden—particularly suitable for large-scale survey research involving student samples. Finally, in terms of empirical foundation, the scale has been widely used in domestic research and has accumulated solid evidence of reliability and validity, with its applicability supported and validated across multiple relevant empirical studies. Therefore, the scale meets the design requirements and contextual needs of this study in terms of cultural relevance, measurement efficiency, and empirical support (Liu, 2015; Liu, 2019; Zhang et al., 2021; Chen, 2022; Wei, 2023).

2.5 Psychological Resilience

Psychologically resilient individuals are capable of coping with difficulties while maintaining a healthy attitude (Herman-Stahl et al., 1996; Qiu & Dai, 2014). High levels of psychological resilience enable individuals to sustain a stable state in the face of stress (Cui, 2016; Wan & Zhang, 2017). The structure of psychological resilience encompasses both external and internal factors. External factors refer to elements that facilitate an individual's active adaptation to their environment, which includes a three-tiered system comprising family, school, and community. Internal protective factors, on the other hand, pertain to the intrinsic characteristics that enable individuals to safeguard their well-being (Sun, 2022).

2.5.1 Past Studies on Psychological Resilience

Research on psychological resilience levels among college students reveals significant disparities across studies, largely attributable to methodological and sample variations. International studies frequently report low resilience levels, particularly among specialized populations like nursing students (Galvin et al., 2015; Janse et al., 2012). However, findings diverge considerably within domestic research. While Lu (2011), Fan et al. (2014), Nie and Xu (2018), Liu et al. (2020), and Ding and Su (2023) consistently

reported above-average resilience, contrasting evidence emerges from studies of master's graduates (Fu, 2013; Liu, 2015) showing below-average levels. This polarization is further complicated by studies reporting intermediate levels (Xu et al., 2021; Song & Wu, 2021; Ríos-Risquez & García-Izquierdo, 2016; Smith & Yang, 2017) and cases of high resilience among specific groups like physical education majors (Guo, 2021) and female students (Ji, 2013). The most concerning trend emerges from Shi et al.'s (2023) meta-analysis, indicating a gradual decline in resilience over time. The fundamental question remains unresolved: whether these disparities reflect genuine population differences or methodological artifacts, highlighting a critical need for longitudinal studies using standardized measures.

Demographic correlates of resilience present equally contradictory patterns. Grade-level differences remain contested, with Li (2012) suggesting superior resilience among graduates while Ding and Su (2023), Liu et al. (2020), Smith and Yang (2017), and Onturk et al. (2020) found negligible differences. Geographic origins yield particularly inconsistent results, with studies alternately favoring urban (Liu et al., 2020), small-town (Liu & Li, 2011; Lei et al., 2008; Ji, 2013), or showing no geographic differences (Ding & Su, 2023). Gender differences prove especially complex, where general male advantage (Pu et al., 2012; Geng, 2013; Shi et al., 2023) conflicts with null findings (Ding & Su, 2023; Lian, 2022; Onturk et al., 2020). Hu and Zhang (2013) provide crucial insight that these contradictions may reflect measurement artifacts, with gender differences varying by conceptualization (dynamic process vs. individual quality) and assessment tool (CD-RISC vs. RSCA). This demonstrates a fundamental theoretical gap in understanding whether resilience operates as a stable trait or context-dependent process, and whether existing measures adequately capture its multidimensional nature across diverse populations.

The mental health implications of resilience are well-established but mechanistically underspecified. Consistent evidence identifies resilience as a significant protective factor (Gibbons et al., 2011; He et al., 2018; Ríos-Risquez et al., 2018) that buffers stress impact (Wener & Smith, 2001), enhances coping through resource utilization (Friborg et al., 2003), and promotes well-being (Li & Hasson, 2020). Its mediating role between stress and mental health (Xia, 2012) and its capacity to alleviate anxiety while fostering adaptability (Zhou, 2021) reinforce its prognostic value (Smith & Yang, 2017; He et al., 2018). However, while these outcome studies are robust, they predominantly establish correlation rather than causation. The field lacks experimental evidence clarifying how resilience operates within

specific stress contexts—particularly how it might interact with employment pressure, academic demands, and social support within mediated pathways. Furthermore, the developmental trajectory of resilience during college years remains poorly understood, despite evidence of its temporal decline (Shi et al., 2023) and potential for cultivation (Rios-Risquez et al., 2018).

Collectively, these findings underscore three critical research priorities: first, resolving methodological inconsistencies through standardized assessment; second, elucidating the contextual and developmental mechanisms underlying resilience; and third, investigating its interactive effects with other protective and risk factors within comprehensive theoretical models. Such advances would substantially enhance both theoretical understanding and intervention efficacy.

2.5.2 Psychological Resilience Measurement Tools

Wagnild and Young (1993) developed the Psychological Resilience Scale based on a survey of older adults aged 53 to 95. This scale encompasses five factors: meaningful life, perseverance, self-reliance, peace, and loneliness. It consists of 25 items and is divided into two subscales. The first subscale, the Individual Ability subscale, contains 17 items, while the second, the Receptive Self and Life subscale, includes eight items.

The Connor-Davidson Resilience Scale is a self-report measure developed by Conner and Davidson in 2003, primarily designed to assess individuals who have post-traumatic stress disorder. There are three versions of the Connor-Davidson Resilience Scale: CD-RISC-2, CD-RISC-10, and CD-RISC-25. The Chinese version of CD-RISC, adapted by Yu and Zhang (2007), comprises 25 items categorized into three dimensions: tenacity (13 items), strength (eight items), and optimism (four items). Responses are measured on a 5-point Likert scale ranging from 1 (“never”) to 5 (“always”), with a total possible score of 100. Higher scores indicate greater psychological resilience. This adapted version has demonstrated good reliability and validity as a robust measure of psychological resilience in Chinese populations.

Friborg et al. (2003) developed Psychological Resilience Scales for adults, comprising 33 items across six dimensions: self-awareness, future planning, social competence, family cohesion, social resources, and planning style. Subsequently, Yan et al.

(2008) revised the Friborg Adult Psychological Resilience Scale, resulting in a questionnaire that is both reliable and valid and is widely utilized for measuring adult psychological resilience.

Teng (2008) introduced and revised the Prince-Embury Adolescent Psychological Resilience Scale. The revised scale comprises three subscales: a sense of control, a sense of relationship, and emotional response, making it suitable for measuring the psychological resilience levels of domestic college students.

The Chinese version of the Connor-Davidson Resilience Scale, adapted by Yu and Zhang (2007), was selected for this study based on the following three considerations. First, regarding population applicability, this scale has been widely validated among Chinese university student populations, and its dimensional structure aligns with the psychological characteristics of young adults. In contrast, the scale developed by Wagnild and Young (1993), which was constructed based on elderly populations, and the version revised by Teng (2008), which focuses on emotion regulation in adolescents, both exhibit significant age- and developmental-stage discrepancies from the graduate student sample in this study. Second, in terms of theoretical distinctiveness, the three-dimensional structure of this scale is clear and independent, effectively distinguishing psychological resilience from other constructs. By comparison, dimensions such as “family cohesion” in the adult resilience scale developed by Friborg et al. (2003) show substantial conceptual overlap with the social support scale used in this study, which would hinder the testing of subsequent chain mediation effects. Finally, concerning measurement reliability and validity, this scale demonstrates sound psychometric properties and has been repeatedly used and empirically supported in multiple domestic studies (e.g., Liu, 2020; Cui et al., 2023; Yu et al., 2023), meeting the requirements of this research for instrument reliability and result comparability.

2.6 Relationship between Employment Pressure, Psychological Resilience, Social Support, and Anxiety

2.6.1 Employment Pressure and Anxiety

Extensive research has consistently demonstrated a significant positive association between employment pressure and anxiety among university students, with employment pressure serving as a stable predictor of anxiety levels.

Multiple studies focusing on general undergraduate populations provide direct evidence for this relationship. For instance, Shu and Tang (2008) used the Employment Pressure Questionnaire and State-Specific Anxiety Questionnaire with college students, finding a positive correlation between employment pressure and anxiety. Regression analysis indicated that academic stress ($\beta = 0.279$) and family relationship quality ($\beta = 0.199$) were significant predictors of anxiety. Lu (2011) also reported a significant positive correlation, with employment pressure serving as a predictor of anxiety, consistent with findings from Cui (2011, 2013). Lv and Liang (2012) examined final-year students from two independent universities and found that employment pressure is significantly associated with anxiety and depression. Ruan et al. (2013) reported a positive correlation, with employment pressure accounting for 6.3% of the variance in anxiety. Liu (2019) studied final-year students and found that employment pressure was positively related to heightened anxiety levels prior to graduation. Finally, Guo (2021) focused on sports graduates and identified a significant positive correlation between employment pressure and negative emotions, with a notable predictive effect.

In summary, existing evidence robustly supports the conclusion that employment pressure is a key factor in triggering and predicting anxiety among university students. Based on this empirical foundation, the present study proposes the following hypothesis: There exists a positive relationship between employment pressure and anxiety. Consequently, alleviating the anxiety experienced by graduates may begin with reducing employment pressure. Recognizing this relationship highlights the importance of further investigation into strategies aimed at mitigating employment pressure.

2.6.2 Mediating Effect of Social Support

Within the direct relationship between employment pressure and anxiety, social support has been demonstrated to serve a clear mediating function. Social support serves as a mediating variable in the examination of the relationship between employment pressure and anxiety. Liu (2010) utilized a variety of tools, including the College Students' Employment Psychological Scale, the Social Support Rating Scale, the Coping Questionnaire, the Depression Rating Scale, and the Anxiety Scale. Through a combination of qualitative and quantitative research methods, including interviews and surveys, Liu explored the current state of employment-related psychological issues among college

students and their influencing factors. The study constructed a primary model linking college students' employment psychology, social support, coping strategies, and emotional states. The findings indicated that social support plays a significant role in mediating the relationship between employment pressure and anxiety (Liu, 2010). Furthermore, Qi (2023) asserted that social support serves as a partial intermediary in the connection between employment pressure and employment anxiety. However, research specifically focusing on this particular mediating pathway remains relatively limited, which creates space for further investigation and deeper examination within this field.

Meanwhile, within broader research on socio-psychological mechanisms, the mediating role of social support has been validated from multiple perspectives. Cheng (2016) found that social support serves as a comprehensive mediator between family socioeconomic status and learning investment. Niu et al. (2015) examined the self-rendering strategies employed on social networking sites, exploring their relationship with social support and self-esteem. Utilizing a questionnaire method with 485 college students, their findings indicated that authentic self-presentation has a significant direct predictive effect on self-esteem while also influencing it indirectly through the mediating role of social support. Additionally, Ye et al. (2017) conducted a study involving 752 adolescents, employing the Teacher Care Behavior Questionnaire, the Understanding Social Support Scale, the Academic Self-Efficacy Scale, and the Adolescent Internet Addiction Scale. Their results concluded that social support mediates the relationship between teacher care behavior and adolescent internet addiction. These cross-situational studies collectively indicate that social support, as a key external resource, plays a significant transmission and buffering role between various stressors or antecedent factors and individual psychological-behavioral outcomes.

A review of the aforementioned research trajectory reveals that social support constitutes a repeatedly verified mediating mechanism connecting the external environment (including stressful contexts) with an individual's internal psychological state. Within the specific framework of how employment pressure influences anxiety, social support may directly buffer the perception of stress—by providing practical assistance, emotional comfort, and a sense of belonging—thereby alleviating anxiety. Consequently, to systematically examine this specific protective pathway and address the current insufficiency of related research, this study incorporates social support into the theoretical

model, hypothesizing that it serves as a standalone mediating variable in the direct path of “employment pressure → anxiety”. This aims to clarify its buffering mechanism within the population of university graduates, particularly among students majoring in preschool education.

2.6.3 Mediating Effect of Psychological Resilience

Existing research has clearly established the critical mediating role of psychological resilience in the relationship between stress and mental health. First, within the direct pathway from employment pressure to anxiety, multiple studies have confirmed the mediating function of psychological resilience. Lu (2011) conducted a study involving 1,204 ordinary college graduates as subjects and utilized a questionnaire survey method. The findings indicated that employment pressure, psychological resilience, and anxiety levels among undergraduate graduates were all above the median, with psychological resilience serving as an intermediary factor between employment pressure and anxiety. Cui (2011) focused on a sample of 240 fresh university graduates from Changchun, using questionnaires to assess employment pressure, psychological resilience, and anxiety states. The results demonstrated that psychological resilience played a partial mediating role between employment pressure and anxiety. Fu (2013) examined postgraduate graduates to explore the relationship between employment pressure, psychological resilience, and anxiety levels, concluding that psychological resilience acted as a significant intermediary variable between employment pressure and anxiety levels. Shi et al. (2016) investigated graduates from a regular college in Fujian Province, aiming to explore the relationship between college students, employment pressure, and job selection anxiety. Their findings revealed that resilience partially mediates the relationship between employment pressure and job selection anxiety. Notably, existing studies on the interplay between psychological resilience, employment pressure, and anxiety have not explicitly addressed students majoring in preschool education.

Second, in broader socio-psychological processes, the mediating role of psychological resilience has been further extended and validated. Han and Li (2014) demonstrated that psychological resilience significantly mediates the relationship between social support and depression, suggesting that the influence of social support on depressive behaviors operates through individual psychological resilience. Similarly, Sang et al. (2016)

identified that psychological resilience mediates the relationship between social support and academic adjustment among college students. Liang et al. (2019) found a negative correlation between social support and resilience with depression, indicating that resilience partially mediates the relationship between social support and depression. Furthermore, Hu (2022) reported that psychological resilience partially mediates the relationship between perceived social support and life satisfaction. Gong et al. (2023) highlighted that social support not only directly predicts anxiety but also does so through the mediating role of psychological resilience. Lastly, Chen et al. (2023) found that psychological resilience mediates the relationship between perceived social support and professional identity, indicating that perceived social support influences professional identity both directly and indirectly through psychological resilience. These findings collectively delineate a clear logical chain: external resources (e.g., social support) enhance internal psychological resources (psychological resilience), which in turn promote adaptive outcomes or buffer against negative emotions.

Synthesizing the evidence from both strands, an integrative theoretical framework emerges: in the process of coping with employment pressure, social support acts as an external protective factor and psychological resilience serves as an internal protective factor, and the two may operate synergistically, forming a chained mediation pathway. Within the specific context of this study, this implies that employment pressure may lead to elevated anxiety by simultaneously undermining an individual's perceived social support and level of psychological resilience. This proposed mechanism highlights the interconnected roles of external and internal resources in shaping emotional outcomes. Therefore, in order to more comprehensively uncover the internal mechanism through which employment pressure influences anxiety, and to address the gap in existing research focusing on preschool education majors, this study incorporates psychological resilience as a key variable, hypothesizing that it mediates the relationship between employment pressure and anxiety, and further examines the potential chained mediation effect involving both social support and psychological resilience.

2.6.4 Chain Mediating Effect of Social Support and Psychological Resilience

A chain mediation model is a key statistical framework for examining multiple indirect effects, providing an in-depth exploration of the underlying mechanisms and

complex pathways through which an independent variable (X) influences a dependent variable (Y) (Hayes, 2018). Unlike a simple mediation model, the serial mediation model posits a sequential causal order among multiple mediators (e.g., M1 and M2), forming a cascading chain of influence (i.e., $X \rightarrow M1 \rightarrow M2 \rightarrow Y$). Within this framework, the effect of a preceding mediator is transmitted, partially or fully, through subsequent mediators. Consequently, the total effect of the independent variable on the dependent variable can be decomposed into several specific indirect effect pathways (e.g., $X \rightarrow M1 \rightarrow Y$; $X \rightarrow M1 \rightarrow M2 \rightarrow Y$). Employing chain mediation analysis not only helps unveil the "black box" of intervening processes but also allows for the disentanglement and quantification of the effect sizes for each distinct transmission path. This enables a more nuanced elucidation of the multi-stage and multi-layered dynamic mechanisms underlying complex phenomena. Therefore, this study adopts a chain mediation model to systematically examine the specific process by which [X] affects [Y] through the sequential roles of [M1] and [M2].

In recent years, some researchers have examined the topic from the perspective of the social-psychological model (Zhou & Lin, 2016) or through the psychological resilience framework (Kumpfer, 2002). They have investigated social support (external factors/environmental factors) (Zhou & Lin, 2016) and psychological resilience (internal factors/personal factors) (Oishi & Roth, 2009) as two critical variables (Huang et al., 2016; Celik et al., 2021). According to the resilience framework, when individuals encounter stressors and challenges (Kumpfer, 2002), a decrease in external support resources correlates with a reduction in psychological resilience, which can lead to negative adaptations to adversity (Ai & Hu, 2016; Li & Sun, 2014). Both social support and psychological resilience serve as buffering factors (Zhang et al., 2017; Min et al., 2013), mitigating stress and reducing negative emotions, thereby enhancing mental health.

There are relatively few studies abroad on the chain mediating effect of social support and psychological resilience. Mahdian and Ghaffari (2016) studied cancer patients and found that psychological resilience and perceived social support mediate the relationship between spiritual well-being and hope.

Zheng et al. (2011) conducted a study involving adolescents and discovered that gratitude not only has a direct effect on post-traumatic stress disorder (PTSD) symptoms but also exerts an indirect influence through the partial mediating roles of social support and psychological flexibility. The study identified four pathways through which gratitude

impacts PTSD symptoms: (1) gratitude → PTSD symptoms, (2) gratitude → social support → PTSD symptoms, (3) gratitude → psychological resilience → PTSD symptoms, and (4) gratitude → social support → psychological resilience → PTSD symptoms, illustrating the manifestation of a chain mediating effect. Huang et al. (2016) focused on college students as their research subjects. They found that social support and psychological resilience completely mediate the relationship between emotion regulation self-efficacy and positive emotions, suggesting that these factors are direct contributors to the experience of positive emotions among college students. Wang et al. (2019) studied students from an armed police academy and found that social support and psychological resilience serve a chain mediating role in the relationship between cohesion and depression.

Additionally, Xiang et al. (2020) reported that social support and psychological resilience act as chain mediators in the relationship between jealousy and depression, with social support being crucial in connecting jealousy to psychological resilience, which in turn mediates the relationship between social support and depression. Finally, Zhang (2021) investigated middle school students and found that social support and psychological resilience significantly mediate the impact of family cumulative risks on beliefs in a just world. Lian (2022) examined college students and found that social support and psychological resilience serve as mediators between physical exercise and levels of depression. The direct effect was significant, and the total indirect effect was substantial. Similarly, Sun (2023) focused on high school students and discovered that social support and psychological resilience mediate the influence of physical exercise on students' social and emotional competencies. Han et al. (2023) also studied college students. They revealed that childhood trauma not only directly impacts suicidal ideation but also exerts an indirect effect through the independent mediating roles of social support and psychological resilience. Furthermore, they identified a chain mediating effect involving social support and psychological resilience that influences suicidal ideation among college students. In another study, Wu and Cai (2023) investigated college students. They found. They found that social support and psychological resilience play a significant intermediary role between basic psychological needs and suicidal ideation, highlighting their critical chain mediation function in this context.

Given that employment pressure constitutes a significant stressor for university students, and existing research has consistently demonstrated that the “social support →

psychological resilience” pathway is a prevalent mediating chain linking various stressors to mental health outcomes, this study reasonably infers that this chain mediation mechanism is also applicable to explaining the impact of employment pressure on anxiety. In other words, social support (an external protective factor) and psychological resilience (an internal protective factor) are likely to operate synergistically within the specific “employment pressure → anxiety” pathway, exerting a chain mediating effect.

2.7 Theoretical Framework

2.7.1 Employment Pressure Theory

Stress theory refers to the rational understanding and knowledge system concerning stress. It primarily consists of three perspectives: stress response theory, social stimulation theory of stress, and the transactional theory of stress, with the transactional theory being the most influential.

Within the transactional theory of stress, the model proposed by Lazarus (1984) is the most representative. He defines stress as a mismatch between demands and coping resources, and emphasizes that in the interaction between person and environment, individual cognitive appraisal is the core mechanism of stress generation. Appraisal refers to the process by which an individual assigns meaning to or judges the nature of an event, whereas coping refers to the behavioral or cognitive efforts to manage demands and conflicts.

This theory primarily encompasses three core propositions: (1) An individual’s cognition, experience, and interpretation of an event’s meaning are the mediators and direct determinants of the stress response. Cognitive appraisal determines whether the relationship between the individual and the environment is stressful and to what degree, specifically including primary appraisal (judging the threat of an event) and secondary appraisal (assessing one’s own coping resources and abilities); (2) It emphasizes the relevance of stress to the specific context (time, place, persons, event); (3) Stress arises from a specific relationship between the individual and the environment; if the individual appraises themselves as unable to meet environmental demands, a stress experience ensues.

Lazarus further delineates the appraisal process into three stages: Primary appraisal, which is the initial judgment of whether an event is beneficial or threatening to oneself;

Secondary appraisal, which involves assessing whether one's coping skills match the environmental demands; and Reappraisal, which involves re-evaluating the event and one's resources based on feedback after coping actions, thereby adjusting subsequent cognitions and coping strategies.

An event is typically considered stressful if it possesses two characteristics: first, its threat level differs from ordinary events; second, it places higher demands on an individual's coping resources and skills. Stress arises in the following situation: when an individual perceives, through primary appraisal, that a situation may cause physical or psychological harm (whether real or imagined), and judges, through secondary appraisal, that they cannot cope effectively. Conversely, stress can be alleviated if the sense of threat is eliminated through reappraisal or neutralized through effective coping strategies.

It is noteworthy that cognitive appraisal does not occur in a cultural vacuum but is deeply influenced by the cultural values of the individual. Within the socio-cultural context of China, the concept of “face” (*mianzi*), as a deeply ingrained normative value, profoundly permeates the aforementioned appraisal processes. During the employment process, university students are highly susceptible to perceiving the potential risk of “losing face” due to familial expectations, peer comparisons, and societal evaluations. This “face consciousness” can systematically influence their secondary appraisal: if an individual closely associates “failing to secure a good job” with “loss of face”, they are more likely to underestimate their own coping resources and abilities, thereby intensifying the perception and experience of stress. This demonstrates how cultural factors can specifically shape an individual's stress response by modulating the cognitive appraisal component within the transactional stress process.

2.7.2 Anxiety Theory

Anxiety is a negative emotional experience that arises when an individual faces potential threats or uncertainty. Moderate anxiety serves an adaptive function, motivating the individual to mobilize resources to cope with challenges; however, excessive or persistent anxiety can impair physical and psychological functioning, disrupt normal life, and may even develop into more severe mental health issues such as anxiety disorders or depression.

Among these, the social support theory of anxiety, grounded in a social-psychological perspective, is particularly relevant to this study. This theory posits that social support is a key buffer against stress and negative emotions. When individuals receive adequate social support—including emotional care, informational support, and tangible assistance—their mental health tends to be better; conversely, when social support is lacking or inappropriate, individuals are more prone to emotional distress such as anxiety and depression (Shu et al., 2021). This mechanism is especially pronounced in individuals undergoing significant life transitions.

Graduating students are in a critical transitional phase from campus to society. Multiple challenges, such as employment pressure and career decisions, make them a population vulnerable to anxiety. According to social support theory, during this stage, if students can obtain timely and effective material and emotional support from social networks such as family, peers, and schools, it will significantly help alleviate anxiety and maintain mental health. Conversely, if individuals are socially isolated or lack adequate support, their anxiety may intensify, thereby increasing the risk of developing more serious psychological issues.

2.7.3 Social Support Theory

Social support theory emerged in the 1970s, with its core proposition being that various social relationships embedded within social network structures can provide individuals with both subjective (e.g., emotional affirmation) and objective (e.g., material assistance) resources, thereby exerting significant influence on their psychology and behavior. Regarding the mechanisms through which social support operates, the academic community has primarily developed three models: the main effect model (positing that social support has a general beneficial effect on physical and mental health), the buffering effect model (positing that social support primarily plays a protective role in stressful situations), and the dynamic effect model (positing that the role of social support varies over time and across contexts). Among these, the buffering effect model has garnered considerable attention due to its profound explanation of the stress-coping process.

The buffering effect model (Bell et al., 1982; Cohen & Wills, 1985) proposes that when individuals face stress or adversity, social support can intervene in the pathway between stress perception and physical/mental health, serving a crucial moderating role. Its

mechanism of action is primarily manifested in two aspects: First, at the cognitive appraisal level, sufficient support may lead individuals to underestimate the threat of stressors while simultaneously enhancing their self-efficacy and perception of coping resources. Second, at the coping process level, support can directly provide problem-solving strategies or resources, aiding individuals in managing stress more effectively. Through these two pathways, social support can not only buffer the psychological impact of stressful events and maintain emotional stability but also foster successful stress adaptation experiences, thereby enhancing an individual's psychological resilience and ultimately improving their long-term well-being and life satisfaction (Zorzetti et al., 2019).

Examining this theory within the specific cultural and social context of China reveals distinct localized characteristics in its connotations and pathways of action. The Chinese concept of “guanxi” (relationship) extends far beyond the general notion of interpersonal networks; it is a complex system integrating emotional bonds, obligatory reciprocity, and resource exchange. For graduating students facing employment pressure, the social support they can mobilize—particularly from “strong ties” such as family, alumni, and mentors—often not only provides traditional emotional solace (i.e., the cognitive aspect of the buffering effect) but is also deeply embedded in the substantive job-seeking process, directly translating into critical employment information, internship referrals, and even decision-making influence (i.e., the coping aspect of the buffering effect). Consequently, in Chinese university students' coping with employment pressure, social support not only acts as an “emotional buffer” but frequently functions as a “resource converter”, thereby forming a unique localized pathway: “relational support → resource acquisition → stress coping”. This represents both a validation of the classical buffering effect model and an important extension of it, contextualized within the Chinese setting.

2.7.4 Psychological Resilience Theory

Psychological resilience refers to a dynamic psychological process through which an individual can effectively adapt to, recover from, and even experience positive growth following exposure to significant stress, adversity, or trauma. A review of existing literature reveals several theoretical models in which resilience serves as a mediating variable, including: the systemic mechanism of resilience theory (Davydov et al., 2010), developmental contextualism (Lerner et al., 2005), the resilience framework theory based on

ecological systems theory (Kumpfer, 2002), and the dynamic model of resilience proposed by psychologists at a California research institution in 2003 (Li Hailei & Zhang Wenxin, 2006). Among these, the “Person-Process-Context” resilience framework theory proposed by Kumpfer (1999, 2002) is particularly notable for its systemic ecological-transactional perspective. It provides an integrative analytical framework for understanding individual adaptation and development within complex environments, aligning closely with the purpose of this study in exploring the processes of individual adaptation and growth under employment pressure.

This theory comprises five core components: (1) an environment with risk and protective factors; (2) individual–environment interaction; (3) internal resilience (cognitive, spiritual, physical, behavioral, emotional); (4) resilience development; and (5) resilience outcomes. Risk/protective factors encompass family, culture, community, school, and peers. Resilience development involves ongoing individual–environment integration, yielding three outcomes: (a) enhanced resilience via reorganization, (b) new adaptive equilibrium maintaining original resilience, or (c) resilience decline from maladaptation. The theory illuminates both resilience mechanisms and its developmental dynamics (Liu et al., 2010).

Chinese university students are nurtured within a collectivist culture, where the development of their psychological resilience is often closely linked to family support, a sense of belonging to their class, and identification with their school. Unlike Western perspectives that emphasize individual traits in resilience, the psychological resilience of Chinese students is more likely to manifest as a process of seeking support within the collective and reconstructing meaning through relationships. Within Kumpfer’s resilience framework theory, the “environment” factor should particularly emphasize the protective role of collective systems such as family, class, and school.

2.7.5 Psychological Resilience Theory

Social Ecological Systems Theory (Zastrow, 2017) is a comprehensive theoretical framework grounded in systems theory, sociology, and ecology. It aims to explore how individual behavior is influenced by, and interacts with, the social environment. The renowned psychologist Urie Bronfenbrenner pioneered the application of ecological principles to the study of human behavior. As a leading figure in the ecological approach, he developed the ecological systems theory of human development between 1973 and 1979.

Based on the degree and manner of systemic influence on the individual, Bronfenbrenner delineated the individual's ecological environment into four levels: the microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 2010). These subsystems continuously interact with the individual, providing support and guidance for development. However, while emphasizing person-environment interactions, the original ecological systems theory paid relatively less attention to individual characteristics and agency. Consequently, between 1980 and 2006, Bronfenbrenner further refined and evolved his model into the social ecological systems theory (Navarro & Tudge, 2022).

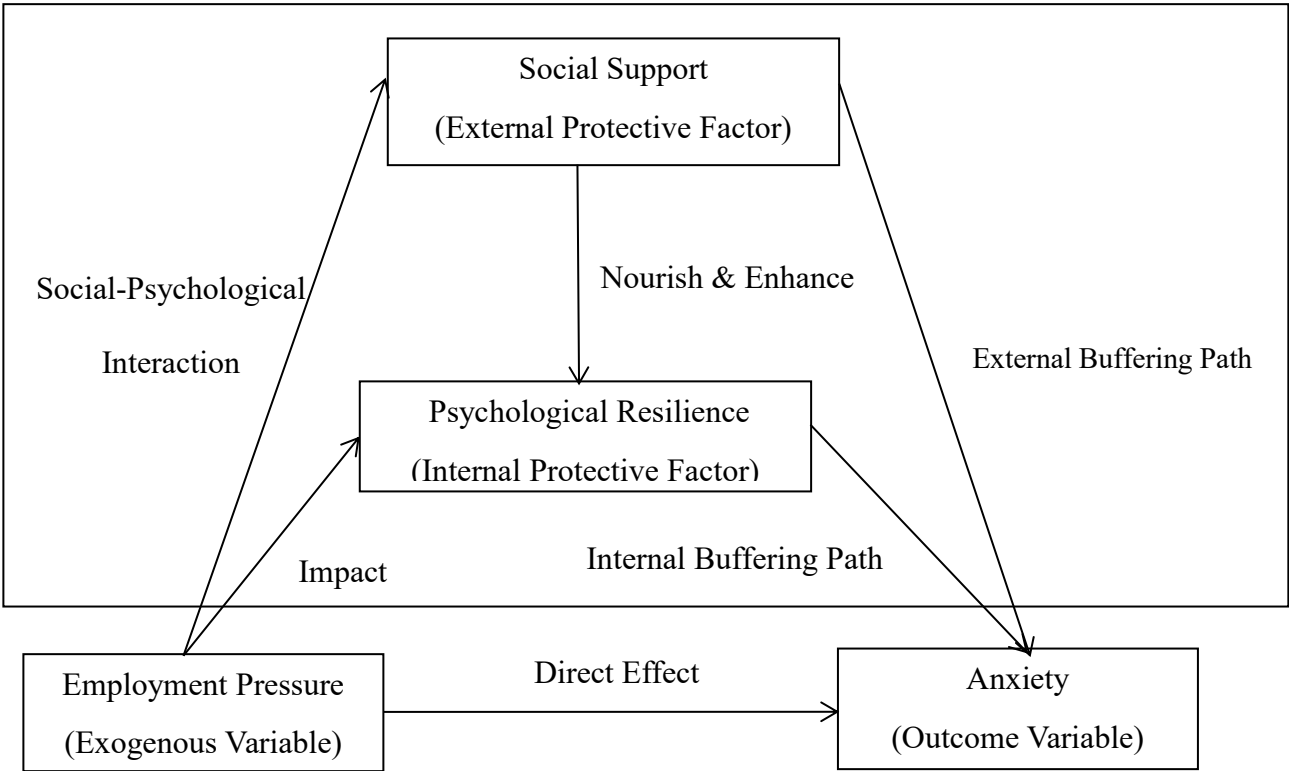
This theory conceptualizes the entire social environment as a social ecosystem, emphasizing the interactions between the individual and its various subsystems. This perspective shifts the research focus from the individual in isolation to the individual within interrelated social ecosystems encompassing family, community, and socio-cultural contexts. It facilitates a systematic, multi-faceted, multi-level, dynamic, and interactive analysis of both negative and positive adaptive processes in response to stress (Vélez-Agosto et al., 2017). A prominent proponent of this theory, Charles H. Zastrow, states in his work *Human Behavior and the Social Environment* (Zastrow, 2017): "The interconnection between an individual's development and their surrounding environment co-constructs multiple systems, including the microsystem, mesosystem, and macrosystem". The microsystem refers primarily to the individual person, encompassing both physiological and psychological aspects. The mesosystem comprises the small-group environments with which the individual interacts daily, such as family, school, peers, and other social groups. The macrosystem encompasses broader societal systems, including community, culture, customs, institutions, and organizations. These three systems are interconnected and mutually influential within the social structure, collectively constituting the external environment for university students' growth and development. The theory posits that individual problems should not be simplistically attributed to the external environment but should rather be viewed as the outcome of conflicts and contradictions among various groups within the ecosystem.

According to Social Ecological Systems Theory, the employment pressure experienced by graduating students originates from the dynamic interaction between the individual and multi-layered environmental systems. The employment landscape and policy environment within the macrosystem form the overarching context of stressors. These structural factors are transmitted and concretized into situational demands directly perceived

by the individual through the mesosystem—particularly via the “Guanxi-based support network” (e.g., family, school, peer groups) embedded in the Chinese cultural context. In this process, the individual is not a passive recipient of stress but actively engages in meaning-making through cognitive appraisal of the stressful situation.

Psychological resilience, as a relatively stable internal psychological resource of the individual, plays a pivotal role in this cognitive appraisal process. It is both influenced by the quality of social support within the mesosystem and, in turn, moderates the individual’s primary appraisal (whether the event constitutes a threat) and secondary appraisal (whether one can cope) of the stressful event. In other words, resilience functions not merely as a “buffer” against stress but as a “dynamic capacity” that is continuously constructed and developed through environmental interactions, permeating the entire process of “stress perception—resource mobilization—meaning reconstruction”.

**Figure 2- 1:
Theoretical Framework**



Therefore, employment pressure and its resulting emotional and behavioral outcomes are, in essence, the product of the ongoing interaction between an individual’s psychological resilience and the multi-layered ecosystem (macrosystem-mesosystem- microsystem). This perspective emphasizes both the structural influence of the environment and highlights the

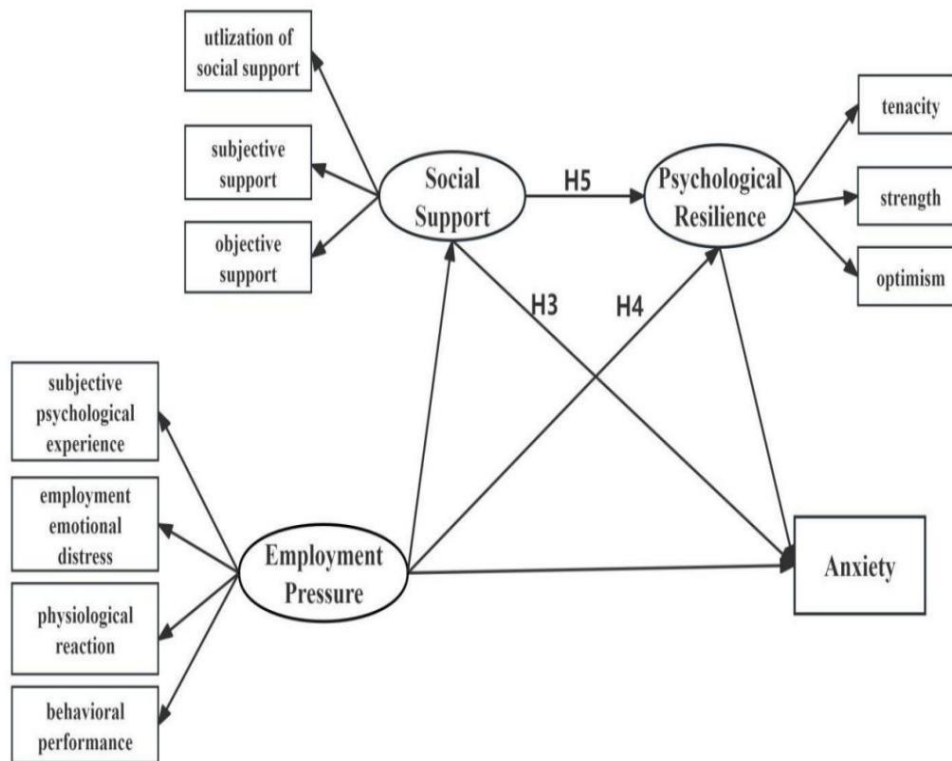
individual's agency and potential for psychological growth within the system.

2.8 Conceptual Framework

According to Social Stress Theory, when individuals face setbacks in any area of society, they experience pressure. Currently, students majoring in preschool education have perceived the increasing importance of preschool education and the reduction in the number of preschool education institutions, which has generated relatively high employment pressure and subsequently led to the emergence of anxiety. In the previous part of this chapter, the other three theories and their main contents were described as follows. The social support theory of anxiety holds that social support acts as a buffer against negative emotions. According to the buffer action theory, social support plays a crucial role in regulating individuals' physical and mental health by mitigating the adverse effects of stress on the body. In the framework theory proposed by Kumpfer, psychological resilience consists of four components: the external environment, internal resilience factors, the interaction between the individual and the external environment, and the outcomes of individual psychological resilience. Through the explanation of the above theories, researchers can see that social support plays a crucial role in alleviating stress and promoting mental health. At the same time, it can also enhance individuals' psychological resilience, which in turn can alleviate negative emotions and promote mental health. Based on the above discussion and the existing experience, the buffering effect model is proposed in this study, as illustrated in Figure 2-2.

In this model, employment pressure serves as the independent variable, comprising four dimensions: subjective psychological experience, employment emotional distress, physiological reactions, and behavioral performance. Psychological resilience and social support function as intermediary variables. Psychological resilience encompasses three dimensions: tenacity, strength, and optimism. Social support, on the other hand, comprises three dimensions: objective support, subjective support, and the utilization of social support. Anxiety is identified as the dependent variable. This model aligns well with our research objectives, questions, and hypotheses.

**Figure 2-2:
Research Framework**



2.9 Research Gap

First, relevant research indicates that college students have a relatively high level of anxiety and a relatively high detection rate. Several scholars have investigated the relationship between employment pressure and anxiety; however, the findings regarding the severity of these variables and their association with demographic factors have not been consistent. Furthermore, the majority of research on employment pressure and anxiety was conducted prior to the pandemic. There is a pressing need for additional studies in the post-pandemic context, given the changes in social and economic conditions that warrant more comprehensive exploration.

Second, most studies on employment pressure and anxiety have focused on medical students. Currently, the country is paying increasing attention to the development of preschool education and is committed to cultivating a group of outstanding preschool teachers. Since the mental health of preschool teachers can have an impact on young children, it has also received a great deal of attention. Given the integrated pre- and post-service

training system, researchers should also attach great importance to the mental health of final-year students from preschool education majors. Students in preschool education majors are experiencing unprecedented employment pressure due to the increasing number of college graduates, the decreasing number of kindergartens, and the declining birth rate of newborns. This pressure may have increased students' anxiety levels and reduced their mental health levels. Therefore, researchers have selected final-year students from preschool education majors as the subjects of our research.

Thirdly, most studies have indicated a positive correlation between employment pressure and anxiety among recent graduates, suggesting that employment pressure can serve as a predictor of anxiety. Moreover, both factors have an adverse impact on the mental health of graduates. Consequently, it is essential to pay more attention to these two variables. Among the existing studies exploring the relationship between employment pressure and anxiety, some emphasize the role of social support, while others highlight the importance of psychological resilience. Additionally, certain studies investigate variables such as psychological capital, coping styles, and self-efficacy. Social support and psychological resilience can serve as buffering factors, mitigating stress and reducing negative emotions. Moreover, some studies have shown that social support and psychological resilience may function as chain mediators. From the perspective of the buffering effect model, this research investigated the relationship between social support (external factors/environmental factors) and psychological resilience (internal factors/ personal factors) to examine the pathways through which employment pressure influences anxiety.

2.10 Chapter Summary

This chapter primarily focuses on the theoretical frameworks surrounding employment pressure, anxiety, social support, psychological resilience, relevant research, measurement tools, and the interrelationships among these variables. By analyzing these components, the research framework is refined, thereby establishing a robust theoretical foundation for the development of this study. The next chapter is "Methodology".

CHAPTER 3:

RESEARCH METHODOLOGY

3.1 Introduction

This chapter introduces the research methods, which facilitate a deeper understanding of the research questions, objectives, and hypotheses presented in the preceding chapters. It primarily addresses the components of research philosophy, research design, measures, population, sample size, sampling technique and procedure, data collection, data analysis, pilot study, and research ethics.

3.2 Research Philosophy

Positivism originated in France in the 19th century. At that time, French society was undergoing a period of drastic transformation, and the natural sciences had made significant progress. People's trust in scientific methods continued to increase. Positivism held that only knowledge obtained through empirical methods, such as observation and experiment, was reliable and considered scientific. Positivism believed that social phenomena, just like natural phenomena, had objective and universal laws. The task of social scientists is to discover and reveal these laws through scientific methods, thereby predicting and controlling social phenomena. The research methods of positivism included the experimental method, the observational method, and statistical analysis. Positivism had a profound impact on the development of social sciences. It promoted the scientific process of social sciences and made social science research pay more attention to the scientificity and rigor of its methods.

This study is an empirical investigation, which is a research method grounded in actual observations and data collection. It aims to verify hypotheses or address research questions by observing, measuring, and analyzing phenomena and relationships in the real world. Empirical research can employ two distinct methodologies: quantitative and qualitative. In this study, the quantitative research method is utilized. Quantitative studies emphasize the use of quantifiable data, wherein researchers gather numerical information,

such as digital responses from questionnaire surveys, and perform statistical analyses to conclude.

3.3 Research Design

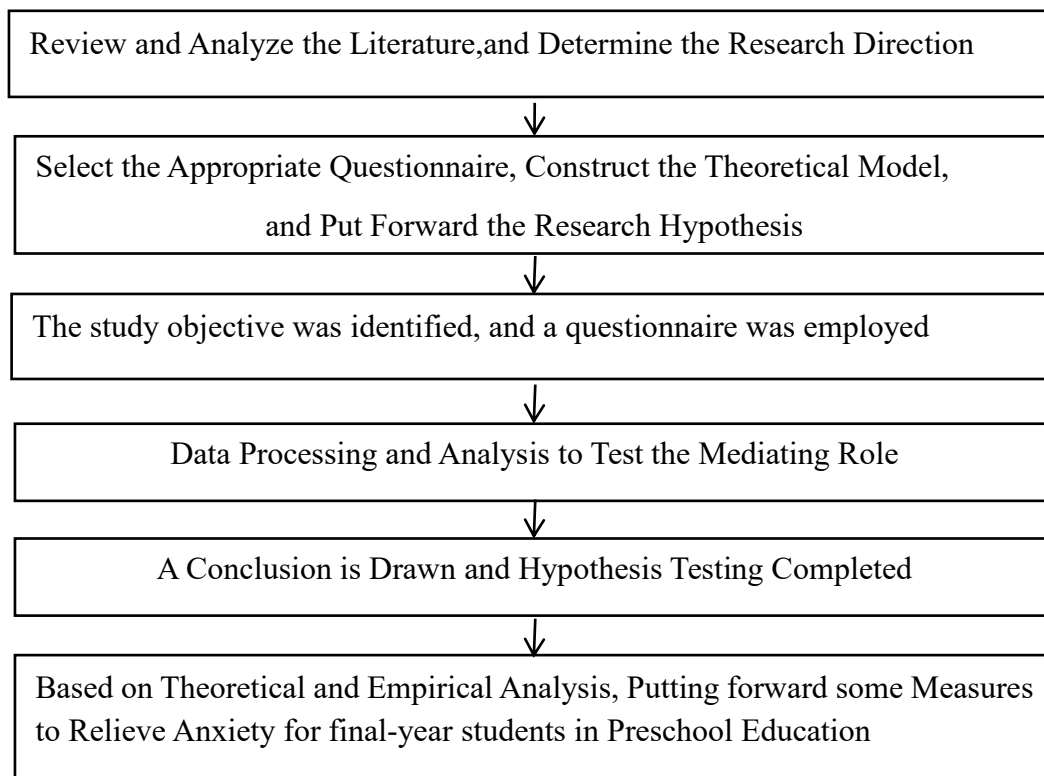
A study's research design serves as a blueprint for data collection, measurement, and analysis, addressing specific research questions (Sekaran & Bougie, 2016). Research designs can be categorized into three main types: qualitative research designs, quantitative research designs, and mixed-methods approaches (Cohen et al., 2007).

Quantitative research is a fundamental research paradigm in the field of social sciences, and it is also one of the important steps and methods in scientific research. Quantitative research has its foundation in empirical research. As Gall et al. (2003) pointed out, "This school of thought holds that the truths of nature and society are independent of the observers, and unbiased observations of reality constitute scientific knowledge". Compared to qualitative research, the research design of quantitative research tends to be more structured and conform to established norms. The structure of quantitative research is typically characterized by a large amount of data, and the research design is designed to enable researchers to make compelling interpretations through the comparison and analysis of these data.

Cross-sectional research refers to collecting relevant data on a research topic at a specific point in time, describing the basic characteristics of the research objects at that time, or exploring the relationships between different variables. The so-called "certain point in time" does not refer to a specific moment but rather a relatively short, continuous period, such as a week, a month, or a particular stage of development, and so on. In practice, cross-sectional research is one of the most common research methods. Cross-sectional research can collect a large amount of data within a short period, making it a relatively time-saving, cost-effective, and straightforward approach to implement. It can study a relatively large number of subjects. Therefore, the subjects are often highly representative, and the results obtained from the research also have good generalizability. Cross-sectional research has a relatively strong timeliness and can obtain research results relatively quickly. At the same time, it avoids the loss of subjects.

This study employs a quantitative, cross-sectional survey design. It examines the relationships between employment pressure, social support, psychological resilience, and anxiety among final-year students majoring in preschool education. In this context, employment pressure is the independent variable, anxiety is the dependent variable, and social support and psychological resilience are intermediary variables. A questionnaire survey measures each variable, and the results are expressed numerically.

**Figure 3- 1:
Research Process**



The research model and questions were established following a comprehensive literature review to assess the current situation, which led to the formulation of research hypotheses. The questionnaire survey method was chosen for data collection, facilitating preliminary verification of the research model and hypotheses. Specifically, a self-administered questionnaire approach was employed; the researcher created a web-based questionnaire and published it on the Questionnaire Star platform, allowing respondents to read and complete the survey. Subsequently, the researcher collects the data. This study aims to gather fundamental information on five aspects: demographic information, employment pressure, social support, psychological resilience, and anxiety. These aspects are measured

using the Participant Demographic Form, the Employment Pressure Scale for College Students, the Social Support Rating Scale, the Psychological Resilience Scale, the Self-Rating Anxiety Scale. The self-administered questionnaire method enables the rapid collection of relevant data within a short time frame.

3.4 Population and Sample

3.4.1 Population

Population refers to the entirety of individuals from which the researcher aims to investigate and draw inferences (Sekaran & Bougie, 2016). For this study, the population consists of all final-year students in preschool education in the year 2024. In 2018, 537 universities in China offered preschool education programs, with an undergraduate enrollment of 55,000 students and 206,000 students in junior colleges, representing a 100.6% increase compared to 2015 (Ministry of Education, 2019). According to the Ministry of Education, in 2021, 1,095 universities provided preschool education, graduating 265,000 students, compared to 591 universities and 231,000 graduates in 2011, representing increases of 1.2 times and 6.7 times, respectively (Ministry of Education, 2022). Currently, the enrollment scale for preschool education majors remains substantial, resulting in a large number of graduates.

3.4.2 Sample

In the context of research and data analysis, a sample is not merely a random assortment but a thoughtfully curated subset, systematically drawn from a larger population. This intentional design allows researchers to generalize findings from the sample to the population while adhering to the principles of rigorous methodology and statistical reliability.

3.4.2.1 Sample Size

The selection of sample size is a critical step that significantly impacts a study's reliability and efficacy. When determining the appropriate sample size, the investigator must consider the study's purpose, the overall population size, the expected effect size, the available resources, and the requirements for statistical analysis.

Barrett (2007) suggests that the sample size should exceed 200 participants. However, he also notes that when employing the maximum likelihood method in SEM with a sample size exceeding 500, the chi-square value may increase substantially, leading to a poor model fit. Additionally, the determination of sample size is often related to the total number of items in the questionnaire. According to literature concerning reliability and validity testing, the sample size should be 5 to 10 times the total number of questionnaire items (Zhou, 2017). This calculation method is rather simplistic and crude. It is an empirical rule and lacks a solid statistical theoretical foundation. Collecting and analyzing a large amount of sample data requires a significant investment of time, human resources, and material resources. If the sample size exceeds the actual need, it will lead to a waste of resources.

Estimating the sample size is a crucial aspect of research design. The appropriateness of the sample size significantly influences statistical power, credibility, effect size estimation, and repeatability. Consequently, this issue consistently garners considerable attention from researchers (Peng et al., 2023).

G*Power is a statistical software designed explicitly for calculating statistical power (including sample size). It is highly powerful and can be used to calculate the post-hoc statistical power (post-hoc analysis), as well as to estimate the sample size in advance (a priori analysis). Using G*Power to calculate the sample size primarily involves the following steps: selecting a statistical method, further classifying the method, determining the desired parameters, and setting each parameter accordingly.

The most common types of power analysis in G*power include: (1) Priori analysis: Calculate the sample size according to the given alpha (α) level, statistical power level ($1-\beta$), and effect size (the difference between H_0 and H_1). (2) Post-hoc analysis: Derive beta (β) based on the sample size (N), alpha (α), and effect size. (3) Compromise analysis: A smaller alpha (α) and a larger statistical power level ($1-\beta$) are desired. Thus, the weight between α and β is represented by $q = \beta/\alpha$. Therefore, when the sample size (N), q , and the specific effect size are known, both α and β can be obtained. (4) Criterion analysis: Calculate alpha (α) and relevant decision criteria based on the statistical power level ($1-\beta$), effect size, and sample size (N). (5) Sensitivity analysis: Calculate the effect size according to alpha (α), statistical power level ($1-\beta$), and sample size (N).

In this study, G*Power 3.1 software (Faul et al., 2007) was used to calculate the necessary sample size, with an effect size of 0.25 and an α level of 0.05. The calculation results indicated that to achieve a statistical test power of 0.95, 400 participants were required to complete the questionnaires.

3.4.2.2 Sampling Procedure

Sampling, as a fundamental research technique, involves a meticulous process of selecting individuals or samples from an extensive population for in-depth research, comprehensive investigation, or intricate statistical analysis. The primary rationale for sampling is deeply rooted in the practical constraints that researchers often encounter. In most real-world scenarios, attempting to study the entire population is not only incredibly time-consuming but also prohibitively expensive. Consequently, the necessary information can be obtained more effectively and economically by selecting representative samples from the population.

Employing sound sampling methods and carefully selecting samples is crucial to ensure the reliability and applicability of the study's results. Various sampling methods are available, such as probability sampling and non-probability sampling. Through sampling, researchers can gain profound insights into the overall characteristics and changes within a population on a smaller scale. By analyzing the sample data, patterns, trends, and relationships can be identified. These findings can then be extrapolated, with a certain degree of confidence, to the larger population. This process thereby provides valuable information for decision-making, policy formulation, and academic research. In academic research, sampling allows scholars to test hypotheses and contribute to the growth of knowledge in their respective fields.

In this study, the researcher employed convenience sampling, a non-random sampling method that selects respondents based on availability and accessibility. This approach has advantages, including its convenience and time efficiency.

The population of this study comprises all final-year students in preschool education from the year 2024. The researcher, affiliated with the Weifang Institute of Technology, teaches preschool education and is knowledgeable about policies and employment trends related to this field. They are well-versed in the needs of students pursuing this major. Final-year students from the preschool education program at Weifang Institute of Technology were

selected based on the principles of efficiency and convenience.

There are 44 institutions in Shandong Province that enroll students majoring in preschool education at the junior college level, 14 institutions that recruit students for the upgrading from junior college to undergraduate program in preschool education, and 25 institutions that enroll students majoring in preschool education at the undergraduate level. There are eight institutions that offer programs at all three levels simultaneously. Among them, five institutions are located in Jinan and Qingdao combined, while one institution is located in each of the following cities: Tai'an, Jining, Zaozhuang, and Weifang. Jinan and Qingdao are economically developed cities, whereas Tai'an, Jining, and Zaozhuang have relatively underdeveloped economies. Weifang represents a mid-level of economic development. To some extent, the level of economic development influences the number of employment opportunities available to students majoring in preschool education. Therefore, selecting a city with a moderate level of economic development appears to be more reasonable. The institution in Weifang that offers preschool education programs at all three academic levels is the Weifang Institute of Technology. The preschool education program at Weifang Institute of Technology has made significant efforts to serve the local community and has established a notable degree of social recognition and influence.

Weifang Institute of Technology is a full-time, ordinary undergraduate university approved by the Ministry of Education and the People's Government of Shandong Province. The College of Education is a secondary institute within the Weifang Institute of Technology. In 2015, a major in preschool education was established, leading to the recruitment of junior college graduates. The following year, in 2016, the institute began enrolling undergraduate students. By 2018, it had started admitting students who had transitioned from junior college to university. The first cohort of graduates emerged in 2018, with approximately 900 graduates over the past three years. This study focuses on the final-year students (class of 2024) majoring in preschool education within the College of Education, including three student categories: junior college students, "promoted students" (those who have advanced from junior college to university), and undergraduate (four-year) students. The sample consists of 144 final-year undergraduates (4 male, 140 female), 371 final-year junior college students (20 male, 351 female), and 348 final-year promoted students (14 male, 334 female), totaling 863 participants, which adequately meets the requirements for sample size.

The Weifang Institute of Technology employs a class system for student management. Final-year students majoring in preschool education are organized into distinct administrative classes, each serving as a sampling unit, exemplified by Class 1 of Preschool Education in 2023. Each class is assigned a head teacher; therefore, it is essential to contact the head teacher to schedule an appointment before engaging with the students. Upon entering the classroom, the researcher invites the students to participate as research subjects. Students need to sign the informed consent form. Those who are unwilling to participate in the questionnaire survey are welcome to leave. The experimenter presents the Quick Response code for participants to answer the questions and provides instructions on the matters that need attention. After the participants have fully understood the instructions, they start to answer the questions. After completing the test, students should be thanked and given a small token of appreciation.

3.5 Measures

Questionnaires are the most commonly employed data collection method because they effectively gather empirical data from large samples (McCelland, 1994; Zhou, 2017). A questionnaire consists of a series of questions designed to collect information about individuals' attitudes, values, opinions, or beliefs regarding a specific topic. The quality of the questionnaire significantly influences the authenticity and practicality of the survey data, the response rate, and, ultimately, the survey's overall results.

The questionnaire consisted of five sections. The first section, the Participant Demographic Form, aimed to gather demographic information about final-year students majoring in preschool education. The subsequent scales included the Employment Pressure Scale for College Students, the Self-Rating Anxiety Scale, the Social Support Rating Scale, and the Psychological Resilience Scale, which measured employment pressure, anxiety, social support, and psychological resilience, respectively.

To identify and eliminate non-serious responses that may persist in the original dataset following data collection, it is essential to ensure the validity of the online questionnaire. According to the research conducted by Zhong et al. (2021), three types of questions were incorporated into the four scales: bogus items (e.g., "I was born on February 30"), instructional questions (e.g., "Please skip this question"), and self-report questions (e.g., "I was very careless when answering the questions"). Including these three question types

helps reduce the incidence of careless responses.

The four primary questionnaires utilized in the existing studies have demonstrated strong reliability and validity (Zhang & Qiu, 2007; Zhou, 2012; Xiao, 1994; Yu & Zhang, 2007). Additionally, given that the reliability and validity of a questionnaire are influenced by the specific context of use and the characteristics of the sample, a pilot study was conducted to further assess these metrics.

3.5.1 Employment Pressure Scale for College Students

The measurement of employment pressure in this study utilizes the Employment Pressure Scale for College Students, developed by Zhang and Qiu (2007). This scale is particularly suited for final-year students seeking employment, aligning well with the survey requirements of this research. It comprises 26 items categorized into four factors: subjective psychological experience (12 items), emotional distress related to employment (eight items), physiological reactions (three items), and behavioral performance (three items). The scale employs a 5-point Likert scoring system, where 1 indicates “completely inconsistent” and 5 signifies “full agreement”, with higher scores reflecting greater employment pressure.

The overall test-retest reliability of the questionnaire ranges from 0.64 to 0.73. Additionally, the internal consistency coefficient ranges from 0.65 to 0.93. These findings suggest that the Employment Pressure Questionnaire for college graduating students demonstrates good reliability and validity, making it a suitable evaluation tool for assessing the employment pressure experienced by final-year students from ordinary comprehensive universities (Zhang & Qiu, 2007).

In the pilot study, the overall Cronbach’s α coefficient for this scale was 0.978, the KMO value was 0.908, and Bartlett’s test of sphericity was significant. In the formal study, the overall Cronbach’s α coefficient for this scale was 0.966, the KMO value was 0.967, and Bartlett’s test of sphericity was also significant. These results indicate that the scale demonstrates strong reliability and validity.

3.5.2 Self-Rating Anxiety Scale

The Self-Rating Anxiety Scale developed by Zung in 1971, is employed in this study. This scale consists of 20 questions, among which questions 5, 9, 13, 17, and 19 are scored

in reverse. The SAS assesses symptom frequency across four defined levels: no or negligible time, short time, considerable time, and most or all of the time. Each question is rated on a scale from 1 to 4, with forward-scoring questions assigned values of 1 to 4 and reverse-scoring questions of 4 to 1. The standard score for the SAS is 50; thus, a higher score indicates more significant anxiety.

The internal consistency coefficient of the SAS is 0.767, while the half-reliability coefficient, according to Spearman-Brown, is 0.724, and the Guttman half-reliability coefficient is 0.720. These three reliability coefficients fall within the range of 0.700 to 0.800, suggesting that the overall internal consistency reliability of the SAS is acceptable (Zhou, 2012).

In the pilot study, the overall Cronbach's α coefficient for this scale was 0.864, the KMO value was 0.856, and Bartlett's test of sphericity was significant. In the formal study, the overall Cronbach's α coefficient for this scale was 0.818, the KMO value was 0.947, and Bartlett's test of sphericity was also significant. These results indicate that the scale demonstrates strong reliability and validity.

3.5.3 Social Support Rating Scale

This study utilizes the Social Support Rating Scale, developed by Xiao Shuiyuan in 1994, to examine the social support experienced by college students. The scale consists of ten items, which are categorized into three dimensions: objective support, subjective support, and utilization of social support.

The Social Support Rating Scale employs an item scoring method. For questions 1 through 4 and 8 through 10, respondents should select only one item from options 1, 2, 3, or 4, scored with 1, 2, 3, and 4 points, respectively. Question 5 includes options A, B, C, and D, which correspond to scores ranging from 1 to 4 points, reflecting levels of support from "no support" to "full support": 1 points for "no support", 2 points for "very few", 3 points for "normal", and 4 points for "full support". For questions 6 and 7, if the response is "no source", it should be recorded as 0 points, whereas multiple sources yield several points if sources are available. The total social support score is calculated as the sum of the scores from the ten items. Social support was assessed across three dimensions, with scores calculated by summing the relevant items: objective support (items 2, 6, and 7), subjective

support (items 1, 3, 4, and 5), and utilization of support (items 8, 9, and 10).

The scale demonstrates good test-retest reliability, with a correlation coefficient of $r = 0.92$ and a reported reliability range from 0.89 to 0.94. These results suggest that the questionnaire is stable over time (Xiao, 1994).

In the pilot study, the overall Cronbach's α coefficient for this scale was 0.724, the KMO value was 0.736, and Bartlett's test of sphericity was significant. In the formal study, the overall Cronbach's α coefficient for this scale was 0.702, the KMO value was 0.778, and Bartlett's test of sphericity was also significant. These results indicate that the scale demonstrates strong reliability and validity.

3.5.4 Psychological Resilience Scale

In 2003, Connor and Davidson developed the Connor-Davidson Resilience Scale. Subsequently, Yu and Zhang (2007) adapted it into a Chinese version, demonstrating its efficacy as a robust psychological resilience measurement tool for Chinese individuals. The scale comprises 25 items categorized into three dimensions: tenacity (13 items: 11-23), strength (eight items: 1, 5, 7-10, 24, 25), and optimism (four items: 2, 3, 4, 6). Responses are measured using a 5-point Likert scale, where 1 indicates "never", 2 indicates "few", 3 indicates "sometimes", 4 indicates "often", and 5 indicates "always". The total score on the scale is 100, with higher scores in each dimension and the overall scale reflecting greater psychological resilience.

The internal consistency coefficient of the Chinese version of the Connor-Davidson Psychological Resilience Scale is 0.91. Furthermore, the three-factor structure: tenacity, strength, and optimism, demonstrates reasonable validity, good efficiency, and standard reliability (Yu & Zhang, 2007).

In the pilot study, the overall Cronbach's α coefficient for this scale was 0.963, the KMO value was 0.914, and Bartlett's test of sphericity was significant. In the formal study, the overall Cronbach's α coefficient for this scale was 0.947, the KMO value was 0.967, and Bartlett's test of sphericity was also significant. These results indicate that the scale demonstrates strong reliability and validity.

To ensure the scientific rigor of the measurement instruments, all four scales selected for this study have well-established reliability and validity. Specifically, Employment Pressure Scale for College Students, the Social Support Rating Scale, and the Psychological Resilience Scale are original instruments developed within the Chinese cultural context. The Self-Rating Anxiety Scale, on the other hand, is a widely adopted Chinese version of an internationally recognized scale, for which cross-cultural measurement equivalence has been confirmed. Prior to the formal survey, a pilot study was conducted to evaluate the internal consistency reliability of the scales within the current sample. The results indicated that Cronbach's α coefficients for all scales ranged from 0.724 to 0.978, meeting psychometric standards and thereby providing robust support for the validity of subsequent analyses.

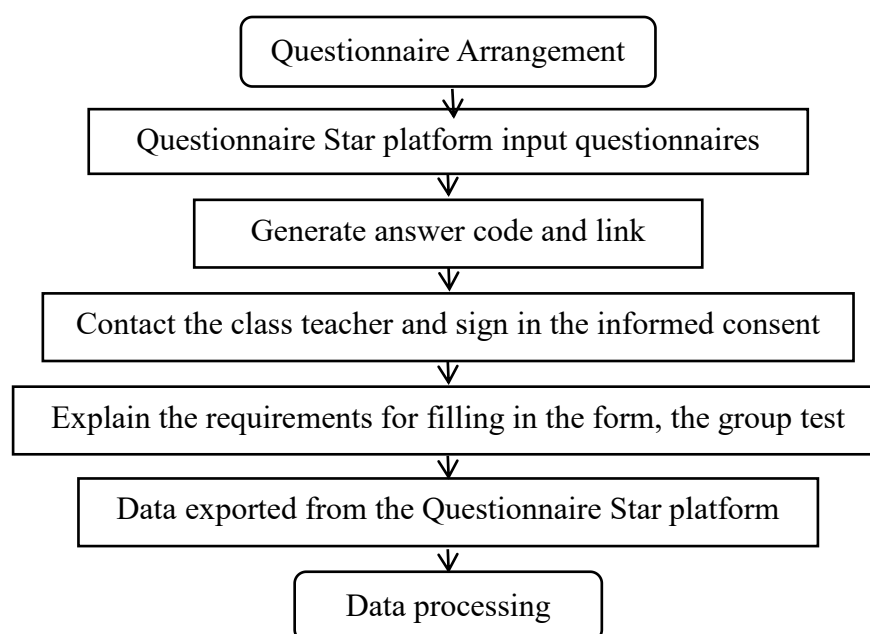
Table 3- 1:
Summary of Measures

Name of Measures	Designer	Year	Number of Items
Employment Pressure Scale of College Students	Zhang & Qiu	2007	26
Self-rating Anxiety Scale	Zung	1971	20
Social Support Rating Scale	Xiao	1994	10
Psychological Resilience Scale	Yu & Zhang	2007	25

3.6 Data Collection

It is conducted as a web-based questionnaire in this study. Specific steps are shown in Figure 3-2. There are three primary reasons for utilizing the network questionnaire. First, the web-based questionnaire survey mitigates the risk of generating invalid responses by carefully designing the questions and establishing logical relationships among certain items. This approach ensures the integrity and validity of each questionnaire without requiring time-consuming deletions. Second, the web-based questionnaire survey significantly reduces the time required for distributing and collecting paper questionnaires. Finally, during the statistical analysis phase, relevant data can be automatically generated online, effectively minimizing errors arising from minor human mistakes in manual calculations.

**Figure 3-2:
Data Collection Process**



3.7 Data Analysis

As noted by Cooley (1978), statistical procedures help establish theoretical model plausibility and estimate the degree to which explanatory variables influence the dependent variable. Accordingly, SPSS 21.0 was used for preliminary data analysis, and SEM with confirmatory factor analysis was employed to evaluate the hypothesized model from Chapter 2.

In testing this model, the study focused on total scores of core variables, based on two considerations: First, the research aims to holistically examine the chain mediation mechanism of social support and psychological resilience between employment pressure and anxiety; thus, total scores allow investigation of macro-level relational patterns consistent with the integrated theoretical framework. Second, using total scores contributes to more stable parameter estimates given the current sample size.

3.7.1 Data Screening

Data screening is critical for ensuring data accuracy, reliability, and the validity of research conclusions. While web-based questionnaires offer cost-effectiveness and speed,

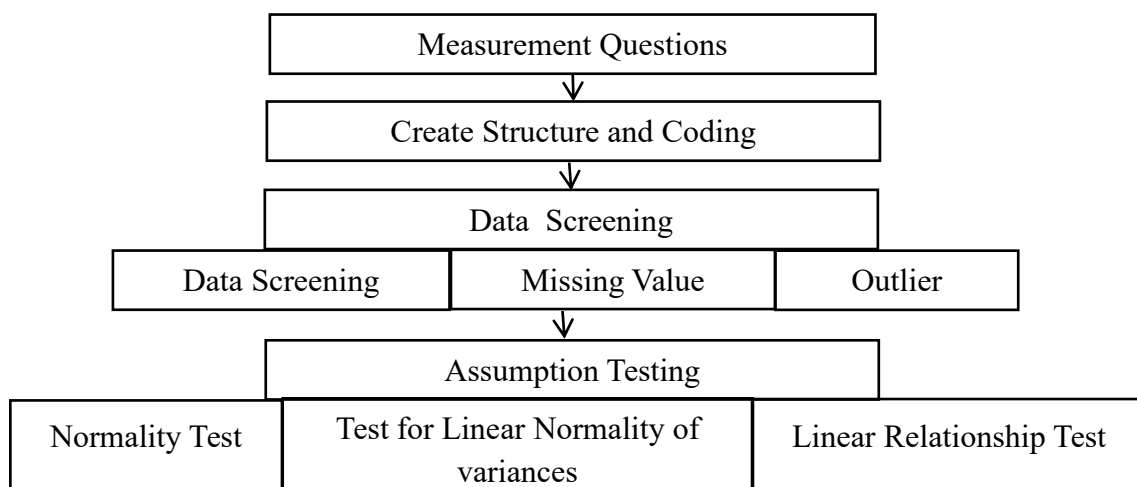
the inability to monitor the response process often results in spurious data. Therefore, data cleaning is the essential first step following collection, guaranteeing the authenticity and validity of the data and laying a solid foundation for subsequent analysis.

Since the web-based questionnaire is set so that all questions must be completed before submission, the integrity of the questionnaire responses can be ensured. The criteria for screening the data are as follows: (1) The average response time per question is less than 2 seconds; (2) The response time deviates beyond ± 2 standard deviations from the mean; (3) Errors on trap questions; (4) Responses with more than 80% identical answers (Lin & Tang, 2021); and (5) Responses showing no variation, where all answers are identical (e.g., all 1s or 5s).

3.7.2 Preliminary Data Analysis

To analyze the questionnaire data, researchers utilized SPSS 21, a software widely accepted and employed by researchers for data analysis (Zikmund, 2003). Various techniques were applied to screen the data in this thesis, focusing on aspects such as coding, handling missing data, identifying outliers, and assessing normality. Preliminary data analysis encompassed calculating frequencies, means, and standard deviations. These analyses were performed for each variable to provide initial insights into the sample. These analyses, performed for each variable, provided an initial “snapshot” of the sample.

**Figure 3-3:
Data Preparation Processes**



3.7.3 Structure Equation Modeling

SEM is defined as “a collection of statistical techniques that enable the examination of relationships between one or more independent variables (which can be either continuous or discrete) and one or more dependent variables (which can also be either continuous or discrete)” (Tabachnick & Fidell, 2001). SEM has become a widely used analytical tool in academic research (Kline, 2005; Holmes-Smith et al., 2006).

The primary purpose of SEM is to simultaneously explain the patterns of interrelated dependence relationships among a set of latent or unobserved constructs, each measured by one or more observed variables (Hair et al., 1995; Schumacker & Lomax, 1996). SEM assumes causal relationships, such that changes in variable x_1 influence variable y_1 , and vice versa. In addition to analyzing basic structures and their causal relationships, SEM is suitable for various other analyses, including estimating variances and co-variances, testing hypotheses, performing traditional linear regression, and conducting confirmatory factor analysis (Jöreskog & Sörbom, 1996). Anderson and Gerbing (1988) believe that SEM is a confirmatory method that provides a comprehensive means of evaluating and modifying theoretical models. Consequently, researchers in psychology have identified SEM as a suitable technique for examining their hypothesized models (Smith, 1998; De Wulf et al., 2001; Roberts et al., 2003; Palmatier et al., 2006).

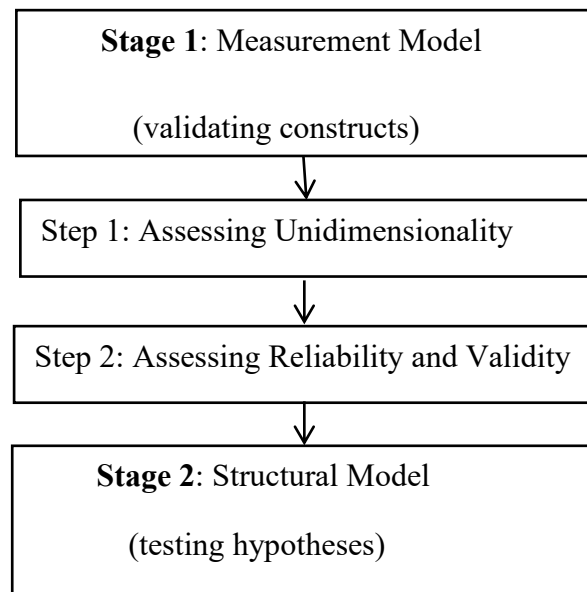
SEM can evaluate the unidimensionality, reliability, and validity of each construct (Anderson & Gerbing, 1988; Bollen, 1989; Hair et al., 1995; Kline, 1998, 2005). Additionally, SEM provides a comprehensive assessment of model fit and testing of individual parameter estimates to ensure that the selected model adequately fits the data. This study employed confirmatory factor analysis for SEM analysis.

Many software programs deal with structural equation models, including LISREL, AMOS, SmartPLS, and MPLUS. AMOS 23.0 is a statistical tool that analyzes the relationships between individual items and factors within independent variable (employment pressure) and dependent variable (anxiety). Additionally, researchers can specify, estimate, evaluate, and present models in causal path diagrams to illustrate hypothesized relationships between variables. Hypothetical models can be compared with empirical models to assess how well the empirical model aligns with the data. Any causal paths inconsistent with the original model can be changed or deleted.

3.7.3.1 Two-Stage Structural Equation Modeling

CFA was employed in SEM using AMOS 23.0 to assess the measurement model, following the two-stage approach by Anderson and Gerbing (1988). The first phase focused on evaluating the measurement model, and the second on the structural model. The goal of Phase One was to establish key metrics. As shown in Figure 3-4, CFA was carried out in two steps during this stage.

Figure 3-4:
Two-Stage Structural Model Used in this Thesis



The primary model fit indices used in this study are as follows: (1) A smaller chi-square (χ^2) value indicates better alignment between the theoretical model and the data. A non-significant χ^2 ($p > .05$) reflects a good model fit (Bollen, 1989). A χ^2/df ratio below 5 suggests an acceptable fit, and below 3 indicates a good fit. (2) The root mean square error of approximation (RMSEA) reflects model fit, with values below 0.080 considered acceptable and those between 0.050 and 0.080 considered good (Kline, 2005). (3) The goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI) range from 0 to 1, with values closer to 1 indicating a better fit. Common thresholds are $\text{GFI} \geq 0.90$ and $\text{AGFI} \geq 0.80$, though some suggest minimum values of 0.80 or 0.85 for GFI. (4) The comparative fit index (CFI), normed fit index (NFI), and incremental fit index (IFI) compare the target model to a baseline (null) model with no covariances. Values exceeding 0.90 indicate good model fit (Bentler, 1990). (5) Parsimony-adjusted indices PNFI, PCFI, and PGFI account for

model simplicity. Values above 0.50 are generally acceptable.

Table 3- 2:
Research Objectives, Research Hypothesis, and Data Analysis

Research Objective	Research Hypothesis	Data Analysis
To assess the levels of employment pressure, anxiety, psychological resilience, and social support among final-year students majoring in preschool education.	H ₁ : Final-year students majoring in preschool education experience employment pressure and anxiety at an upper-middle level, while their social support and psychological resilience are at a middle level.	Descriptive Analysis
To assess the relationships between employment pressure, anxiety, psychological resilience, and social support among final-year students majoring in preschool education.	H ₂ : There exists a significant correlation among employment pressure, social support, psychological resilience, and anxiety among final-year students majoring in preschool education.	Inferential Analysis (Correlation Analysis)
To investigate the mediating effect of social support on the relationship between employment pressure and anxiety among final-year students majoring in preschool education.	H ₃ : There a mediating effect of social support between employment pressure and anxiety for final-year students majoring in preschool education.	Inferential Analysis (SEM)
To investigate the mediating effect of psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education.	H ₄ : There is a mediating effect of psychological resilience between employment pressure and anxiety among final-year students majoring in preschool education.	Inferential Analysis (SEM)
To examine the chain-mediating effects of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students in preschool education.	H ₅ : There is a chain-mediating effect of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education.	Inferential Analysis (SEM)

3.8 Research Ethics

Research ethics refers to a series of moral principles and norms that are adhered to during the research process, aiming to ensure the scientific nature and fairness of the research, as well as the protection of research participants and society. This study focuses on final-year students majoring in preschool education students. Therefore, significant efforts have been made in aspects such as ensuring respect for research subjects, protecting their privacy, and achieving fairness and justice throughout the research process.

This study has undergone review and approval. All procedures carried out in this research involving human participants comply with the ethical standards set by the Ethics Committee of Universiti Malaysia Sarawak, its subsequent amendments, or other similar ethical guidelines. The researchers submitted relevant materials and obtained the consent of the Universiti Malaysia Sarawak Ethics Committee. Since the research subjects are from the Weifang Institute of Technology, the Ethics Committee of the Weifang Institute of Technology reviewed and approved the questionnaire content and application for the questionnaire survey.

Firstly, informed consent was obtained from the subjects. All subjects signed the informed consent form electronically and voluntarily participated in this study. They were promised that the data obtained from the survey would only be used for academic research and would be kept strictly confidential. This survey safeguarded the privacy rights of participants and did not disclose any personal information.

Secondly, before distributing the questionnaire's quick response code, the investigators explained the research objectives and confidentiality measures in detail to the subjects, ensuring that they were aware that the researchers would protect their privacy rights. The data were collected anonymously. At the same time, emphasis was also placed on protecting the subjects' physical and mental health. It was stated that if the subjects experienced psychological problems due to filling out the questionnaire, they could seek telephone consultations or face-to-face interviews using the provided contact information.

Thirdly, to prevent data loss or damage caused by unforeseen technical failures, hardware malfunctions, or accidental deletions, regular and automated backups of the collected questionnaire data were conducted throughout the research process. All backup data were stored in a secure, password-protected cloud server as well as on an external hard

drive, and kept physically and digitally separate from the original data to ensure redundancy. At the same time, strict access rights to the questionnaire data were implemented and enforced, and only authorized researchers directly involved in the project were permitted to access, process, or analyze the data.

3.9 Pilot Study

3.9.1 Importance of Pilot Study

A pilot study, often referred to as a feasibility study, is a small-scale preliminary investigation conducted before a main study to assess feasibility or refine the research design. Pilot studies play a key role in developing comprehensive research projects by helping design research methods and protocols.

Conducting a pilot questionnaire study is essential for several reasons: (1) it allows researchers to verify that respondents comprehend the terminology employed; (2) it evaluates whether emotional questions are included, as such questions can provoke defensiveness and compromise the validity of responses.; (3) it evaluates the presence of leading questions, which can unduly influence respondents' answers; (4) it ensures that the questionnaire can be completed in a reasonable amount of time. If the questionnaire is excessively lengthy, respondents may lose interest or lack sufficient time to finish it, potentially impacting response rates and the data quality.

Pilot studies help researchers minimize errors and risks associated with the main study by identifying and addressing potential issues during the pilot phase. This process enhances the reliability and validity of the results obtained in the main study. Additionally, pilot studies evaluate the main study's practicality and feasibility while testing the validity of the research instruments employed.

3.9.2 Pilot Study Process

During the period from October to November 2023, upon entering the questionnaire into the Questionnaire Star platform, a Quick Response code and a link were generated to facilitate responses to the questions. Additionally, a notice for subject recruitment was posted in the teaching building. In October 2023, the experimenter introduced the study,

obtained informed consent from the subjects, and subsequently conducted the test. Following the test, subjects received a small gift as a token of appreciation.

3.9.3 Pilot Study Sample Data Screening

The questionnaire was designed to ensure that all questions were answered before submission. A total of 105 questionnaires were collected. Despite the inclusion of trap questions, no respondents fell into these traps. Invalid questionnaires were eliminated based on specific criteria: two questionnaires were discarded due to an average response time of less than two seconds per question, two were removed for response times that fell outside three standard deviations, and one was excluded for providing regular but invalid responses. Ultimately, 100 valid samples were retained for analysis.

3.9.4 Pilot Study Results

3.9.4.1 Reliability Analysis

To assess the reliability of the survey questionnaire, this study employed the “Reliability Analysis” function of SPSS 21.0 to determine Cronbach’s α reliability coefficient, which evaluates the internal consistency of the questionnaire data. This coefficient ranges from 0 to 1. Specifically, a Cronbach’s α value between 0.65 and 0.70 is considered the minimum acceptable threshold, a value between 0.70 and 0.80 is regarded as quite good, and a value between 0.80 and 0.90 is deemed very good. According to Nunnally (1978), Cronbach’s α coefficient exceeding 0.70 indicates that the questionnaire possesses good internal consistency.

The Cronbach’s α reliability coefficient, presented in Table 3-3, indicated an overall value of 0.862, significantly exceeding the critical threshold of 0.7, thereby demonstrating a relatively high level of reliability. Furthermore, the Cronbach’s α coefficient values for the four measurement scales were all greater than 0.7, confirming that each latent variable in the measurement questionnaire exhibited satisfactory measurement reliability.

Table 3-3:
Reliability Statistics: Cronbach's α Value

Variable	Scale Name	Number of Items	Cronbach's α
Employment Pressure	Employment Pressure Scale for College Students	26	0.978
Social Support	Social Support Rating Scale	10	0.724
Psychological Resilience	Psychological Resilience Scale	25	0.963
Anxiety	Self-rating Anxiety Scale	20	0.864
Overall Reliability Statistics		81	0.862

3.9.4.2 *Validity Analysis*

The suitability of the data for factor analysis—a key step in assessing the structural validity of the scale—was evaluated using Bartlett's test of sphericity and the KMO measure of sampling adequacy. Bartlett's test examines whether the correlation matrix deviates significantly from an identity matrix, with a significant result ($p < .05$) indicating that the variables share sufficient common variance to warrant factor analysis. The KMO statistic complements this by measuring sampling adequacy based on the proportion of variance among variables that might be common variance, with values interpreted as follows: ≥ 0.90 superb, 0.80–0.89 meritorious, 0.70–0.79 middling, 0.60–0.69 mediocre, 0.50–0.59 miserable, and < 0.50 unacceptable. Generally, a KMO value above 0.7 along with a significant Bartlett's test provides preliminary evidence that the data are appropriate for factor extraction, though final structural validity depends on further analysis such as factor loadings, interpretability of factors, and theoretical coherence, in addition to meeting sample size guidelines (e.g., a subject-to-item ratio of at least 5:1).

As shown in Table 3-4, the overall KMO value was 0.711, exceeding the critical threshold. Bartlett's test was significant ($p < .001$), suggesting that the assumption of variable independence was violated and the data were adequately correlated for factor extraction. This indicates that the questionnaire data had sufficient concentration and met the requirements for factor analysis. Additionally, the KMO values for the four individual measurement scales were all greater than or equal to 0.736, each surpassing the 0.7

benchmark. The significance levels of Bartlett's tests for these scales were also $p < .001$, confirming the presence of sufficient inter-variable correlations. These results support the structural validity of the scales and suggest that the latent variables measured in the model have strong construct validity, making the data suitable for subsequent factor analysis.

Table 3- 4:
KMO and Bartlett's Test of Sphericity

Scale	Measure		Numeric
Employment Pressure Scale for College Students	Kaiser-Meyer-Olkin Metric for Sampling Adequacy		0.908
	Bartlett's test of sphericity	Approximate Chi-Square	3500.062
		df	325
		Sig	0.000
		Kaiser-Meyer-Olkin Metric for Sampling Adequacy	0.736
Social Support Rating Scale	Bartlett's test of sphericity	Approximate Chi-Square	274.173
		df	45
		Sig	0.000
		Kaiser-Meyer-Olkin Metric for Sampling Adequacy	0.914
Psychological Resilience Scale	Bartlett's test of sphericity	Approximate Chi-Square	2050.078
		df	300
		Sig	0.000
		Kaiser-Meyer-Olkin Metric of Sampling Adequacy	0.856
Self-Rating Anxiety Scale	Bartlett's test of sphericity	Approximate Chi-Square	1154.693
		df	190
		Sig	0.000
		Kaiser-Meyer-Olkin Metric of Sampling Adequacy	0.711
Overall Questionnaire	Bartlett's test of sphericity	Approximate Chi-Square	8894.742
		df	3240
		Sig	0.000

Data analysis of the sample collected during the pilot study indicated that the scale employed possesses good reliability and validity, making it suitable for use in the formal study. G*Power calculations revealed that a minimum of 400 subjects was required for this study.

3.10 Chapter Summary

This chapter outlines the methodological strategy utilized to address the study's research questions and associated hypotheses. Key topics covered include research philosophy, research design, measurement techniques, sample size, and sampling procedures. A section detailing data collection, data analysis, and research ethics is included, concluding with a summary. The subsequent chapter focuses on "Data analysis and results"

CHAPTER 4:

DATA ANALYSIS AND RESULTS

4.1 Introduction

The previous chapter outlined the research methods employed to evaluate the proposed theoretical model and addressed the research questions of this study. The objective of this chapter was to present the results of the data analysis and to test the hypotheses. Following the introduction, this chapter details the pilot study and data screening, including sample data cleaning, sample response rate, and a description of sample characteristics, as well as the analysis of the questionnaire's normality, reliability, and validity. It also examined the current status of employment pressure, psychological resilience, social support, and anxiety, as well as the relationships among these variables and the differences in employment pressure, psychological resilience, social support, and anxiety across various demographic variables. After evaluating the measurement model from the first stage and the structural model from the second stage, the final results concerning the hypotheses testing were concluded. The chapter concluded with a summary of the findings.

4.2 Data Screening and Response Rate

4.2.1 Data Screening

Careless answering can significantly compromise data integrity and authenticity. This study builds upon the control and identification technology for careless answering, as described by Zhong et al. (2021), which is divided into pre-control and post-detection elimination.

Several control measures were implemented to ensure that participants answered the questions thoughtfully and accurately. (1) In selecting the scale, researchers aimed to choose one with fewer questions and minimized the number of demographic questions. The final

questionnaire consisted of 89 questions, with an effort to condense it as much as possible to minimize participant fatigue. Empirical research has shown that completing a lengthy questionnaire in a single session can negatively impact data quality (Nguyen, 2017). (2) During the questionnaire administration, the experimenter emphasized the importance of careful completion and instructed participants to answer diligently.

Pre-control can reduce the occurrence of careless answers; however, it cannot eliminate them. Therefore, it is essential to identify and remove the careless responses that may still exist in the original data after collection. This study employed an embedded recognition scale called proactive approaches (Dunn et al., 2018). The fundamental principle of this method was to integrate a recognition scale within the original questionnaire to assess the degree of carelessness exhibited by the subjects. The recognition scale questions utilized in this study consist of trap questions, categorized as follows: (1) Instruction questions, which require subjects to adhere to the instructions provided in the question stem. For example, “To confirm that you are answering the questions seriously, please choose A directly for this question” (Anduiza & Galais, 2017), and “Please skip this question and do not answer it”. (2) Trap questions, which present apparent correct answers, such as “I was born on February 30” (Huang et al., 2012). (3) Self-report questions, which solicit subjects’ subjective assessments of their seriousness and effort, such as “I was careless when answering questions” (Huang et al., 2012). In this study, questionnaires with incorrect answers to trap questions were deemed invalid, resulting in 20 questionnaires being excluded.

When response times are very short, subjects often cannot adequately read before answering questions, leading to responses that may not reflect their true thoughts (Huang et al., 2012). According to Huang et al. (2012), the questions were answered within 2 seconds (Curran, 2016; Soland et al., 2019). This study included a total of 89 questions. Responses were filtered based on the time taken to answer; questionnaires with response times shorter than 178 seconds were deemed invalid (a total of 10 responses). Questionnaires with response times outside two standard deviations (Li et al., 2023) were also classified as invalid (14 responses). To enhance the validity of the remaining questionnaires, researchers identified invalid responses through manual review. Specifically, researchers excluded those with more than 80% identical answers (Lin & Tang, 2021) and those with no variation in responses (where all answers were identical, such as all 1s, all 3s, or all 5s), which included 20 invalid responses.

4.2.2 Response Rate

In this study, 700 final-year students majoring in preschool education completed a questionnaire. The web-based questionnaire was designed to prevent the submission of unanswered questions, resulting in 700 fully completed responses. After data screening, 636 valid samples were retained for empirical analysis, yielding an effective response rate of 90.86%.

4.3 Participants' Demographic Profile

In descriptive statistical analysis, the researcher selected eight demographic variables: gender, place of origin, education level, family income, whether the child is an only child, whether the student is taking higher education examinations, employment status, and future employment options. The statistical results are shown in Table 4-1.

Table 4- 1:
Summary of Participant Demographic Information

Demographic Variable Name	Category Value	Corresponding Number of Student	Percentage(%)
Gender	Boy	18	2.8%
	Girl	618	97.2%
Place of Origin	Urban Areas	158	24.8%
	Rural Areas	478	75.2%
Education Level	JC	207	32.5%
	BD	142	22.3%
	UAB	287	45.1%
Family Income	Poor	37	5.8%
	Average	529	83.2%
Only Child	Good	70	11%
	Yes	116	18.2%
	No	520	81.8%
Higher Education Examination	Yes	311	48.9%
	No	325	51.1%
Employment Status	Yes	29	4.6%
	No	607	95.4%

Table 4-1	continued		
Future Employment Options	Entrepreneurship	13	2%
	Examination	296	46.5%
	Further studies	146	23%
	Employment	149	23.4%
	Other	32	5%

Note: JC: Junior College, BD: Bachelor's Degree, UAB: Upgrading from Associate to Bachelor

The survey of final-year students in preschool education revealed a gender distribution of 18 boys, representing 2.8% of the total, and 618 girls, accounting for 97.2%. This significant disparity in the male-to-female ratio, with a markedly higher proportion of girls, was closely linked to the characteristics of this major.

Regarding the geographical origin of the final-year students, 158 individuals hailed from urban areas, making up 24.8% of the total, while 478 were from rural areas, which constitutes 75.2%. This result indicated a more excellent representation of students from rural backgrounds than those from urban settings.

In terms of education level, the survey identified 207 individuals with a junior college education (32.5%), 142 with a bachelor's degree (22.3%), and 287 at varying levels between junior college and undergraduate (45.1%). The distribution of students across junior college, undergraduate, and junior college to undergraduate levels was relatively balanced, with a slight decrease in undergraduates.

Analyzing the family income of final-year students in preschool education reveals that 37 students came from families with poor income, representing 5.8% of the total cohort. In contrast, 529 students had an average family income, comprising 83.2% of the total, while 70 students belonged to families with good income, accounting for 11%. Notably, the number of final-year students with average family income significantly exceeded that of the other two categories.

Regarding the status of being an only child, there were 116 only children among the final-year students, which constituted 18.2% of the total. Conversely, 520 final-year students were non-only children, making up 81.8%. Prevailing fertility concepts might influence this

higher proportion of non-only children in China.

In examining the final-year students in preschool education majors surveyed regarding their participation in higher education examinations, it was found that 311 individuals, representing 48.9% of the total sample, have taken such examinations. Conversely, 325 individuals, accounting for 51.1% of the total, had not participated in these examinations. Notably, the proportion of final-year students who had taken higher education examinations was slightly more significant than those who had not.

Regarding employment status among the surveyed final-year students in preschool education majors, only 29 individuals secured employment, representing 4.6% of the total sample. In contrast, 607 individuals, making up 95.4% of the total, had not found employment. This result indicated that the proportion of final-year students without employment was significantly higher than those with secured jobs.

An analysis of the final-year preschool education students' future employment options reveals that 13 individuals opted for entrepreneurship to start their businesses, representing 2% of the total respondents. In contrast, 296 individuals chose to take the public institution staffing exam, accounting for 46.5% of the total. Additionally, 146 final-year students decided to pursue further study, constituting 23% of the total, while 149 individuals sought employment, making up 23.4%. Lastly, 32 respondents selected other options, which accounted for 5% of the total. Notably, most final-year students chose to take the public institution staffing exam, followed by those who opted to continue their studies.

The content within this section has been systematically organized into charts, all of which are uniformly collated and placed in the Appendices section for reference.

4.4 Normal Distribution Test

Given that the statistical method typically requires normally distributed data, preliminary tests for reliability and validity involve assessing the maximum, minimum, mean, standard deviation, skewness, and kurtosis to determine normality. Four indicators were employed for this assessment: First, due to the sample size in this study being significantly larger than 50, the Kolmogorov-Smirnov test for normality was conducted, examining its Z value and P value. A P value greater than or equal to 0.05 indicates that the data is typically

distributed. Second, the absolute values of the skewness and kurtosis coefficients were analyzed; when both are less than 1, the distribution can be considered approximately normal. Third, a Q-Q plot was utilized, where data points that closely align along a straight line suggest normal distribution. Fourth, a P-P plot was also employed, with similar implications regarding normality when data points cluster around a straight line. Since the latter two methods were presented graphically and this article aims to provide a concise statistical descriptive analysis, the first two methods were prioritized for normality assessment. Subsequently, the maximum, minimum, mean, standard deviation, Kolmogorov-Smirnov test statistic, its P value, and the kurtosis and skewness for each variable and its dimension in this study were reported and evaluated for normal distribution.

4.4.1 Normal Distribution Test of Employment Pressure

As shown in Table 4-2, the Kolmogorov-Smirnov test for normality revealed that the *p* values for employment pressure and its dimensions fell below 0.05, indicating that these data do not follow a normal distribution. However, the absolute values of skewness and kurtosis for each dimension and the total score of employment pressure remained below 1. This suggests that the data for employment pressure and its dimensions approximate a normal distribution.

Table 4- 2:
Normal Distribution Test Analysis of Employment Pressure

	Min	Max	Mean	SD	Kolmogoryv– Smirnov Test		Skewness	Kurtosis
					Statistics	P		
Employment Pressure	26	130	59.539	21.584	0.060	0.000	0.266	-0.658
SPE	12	60	27.566	11.667	0.096	0.000	0.336	-0.796
EED	8	40	20.294	7.273	0.063	0.000	0.206	-0.536
PR	3	15	6.252	2.671	0.116	0.000	0.570	-0.253
BP	3	15	5.428	2.185	0.159	0.000	0.688	0.044

4.4.2 Normal Distribution Test of Social Support

As illustrated in Table 4-3, the results of the Kolmogorov-Smirnov test for normality indicated that the p values for social support and its dimensions were all below 0.05, suggesting that they do not follow a normal distribution. However, the absolute values of skewness and kurtosis for each dimension and the total score of social support were all less than 1, indicating that the data could be considered approximately normally distributed concerning social support and its dimensions.

Table 4-3:
Normal Distribution Test Analysis of Social Support

	Min	Max	Mean	SD	Kolmogoryv– Smirnov Test		Skewnes s	Kurtosis
					Statistics	P		
Social Support	19	58	39.799	6.253	0.047	0.002	-0.082	-0.174
OS	4	20	9.448	2.515	0.127	0.000	0.743	0.830
SS	10	28	21.881	3.665	0.106	0.000	-0.557	-0.150
USS	4	12	8.470	1.766	0.169	0.000	0.377	-0.592

4.4.3 Normal Distribution Test of Psychological Resilience

Table 4-4:
Normal Distribution Test Analysis of Psychological Resilience

	Min	Max	Mean	SD	Kolmogoryv– Smirnov Test		Skewness	Kurtosis
					Statistics	P		
PR	26	125	90.695	14.207	0.061	0.000	-0.028	0.894
T	13	65	46.132	7.942	0.063	0.000	0.088	0.573
S	9	40	30.363	4.711	0.091	0.000	-0.285	0.860
O	26	125	14.200	2.602	0.095	0.000	-0.028	0.894

As presented in Table 4-4, the results of the Kolmogorov-Smirnov test for normality indicated that the p values for psychological resilience and its dimensions were all below 0.05, suggesting that they do not follow a normal distribution. However, the absolute values of skewness and kurtosis for each dimension and the total score for psychological resilience were all less than 1, indicating that the data were approximately normally distributed concerning psychological resilience and its dimensions.

4.4.4 Normal Distribution Test of Anxiety

Table 4-5 shows that the Kolmogorov-Smirnov test for normality yielded p values less than 0.05, indicating that anxiety was not normally distributed. However, the absolute values of skewness and kurtosis for anxiety were both less than 1, which suggests that anxiety was approximately normally distributed.

**Table 4- 5:
Normal Distribution Test Analysis of Anxiety**

	Min	Max	Mean	SD	Kolmogoryv– Smirnov Test		Skewness	Kurtosis
					Statistics	P		
Anxiety	20	78	34.588	7.119	0.053	0.000	0.283	0.912

4.5 Reliability and Validity Analysis

Before conducting the structural equation modeling validation analysis on the hypothesized model developed in this study, it is essential to assess the reliability and validity of the measured data. This step ensured that the data utilized for model validation analysis was appropriate. Consequently, this study evaluated the reliability and validity of the questionnaire data and the measurement model separately.

Reliability is a critical indicator for assessing the dependability of research data. It typically pertains to the stability, consistency, and trustworthiness of results derived from questionnaires or measurement tools. Data reliability is generally quantified through the internal consistency of the measurement instruments. Currently, the most commonly utilized methods for reliability analysis include Test-retest Reliability, Parallel-forms Reliability,

Split-half Reliability, and Internal Consistency Reliability, among others. In empirical research, however, it is often challenging to conduct a follow-up survey, which complicates the determination of retest and replicate reliability. Consequently, most researchers rely on internal consistency reliability to evaluate the dependability of their data results. In this study, the reliability and validity analysis of questionnaire data employed Cronbach's α coefficient to assess the internal consistency of the survey instrument. Additionally, in the measurement model verification analysis, Composite Reliability (CR) and Average Variance Extracted (AVE) were utilized to elucidate and reflect the internal consistency reliability of the measurement model.

Validity refers to the effectiveness of measurement tools in accurately reflecting the intended measurement objectives. It is typically categorized into content validity, structural validity, criterion validity, and correlation validity. In the context of structural equation model analysis, validity pertains to the extent to which the data generated by the measurement model (measurement items) accurately represent the latent variables under investigation. It is essential to analyze the measurement model's content and structural validity. Content validity assesses the relevance of the measurement items to the latent variables being measured. In this study, the measurement items for the 11 latent variables are established scales developed by previous researchers and recognized in the field. Consequently, the measurement items employed in this study effectively elucidate the latent variables, indicating that the survey questionnaire and measurement model possess strong content validity. Structural validity is further subdivided into convergent validity, discriminant validity, and characteristic validity. This study employed characteristic validity to assess the structural validity of the survey questionnaire. In contrast, convergent and discriminant validity were utilized to evaluate the structural validity of the measurement model.

4.5.1 Reliability and Validity of the Survey Questionnaire

4.5.1.1 Reliability Analysis of Questionnaire Data

To assess the reliability of the survey questionnaire, this study employed the "Reliability Analysis" function of the SPSS 21.0 software to calculate the Cronbach's α reliability coefficient, which measured the internal consistency of the questionnaire data. This coefficient ranges from 0 to 1. A Cronbach's α value between 0.65 and 0.70 is

considered the minimum acceptable threshold, while values between 0.70 and 0.80 are regarded as quite good, and those between 0.80 and 0.90 are deemed very good. According to Nunnally (1978), Cronbach's α coefficient exceeding 0.7 indicates the questionnaire's good internal consistency.

Table 4- 6:
Reliability Statistics: Cronbach's α value

Latent Variables	Number of Items	Cronbach's α
Employment Pressure	26	0.966
Social Support	10	0.702
Psychological Resilience	25	0.947
Anxiety	20	0.818
Overall Reliability Statistics	81	0.882

The Cronbach's α reliability coefficient in Table 4-6 indicates that 81 valid measurement items corresponded to the 11 latent variables within the model. The overall Cronbach's α coefficient was 0.882, which significantly exceeded the critical threshold of 0.7, demonstrating a relatively high level of reliability. Furthermore, the Cronbach's α values for the measurement scales of the four variables were all ≥ 0.702 , surpassing the critical value of 0.7. The result suggested that the measurement reliability for these four variables in the model's questionnaire was satisfactory.

4.5.1.2 Validity Analysis of Questionnaire Data

This study employed CFA to assess the construct validity of the survey questionnaire. Before conducting the factor analysis, it is essential to perform Bartlett's test of sphericity on the questionnaire data and to calculate the KMO measure. SPSS 21.0 was employed to perform exploratory factor analysis on the 81 measurement items of the model survey questionnaire.

**Table 4- 7:
KMO and Bartlett's Test of Sphericity**

Scale	Measure		Numeric
Employment Pressure Scale for College Students	Kaiser-Meyer-Olkin Metric for Sampling Adequacy		0.967
	Bartlett’s test of sphericity	Approximate Chi-Square	13835.056
		df	325
		Sig.	0.000
	Kaiser-Meyer-Olkin Metric for Sampling Adequacy		0.778
Social Support Rating Scale	Bartlett’s test of sphericity	Approximate Chi-Square	1089.543
		df	45
		Sig.	0.000
	Kaiser-Meyer-Olkin Metric for Sampling Adequacy		0.967
	Psychological Resilience Scale	Bartlett’s test of sphericity	Approximate Chi-Square
df			300
Sig.			0.000
Kaiser-Meyer-Olkin Metric for Sampling Adequacy		0.905	
Self-rating Anxiety Scale		Bartlett’s test of sphericity	Approximate Chi-Square
	df		190
	Sig.		0.000
	Kaiser-Meyer-Olkin Metric for Sampling Adequacy		0.947
	Overall Questionnaire	Bartlett’s test of sphericity	Approximate Chi-Square
df			3240
Sig.			0.000

The results are presented in Table 4-7, indicated a KMO value of 0.947 (which is greater than the acceptable threshold of 0.7). Additionally, the approximate chi-square value of Bartlett's test of sphericity was 31,267.702, with 3,240 degrees of freedom (df) and a

significance level (Sig.) of 0.000, indicating a highly significant result. The findings suggested that the assumption of independence among the variables was not upheld, revealing intense concentration in the questionnaire data, which made it suitable for factor analysis.

4.6 Common Method Bias Test

Common method biases refer to the artificial co-variation problem that arises when data collected from measurement questionnaires originate from the same respondent within similar answering environments and contexts, as well as other measurement errors that are independent of the questionnaire. Common method bias constitutes a systematic error (Zhou & Long, 2004). Both procedural and statistical control can be employed to mitigate common method biases.

From the perspective of program control, this involves, on one hand, the screening and management of the subject sample concerning time, space, psychology, and methodology to ensure variability; on the other hand, it encompasses controls related to questionnaire design, such as adjusting the order of items to achieve balance, enhancing the logical relationships among scale items, and reducing the predictability of the subject sample regarding the measurement items. This study employs the distribution of online questionnaires, which inherently incorporates program control measures, such as preventing respondents from completing the questionnaire in the exact location or at the same time. The sample's descriptive statistics further indicate significant variations in both the timing and location of questionnaire completion. Additionally, regarding questionnaire design, This study meticulously considers the content of the introductory section, ensuring that participants understand the purpose of the measurement while minimizing the likelihood of disclosing the relationships between the measured items.

From the perspective of statistical control, this study employed the single-factor test proposed by Harman (Harman's Single-Factor Test) to test and manage common method bias. This approach posits that if the recovered data can extract a common factor that accounts for the variance among all items, then the data exhibits common method bias. The specific testing procedure involves conducting an exploratory factor analysis on all items to determine whether the variance explained by the first common factor falls below the critical threshold of 40% (Zhou & Long, 2004). This study extracted 14 common factors with

eigenvalues greater than 1, collectively explaining 62.247% of the total variation. Notably, the variance explained by the first common factor was 24.96%, below the critical threshold of 40%, indicating that the data was acceptable and did not exhibit significant common method bias.

4.7 Analysis of the Level of Employment Pressure, Social Support, Psychological Resilience and Anxiety

One of the research objectives of this study is “to assess the relationships between employment pressure, anxiety, psychological resilience, and social support among final-year students majoring in preschool education”. Based on this research objective, the researcher proposed H₁: Final-year students majoring in preschool education experience employment pressure and anxiety at an upper-middle level, while their social support and psychological resilience are at a middle level. A descriptive analysis was carried out to verify the research hypothesis.

4.7.1 Analysis of the Level of Employment Pressure

The mean total score on the Employment Pressure Scale for College Students was 59.539, below the theoretical median of 78. This result suggested that the employment pressure experienced by final-year preschool education students is not high but instead falls within a lower-middle level.

Table 4- 8:
Overall Description of Employment Pressure and its Dimensions

Scale Name	Number of Items	<i>M</i>	<i>SD</i>
Subjective Psychological Experience	12	27.566	21.584
Employment Emotional Distress	8	20.294	11.667
Physiological Reaction	3	6.252	2.671
Behavioral Performance	3	5.428	2.185
Employment Pressure	26	59.539	21.584

Notably, the total scores for subjective psychological experience ($M = 27.566$), employment emotional distress ($M = 20.294$), physiological reactions ($M = 6.252$), and behavioral performance ($M = 5.428$) are below the theoretical median. Consequently, it can be inferred that final-year preschool education students' subjective psychological experience, employment emotional distress, physiological reactions, and behavioral performance are also at a lower-middle level.

4.7.2 Analysis of the Level of Social Support

Lin et al. (2023) proposed that a total score ranging from 30 to 40 points indicates relatively satisfactory social support. In this study, the total score on the Social Support Rating Scale for college students was 39.799, compared to the national norm of 40 (Qiu & Dai, 2014) ($t = 89.990, p < .001$). The results indicated that the social support level among final-year preschool education students was significantly lower than the national norm ($p < .05$). This statistically significant difference suggests that the actual social support perceived by this group falls within a medium range.

However, the development across different dimensions was uneven. The total score for objective support was 9.488, lower than the theoretical median of 11.5. In contrast, the total score for the subjective support dimension was 21.881, exceeding the theoretical median of 17.5. Additionally, the total score for the utilization of social support was 8.470, which is slightly above the theoretical median of 7.5. The results indicate that final-year preschool education students have developed strong subjective support in social interactions but still exhibit relatively weak objective support. The scores for the various dimensions of the Social Support Rating Scale, along with their total scores, were presented in Table 4-9.

Table 4-9:
Overall Description of Social Support and its Dimensions

Scale Name	Number of Items	<i>M</i>	<i>SD</i>
Subjective Support	4	21.881	3.666
Objective Support	3	9.448	2.515
Utilization of Social Support	3	8.470	1.766
Social Support	10	39.799	6.001

4.7.3 Analysis of the Level of Psychological Resilience

The mean total score of all items on the Psychological Resilience Scale was 90.695, significantly surpassing the theoretical median of 75. This result indicated that the overall psychological resilience of final-year preschool education students was commendable and positioned at an upper-middle level.

The scores for each dimension of psychological resilience were ranked from highest to lowest as follows: tenacity ($M = 46.132$), strength ($M = 30.363$), and optimism ($M = 14.2$), with all dimensions exceeding the theoretical median. Final-year preschool education students display resilience, strength, and optimism at an upper-middle level.

Table 4- 10:
Overall Description of Psychological Resilience and its Dimensions

Scale Name	Number of Items	M	SD
Tenacity	13	46.132	7.942
Strength	8	30.363	4.717
Optimism	4	14.200	2.602
Psychological Resilience	25	90.695	14.207

4.7.4 Analysis of the Level of Anxiety

The total score of the 20 items in the Self-Rating Anxiety Scale was summed, multiplied by 1.25, and the integer part was retained to obtain the standard total score. The cutoff value for the SAS standard score is set at 50 points, with scores ranging from 50 to 59 indicating mild anxiety, 60 to 69 indicating moderate anxiety, and scores of 70 or higher indicating severe anxiety (Cheng et al., 2018; Liang et al., 2024). The total standard score of anxiety for final-year students majoring in preschool education ($M = 43.235$, $SD = 8.898$) was notably higher than the SAS Chinese norm standard score ($M = 33.80$, $SD = 5.90$) (Zheng & Li, 2016; Li, et al., 2020) ($t = 2.792$, $p < .05$), suggesting that the anxiety level among these final-year students majoring in preschool education is significantly elevated compared to the national norm, placing it at an upper-middle level. However, examining the overall mean may obscure the true nature of anxiety, prompting a re-evaluation based on the

degree of anxiety.

As illustrated in Table 4-11, the distribution of anxiety levels revealed that students without anxiety constitute the most significant proportion, with a decrease in numbers as anxiety levels increase, aligning with the psychological development trends observed in final-year students. The overall detection rate of anxiety stood at 20.60%. Furthermore, the detection rates across education levels were highest among final-year students upgrading from junior college to bachelor and lowest among those in junior college.

**Table 4- 11:
SAS Positive Detection Rates**

Education Level	Number of Students	No Anxiety	Mild Anxiety	Moderate Anxiety	Severe Anxiety	Detection Rate
Junior College	207	167	31	7	2	19.32%
Bachelor's Degree	142	113	20	8	1	20.42%
Upgrading from Junior College to Bachelor	287	225	46	14	2	21.60%
Total	636	505	97	29	5	20.60%

4.8 Analysis of Employment Pressure, Anxiety, Social Support, and Psychological Resilience Across Demographic Variables

The researchers conducted independent sample t-tests and one-way analyses of variance to explore the differences in employment pressure, social support, psychological resilience, and anxiety among final-year students majoring in preschool education based on their demographic variables.

Table 4- 12:
Results of Differences in Demographic Variables for Four Variables

Variable		Employment Pressure	Social Support	Psychological Resilience	Anxiety
Gender	Boy	54.833 ± 23.505	38.6111 ± 7.421	91.444± 19.791	33.222 ± 7.597
	Girl	59.677 ± 21.530	39.833 ± 6.220	90.673 ± 14.033	34.628 ± 7.107
Place of Origin	Urban	59.000 ± 21.976	39.247 ± 6.508	90.684 ± 12.809	34.817 ± 7.925
	Rural	59.718 ± 21.473	39.981 ± 6.163	90.699 ± 14.652	34.513 ± 6.838
Only Child	Yes	58.948 ± 21.589	38.086 ± 6.426	89.759 ± 14.141	33.810 ± 7.100
	No	59.671 ± 21.601	40.181 ± 6.156	90.904 ± 14.227	34.762 ± 7.118
	<i>t</i>	-0.326	-3.287***	-0.785	-1.302
Education Level	JC	58.280 ± 21.066	39.507 ± 7.022	90.358 ± 14.561	34.106 ± 7.187
	BD	61.972 ± 23.142	38.944 ± 6.046	90.423 ± 14.965	34.944 ± 7.364
	UAB	59.244 ± 21.130	40.432 ± 5.697	91.073 ± 13.591	34.760 ± 6.950
	<i>F</i>	1.282	3.044*	0.186	0.734
Family Income	Poor	66.081 ± 21.927	38.865 ± 5.774	82.757 ± 14.543	36.460 ± 5.933
	Average	59.488 ± 21.552	39.701 ± 6.176	90.582 ± 13.767	34.599 ± 7.186
	Good	56.471 ± 21.199	41.029 ± 6.964	95.743 ± 15.400	33.514 ± 7.054
	<i>F</i>	2.419	1.835	10.517***	2.083
Higher Education Examination	Yes	57.749 ± 21.604	40.466 ± 6.713	90.836 ± 14.130	33.984 ± 7.172
	No	61.252 ± 21.457	39.160 ± 5.717	90.560 ± 14.301	35.166 ± 7.030
	<i>t</i>	-2.051*	2.637**	0.245	-2.099*
Employment Status	Yes	48.207 ± 18.743	42.379 ± 5.171	96.552 ± 15.431	37.448 ± 8.065
	No	60.081 ± 21.575	39.676 ± 6.277	90.415 ± 14.099	34.451 ± 7.049
	<i>t</i>	-2.911**	2.282*	2.280*	2.222*
Future Employment Options	E	59.000 ± 21.098	39.308 ± 6.210	83.231 ± 17.796	37.308 ± 5.836
	PISE	61.807 ± 20.828	39.686 ± 5.725	91.287 ± 13.097	34.632 ± 6.941
	Further study	55.945 ± 21.335	40.849 ± 7.082	92.678 ± 14.478	33.781 ± 7.449
	Employment	59.181 ± 22.337	39.631 ± 6.348	89.302 ± 14.071	35.141 ± 6.923
	Other	56.844 ± 24.753	37.031 ± 5.806	85.688 ± 19.321	34.188 ± 8.376
<i>F</i>		1.978	2.697*	3.130*	1.198

*Note: * p < .05 , ** p < .01 , *** p < .001. JC: Junior College, BD: Bachelor's Degree; UAB: Upgrading from Associate to Bachelor; E : Entrepreneurship; PISE: Public Institution Staffing Exam*

Regarding employment pressure, final-year students who did not take the higher education examination experienced significantly higher levels of employment pressure than those who did ($p < .05$). Additionally, unemployed final-year students faced significantly greater employment pressure than their employed counterparts ($p < .01$).

Regarding social support, the level of social support for the final-year students of the non-only child was significantly higher than that of the only child ($p < .001$). Final-year students upgrading from junior college to bachelor's degree reported significantly greater social support than their undergraduate counterparts ($p < .05$), although no significant difference was observed between undergraduate and junior college final-year students. Furthermore, final-year students who had undertaken higher education examinations experienced significantly higher levels of social support than those who had not ($p < .01$). Employed final-year students also reported higher social support levels than unemployed final-year students ($p < .05$). Additionally, final-year students who selected "other" as their employment option demonstrate significantly lower social support levels than those who chose "employment", "public institution staffing exam", or "further study" ($p < .05$), with no significant differences noted among the remaining options.

Regarding psychological resilience, significant differences existed among final-year students categorized by family income levels: "poor", "average" and "good" ($p < .001$). Final-year students from families with "good" incomes demonstrated significantly greater psychological resilience compared to their counterparts from "average" and "poor" income backgrounds. Additionally, final-year students with job offers exhibited significantly higher levels of psychological resilience than final-year students without job offers ($p < .05$). Among those who pursued "further study", psychological resilience was notably superior to that of final-year students who opted for "entrepreneurship", "employment", or "other" ($p < .05$). However, no significant difference was observed in psychological resilience between final-year students who chose "further study" and those who prepared for the "public institution staffing exam".

Regarding anxiety, the anxiety levels of final-year students who did not take higher education examinations were significantly higher than those of final-year students who did take the examination ($p < .05$). Additionally, final-year students with a job offer reported significantly higher anxiety levels than those still seeking employment ($p < .05$).

4.9 Correlation Analysis between Employment Pressure, Anxiety, Social Support, and Psychological Resilience

One of the research objectives of this study is “to assess the relationships between employment pressure, anxiety, psychological resilience, and social support among final-year students majoring in preschool education.” Based on this research objective, the researcher proposed H₂: There exists a significant correlation among employment pressure, social support, psychological resilience, and anxiety among final-year students majoring in preschool education. Inferential analysis was carried out to verify the research hypothesis.

4.9.1 Correlation Analysis between Employment Pressure and Anxiety

To investigate the relationship between these variables, the total scores of employment pressure and its dimensions were analyzed for their correlation with the total score of anxiety. The researchers present the results in Table 4-13, which shows a significant positive correlation between employment pressure and anxiety, $r = .470$, $p < .01$. Additionally, each dimension of employment pressure showed a significant positive correlation with anxiety ($p < .01$), suggesting that increased employment pressure was associated with higher levels of anxiety.

Table 4- 13:
Correlation Analysis between Employment Pressure and Anxiety

Variable	1	2	3	4	5	6
1. Employment Pressure	1					
2. SPE	0.968**	1				
3. EED	0.912**	0.809**	1			
4. PR	0.876**	0.827**	0.736**	1		
5. BP	0.606**	0.517**	0.459**	0.568**	1	
6. Anxiety	0.470**	0.461**	0.404**	0.477**	0.246**	1

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Furthermore, the correlation matrix reveals strong interrelationships among the various dimensions of employment pressure itself. Specifically, the total score of employment pressure demonstrated very strong positive correlations with each of its

constituent dimensions: SPE ($r = .968, p < .01$), EED ($r = .912, p < .01$), PR ($r = .876, p < .01$), and BP ($r = .606, p < .01$). Moreover, the dimensions were all significantly and positively correlated with one another, with correlation coefficients ranging from $r = .736$ (between EED and PR) to $r = .827$ (between SPE and PR). These robust intercorrelations suggest that employment pressure is a cohesive construct comprised of multiple, highly related dimensions.

4.9.2 Correlation Analysis between Employment Pressure and Social Support

The total scores and individual dimensions of employment pressure were analyzed for their correlation with the total scores and each dimension of social support to explore the relationship between these variables. The results are presented in Table 4-14.

Table 4- 14:
Correlation Analysis between Employment Pressure and Social Support

Variable	1	2	3	4	5	6	7	8
1. Employment Pressure	1							
2. SPE	0.968**	1						
3. EED	0.912**	0.809**	1					
4. PR	0.876**	0.827**	0.736**	1				
5. BP	0.606**	0.517**	0.459**	0.568**	1			
6. Social Support	-0.319**	-0.318**	-0.283**	-0.264**	-0.185**	1		
7. OS	-0.187**	-0.178**	-0.176**	-0.156**	-0.117**	0.730**	1	
8. SS	-0.290**	-0.296**	-0.258**	-0.233**	-0.141**	0.887**	0.426**	1
9. USS	-0.261**	-0.260**	-0.214**	-0.229**	-0.196**	0.662**	0.276**	0.457**

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

As illustrated in the table, a significant negative correlation existed between employment pressure and social support, $r = -.319, p < .01$. Additionally, each dimension of employment pressure was significantly negatively correlated with each dimension of social support ($p < .01$). These results suggest that lower levels of social support are associated with higher levels of employment pressure.

Furthermore, the analysis at the dimensional level revealed that all facets of social support were significantly negatively correlated with employment pressure. Specifically, objective support (OS, $r = -.187, p < .01$), subjective support (SS, $r = -.290, p < .01$), and support utilization (USS, $r = -.261, p < .01$) all demonstrated significant inverse relationships with the overall pressure. This pattern of negative correlations was consistently observed across all pairings between the dimensions of employment pressure and the dimensions of social support, suggesting a pervasive association wherein higher employment pressures are linked to lower levels of each specific type of social support.

4.9.3 Correlation Analysis between Employment Pressure and Psychological Resilience

To investigate the relationship between these variables, the total scores and each dimension of employment pressure were analyzed for their correlation with the total scores and each dimension of psychological resilience. The results are presented in Table 4-15, which shows a significant negative correlation between employment pressure and psychological resilience, $r = -.309, p < .01$. Additionally, each dimension of employment pressure demonstrated a significant negative correlation with each dimension of psychological resilience ($p < .01$). This finding suggested that lower levels of psychological resilience were associated with higher levels of employment pressure.

Furthermore, analysis at the dimensional level revealed consistent negative correlations between the components of employment pressure and those of psychological resilience. Specifically, the total score of employment pressure showed significant inverse relationships with all three dimensions of psychological resilience: Tenacity (T, $r = -.285, p < .01$), Strength (S, $r = -.304, p < .01$), and Optimism (O, $r = -.267, p < .01$). This pattern of significant negative correlations was also observed across all sub-dimensions of employment pressure (SPE, EED, PR, and BP) in relation to each psychological resilience facet (all $p < .01$), indicating a broadly consistent association wherein lower resilience across

its specific attributes is linked to higher perceived pressure across various employment-related stressors.

Table 4- 15:
Correlation Analysis between Employment Pressure and Psychological Resilience

Variable	1	2	3	4	5	6	7	8
1. Employment Pressure	1							
2. SPE	0.968**	1						
3. EED	0.912**	0.809**	1					
4. PR	0.876**	0.827**	0.736**	1				
5. BP	0.606**	0.517**	0.459**	0.568**	1			
6. Psychological Resilience	-0.309*	-0.303*	-0.279*	-0.266*	-0.181*	1		
7. T	-0.285*	-0.287*	-0.259*	-0.230*	-0.142*	0.963**	1	
8. S	-0.304*	-0.292*	-0.264*	-0.288*	-0.213*	0.936**	0.831**	1
9. O	-0.267*	-0.250*	-0.257*	-0.231*	-0.169*	0.827**	0.698**	0.765**

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

4.9.4 Correlation Analysis between Social Support and Psychological Resilience

The total scores and their respective dimensions of social support were analyzed for correlation with the total scores and dimensions of psychological resilience to explore their interrelationship. The results are presented in Table 4-16. A significant positive correlation existed between social support and psychological resilience, $r = .306$, $p < .01$. Furthermore, each dimension of social support also demonstrated a significant positive correlation with

psychological resilience ($p < .01$). This result indicated that higher levels of social support were associated with increased psychological resilience.

Table 4- 16:
Correlation Analysis between Social Support and Psychological Resilience

Variable	1	2	3	4	5	6	7	8
1.Social Support	1							
2.OS	0.730 **	1						
3.SS	0.887 **	0.426 **	1					
4. USS	0.662 **	0.276 **	0.457 **	1				
5.Psychological Resilience	0.306 **	0.147 **	0.281 **	0.290 **	1			
6.T	0.292 **	0.141 **	0.269 **	0.275 **	0.963 **	1		
7.S	0.271 **	0.131 **	0.244 **	0.266 **	0.936 **	0.831 **	1	
8.O	0.288 **	0.136 **	0.273 **	0.260 **	0.827 **	0.698 **	0.765 **	1

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Furthermore, the dimensional analysis revealed that all specific facets of social support were positively correlated with the overall construct of psychological resilience. Objective support (OS) showed a correlation of $r = .147$, $p < .01$, subjective support (SS) correlated at $r = .281$, $p < .01$, and utilization of social support (USS) demonstrated a correlation of $r = .290$, $p < .01$. This pattern of significant positive correlations extended to the relationships between the three social support dimensions and the three core components of psychological resilience—tenacity (T), strength (S), and optimism (O)—with all coefficients significant at the $p < .01$ level. This indicates that not only is global social support linked to global resilience, but each specific type of supportive resource is distinctly associated with the various attributes that constitute psychological resilience.

4.9.5 Correlation Analysis between Social Support and Anxiety

A correlation analysis was conducted to examine the relationship between the total social support score, including its dimensions, and the total anxiety score. The findings are presented in Table 4-17.

**Table 4- 17:
Correlation Analysis between Social Support and Anxiety**

Variable	1	2	3	4	5
1.Social Support	1				
2.OS	0.730**	1			
3.SS	0.887**	0.426**	1		
4. USS	0.662**	0.276**	0.457**	1	
5.Anxiety	-0.292**	-0.163**	-0.293**	-0.193**	1

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4-17 shows a significant negative correlation between social support and anxiety, $r = -.292$, $p < .01$. Furthermore, each dimension of social support also exhibited a significant negative correlation with anxiety ($p < .01$), suggesting that poorer social support was associated with elevated levels of anxiety.

Furthermore, analysis at the dimensional level elucidated significant negative correlations between all facets of social support and anxiety. Specifically, objective support (OS) demonstrated a correlation of $r = -.163$, subjective support (SS) correlated at $r = -.293$, and utilization of social support (USS) showed a correlation of $r = -.193$ (all p values $< .01$). This consistent pattern across all specific types of support underscores a broad inverse relationship, indicating that deficits in both perceived and actual external resources, as well as in the ability to mobilize them, are distinctly associated with higher levels of anxiety.

4.9.6 Correlation Analysis between Psychological Resilience and Anxiety

To investigate the relationship between these variables, the total scores of psychological resilience and its dimensions were analyzed for their correlation with the total score of anxiety. The results are presented in Table 4-18.

Table 4- 18:
Correlation Analysis between Psychological Resilience and Anxiety

Variable	1	2	3	4	5
1.Psychological Resilience	1				
2.T	0.963**	1			
3.S	0.936**	0.831**	1		
4.O	0.827**	0.698**	0.765**	1	
5.Anxiety	-0.277**	-0.228**	-0.308**	-0.258**	1

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4-18 shows a significant negative correlation between psychological resilience and anxiety, $r = -.277$, $p < .01$. Furthermore, each dimension of psychological resilience also exhibited a significant negative correlation with anxiety ($p < .01$), suggesting that lower levels of psychological resilience were associated with higher levels of anxiety.

A more detailed analysis of the dimensions of psychological resilience further clarified these relationships with anxiety. The negative correlations were significant for each individual facet, demonstrating that lower levels of tenacity (T, $r = -.228$, $p < .01$), strength (S, $r = -.308$, $p < .01$), and optimism (O, $r = -.258$, $p < .01$) were each uniquely associated with higher anxiety. Notably, the dimension of strength exhibited the strongest inverse correlation with anxiety among the three, suggesting it may be a particularly salient protective factor against anxious symptoms.

The summary of the research results is in this section. Employment pressure exhibited a significant negative correlation with social support ($r = -.319$) and psychological resilience ($r = -.309$). Conversely, it demonstrated a significant positive correlation with anxiety ($r = .470$). Additionally, social support was significantly positively correlated with psychological resilience ($r = .306$) while also showing significant negative correlations with both social support and anxiety ($r = -.292$) and psychological resilience and anxiety ($r = -.277$).

4.10 Structural Equation Modeling

In this study, the three research objectives are to test the mediating effect: to investigate the mediating effect of social support on the relationship between employment pressure and anxiety among final-year students majoring in preschool education; to investigate the mediating effect of psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education; to examine the chain-mediating effects of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students in preschool education. Based on these research objectives, the researcher proposed H₃: There is a mediating effect of social support between employment pressure and anxiety for final-year students majoring in preschool education; H₄: There is a mediating effect of psychological resilience between employment pressure and anxiety among final-year students majoring in preschool education; H₅: There is a chain-mediating effect of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education. Inferential analysis was carried out to verify the research hypothesis.

4.10.1 Stage One: Measurement Model

This study employed structural equation modeling analysis, consisting of two primary components: the measurement and structural models. The measurement model serves as the foundation for the structural model; thus, the structural model can only demonstrate reliability and validity if the measurement model achieves an acceptable level of fit (Olsen & Kenny, 2006). The basic steps for testing the measurement model are as follows: The first step involves the model specification, wherein the measurement model for the research's latent variables is determined based on the guidelines outlined in Chapter 3. The second step is the model fit assessment, which entails conducting first-order confirmatory factor analyses sequentially by the established measurement model. This process includes modifying and optimizing the measurement model to ensure a satisfactory fit between the data and the model. The third step involves testing the model's reliability and validity, utilizing indicators such as the composite reliability index and variance extracted index.

Goodness of fit refers to the extent to which the collected data aligns with the hypothesized measurement model. In this study, researchers considered anxiety, subjective psychological experience, employment emotional distress, physiological response, behavioral performance, objective support, subjective support, utilization of social support, tenacity, strength, and optimism as first-order latent variables. The researchers analyzed these variables using first-order confirmatory factor analysis of observation items. Additionally, employment pressure, social support, and psychological resilience were treated as second-order latent variables, from which second-order latent concepts are derived based on the first-order latent concepts obtained from the observation items. However, this study performed first-order confirmatory factor analyses on distinct concepts to evaluate the goodness of fit between the collected data and each measurement model. This study presented several absolute goodness-of-fit indices, value-added goodness-of-fit measures, and simplified metrics introduced in Chapter 3.

The model internal fit test is evaluated based on factor loading, CR, and AVE (Qiu & Lin, 2012, p. 100). (1) Factor loading represents the correlation between the latent variable and the observed indicator. Stevens (1992) recommended a cutoff value of 0.4 for explanatory purposes, irrespective of sample size. In contrast, Comrey and Lee (1992) proposed a more stringent cutoff scale ranging from 0.32 (poor) to 0.71 (excellent), with corresponding categories of 0.45 (fair), 0.55 (good), and 0.63 (very good). Field (2005) suggested that a factor should be considered reliable if it has at least four loadings of 0.6 or higher, regardless of sample size. Hair et al. (2006) recommended that the standardized load estimate be at least 0.5, with an ideal target of 0.7 or higher. (2) CR refers to the overall credibility of the latent variable and indicates its internal consistency. A higher CR value signifies greater internal consistency among the observed items of the latent variable. A CR value above 0.50 indicates the measurement tool's essential stability (Raine-Eudy, 2000). (3) AVE reflects the extent of convergence among latent variables that a set of observed variables can effectively estimate. Ideally, AVE should exceed 0.5, while values between 0.36 and 0.5 are acceptable.

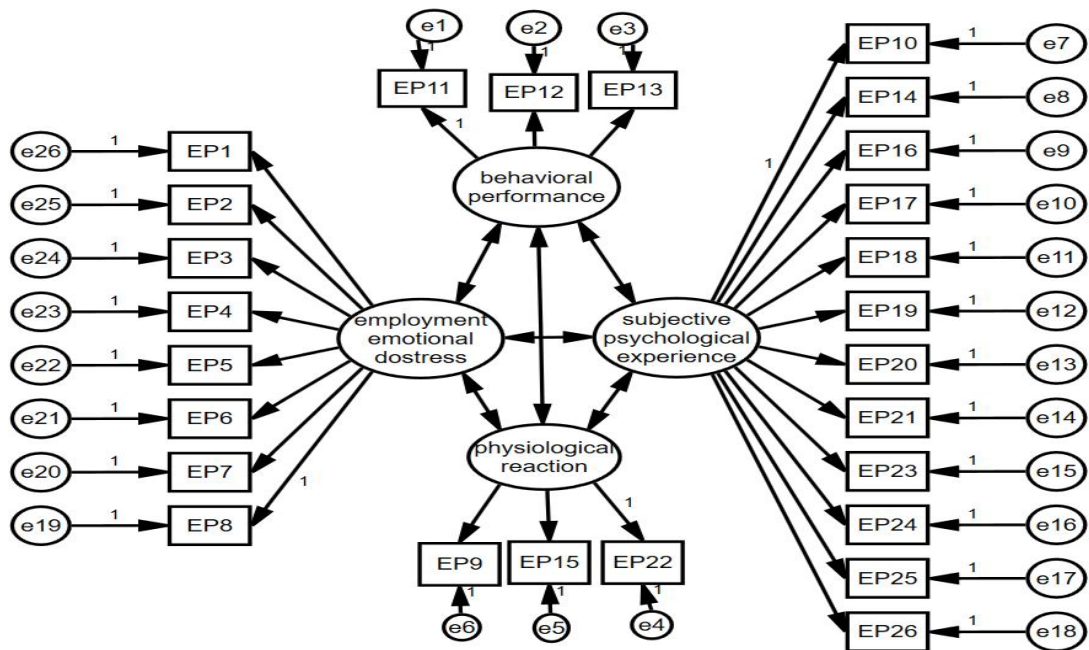
4.10.1.1 Test of the Measurement Model of Employment Pressure

4.10.1.1.1 Measurement Model Setting

Employment pressure encompasses four dimensions: subjective psychological experience, employment emotional distress, physiological reaction, and behavioral

performance. These dimensions are assessed using a total of 12 questions (EP10, EP14, EP16-EP21, EP23-EP26), eight questions (EP1-EP8), three questions (EP9, EP15, EP22), and an additional three questions (EP11-EP13) from the Employment Pressure Scale for College Students. The measurement model for employment pressure is illustrated in Figure 4-1.

**Figure 4-1:
Employment Pressure Measurement Model**



4.10.1.1.2 Model Fitness Test

The maximum likelihood estimation was used to fit the model. For the convenience of comparison, the overall fitting index in the model modification process was organized into a table. Table 4-19 shows that the model is still not ideal, and some model parameters must be corrected.

Modification indices(MI) represent the minimum chi-square value that is reduced when a previously fixed parameter is released and the model is re-estimated. Statistically, an MI can be interpreted as the chi-square distribution with one degree of freedom. Given that the critical value of the chi-square statistic with one degree of freedom ($\alpha = 0.05$) is 3.84, an MI value exceeding 3.84 is deemed sufficiently large. If this parameter's causality is supported by adequate theoretical justification, it may be released and re-estimated.

Table 4- 19:
Summary of Employment Pressure Measurement Model Fit Indices

Statistical Test	Absolute Fit Index			Value-added Fit Index				Simple Fit Index		
	χ^2	χ^2/df	RMSEA	GFI	NFI	IFI	CFI	PNFI	PCFI	PGFI
Adaptation Standards	$p < .05$	< 5	< 0.08	> 0.85	> 0.9	> 0.9	> 0.9	> 0.5	> 0.5	> 0.5
Initial Model Fit	1818.164 ***	6.205	0.091	0.793	0.871	0.889	0.889	0.785	0.801	0.662
Final Model Fit	1339.744 ***	4.668	0.076	0.848	0.905	0.923	0.923	0.799	0.815	0.693

Table 4- 20:
Summary of Employment Pressure Measurement Model Fit Indices

Variable	MI	Par Change
e9<-->e13	68.782	0.147
e9<-->e10	46.275	0.1
e11<-->e12	96.974	0.095
e15<-->e16	96.501	0.156
e23<-->e24	85.802	0.176
e25<-->e26	70.106	0.223

The MI value between e11 and e12 was 96.974, indicating a strong relationship. When examining question 18 (“During the period of job hunting, I feel more bored”) and question 19 (“During the period of job hunting, I feel more restless and irritable”) from the scale, it was evident that both inquiries pertain to the emotional state experienced during the job hunting phase. Notably, “bored” and “restlessness and irritable” were closely related. Therefore, it was appropriate to prioritize the release of the variables associated with e11 and e12.

The MI value between e15 and e16 was 96.501, indicating a significant correlation. Examining the question 23 (“Facing employment difficulties, I have unspeakable depression”) and question 24 (“During the period of job hunting, I often feel helpless”), researchers observed that although the content of these questions differs, both pertain to the

emotional experiences associated with job hunting. In essence, the concepts of “depression” and “helplessness” were interrelated to some degree. Consequently, the variables e15 and e16 were released.

The MI value between e23 and e24 was 85.802, indicating a relatively strong relationship. Upon examining question 3, “I am frustrated by the failures in the job fairs”, alongside question 4, “I have not found a job, so I often stay in the dormitory and stare blankly”, it became evident that although the content of these two questions differs, both address the underlying frustration associated with the inability to secure employment, which may manifest as a tendency to stare blankly. With this understanding, the variables e23 and e24 were analyzed.

The MI value between e25 and e26 was 70.106. Analyzing question 2 (“The troubles of finding a job often make me lose my appetite”) alongside question 1 (“I feel anxious when I think of graduation and employment”) revealed that, despite differing expressions, both reflect emotional distress related to job searching, suggesting a potential correlation. Consequently, the variables associated with e25 and e26 were released.

The MI value between e9 and e13 was 68.782. Examining question 16 in the scale, which states “I often get angry for no reason when I am unable to find a job”, alongside question 20, “When I encounter setbacks in finding a job, I feel the urge to throw things or curse at people”, revealed that both questions reflect the psychological distress associated with unsuccessful job searches. Additionally, there was a notable correlation between feelings of “anger” and the impulse to “throw things or curse at people”. The variables corresponding to e9 and e13 were released upon further consideration.

The MI value between e9 and e10 was 46.275. Analyzing question 16, which states, “The difficulty in finding a job often makes me angry for no reason”, alongside question 17, which states, “During the period of job hunting, I have lost interest in many things”, revealed that both questions address the psychological experiences associated with unsuccessful job searches. The result indicated a correlation between them, justifying the release of e9 and e10.

The results of the final model fitness index analysis are presented in Table 4.19 and indicate the following: $\chi^2 = 1339.744$; $p < .001$ (which is significantly lower than 0.05, indicating a highly significant result); $\chi^2/\text{df} = 4.668$ (which is less than 5); RMSEA = 0.076

(which is less than 0.08); NFI = 0.905 (greater than 0.9); IFI = 0.923 (greater than 0.9); CFI = 0.923 (greater than 0.9); PNFI = 0.799; PCFI = 0.815; and PGFI = 0.693, all of which exceed 0.5. These comprehensive analysis results suggested that the fitness of the measurement model for employment pressure was acceptable.

4.10.1.1.3 Model Reliability and Validity Test

Table 4- 21:
Factor Loading, AVE , and CR of the Employment Pressure Measurement Model

Path	Estimate	AVE	CR
EP11<---behavioral performance	0.611		
EP12<---behavioral performance	0.518	0.3375	0.6031
EP13<---behavioral performance	0.609		
EP22<---physiological reaction	0.72		
EP15<---physiological reaction	0.763	0.5604	0.7926
EP9<---physiological reaction	0.762		
EP10<---subjective psychological experience	0.759		
EP14<---subjective psychological experience	0.818		
EP16<---subjective psychological experience	0.818		
EP17<---subjective psychological experience	0.859		
EP18<---subjective psychological experience	0.906		
EP19<---subjective psychological experience	0.896	0.6645	0.9594
EP20<---subjective psychological experience	0.714		
EP21<---subjective psychological experience	0.766		
EP23<---subjective psychological experience	0.851		
EP24<---subjective psychological experience	0.858		
EP25<---subjective psychological experience	0.693		
EP26<---subjective psychological experience	0.813		
EP8<---employment emotional distress	0.605		
EP7<---employment emotional distress	0.741		
EP6<---employment emotional distress	0.863		
EP5<---employment emotional distress	0.876	0.5784	0.9156
EP4<---employment emotional distress	0.795		
EP3<---employment emotional distress	0.729		
EP2<---employment emotional distress	0.746		
EP1<---employment emotional distress	0.693		

The data in Table 4-21 indicated that the factor loadings for each latent variable, including subjective psychological experience, employment emotional distress, physiological reaction, and behavioral performance, exceed 0.5, suggesting that each latent variable strongly represents its corresponding question. Furthermore, the CR averages were above 0.6, and AVE values exceeded 0.5 for all dimensions except behavioral performance. This overall pattern indicated a generally acceptable level of convergent validity.

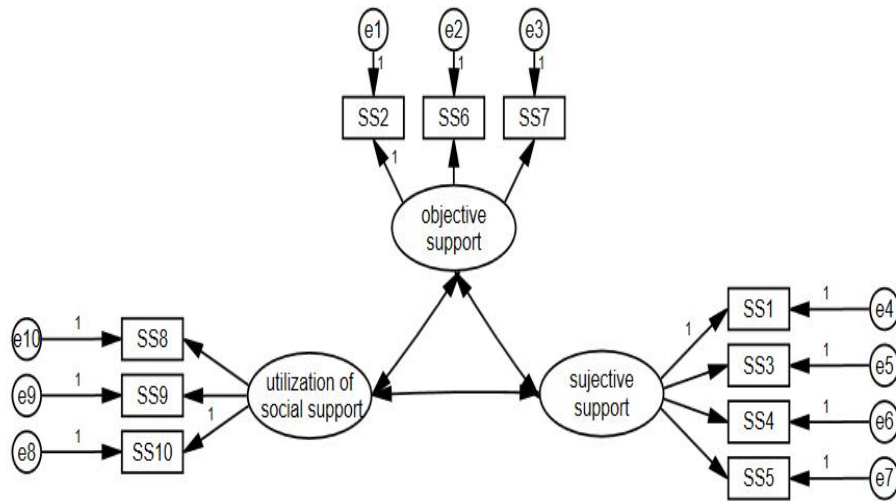
The latent variable "behavioral performance" was measured by three observation indicators: question 11 ("During job hunting, I often ask classmates to go out for drinks and chat"), question 12 ("Playing games can temporarily help me forget job-hunting unhappiness"), and question 13 ("I often skip classes because my job search is not going well"). These three indicators represented the minimum required for assessing the latent variable. Chinese men's drinking rate (48%) exceeds the global average of 39%, while women's rate is lower than the global average of 25% (Yonghong Technology, 2022). Given that many women dislike or are unfamiliar with drinking, few female-dominated preschool education students turn to alcohol when facing job-search setbacks. Gaming is prevalent among college students: 49.58% of graduates engage in mobile gaming, with 64% preferring it, and 79.5% admit gaming during class, viewing it as commonplace (Niu & Gao, 2019). Thus, students are more likely to game than to drink when distressed. Although class skipping is recognized, students may underreport it due to social expectations, and "physical presence with mental absence" is a documented phenomenon (Li, 2022). Since the questionnaire did not explicitly define skipping, students might interpret disengagement as non-skipping. These factors suggest limited convergent validity for this dimension.

4.10.1.2 Measurement Model of Social Support

4.10.1.2.1 Measurement Model Setting

Social support encompassed three dimensions: subjective support, objective support, and utilization of social support. These dimensions were assessed by using four questions (SS1, SS3, SS4, SS5) for subjective support, three questions (SS2, SS6, SS7) for objective support, and three questions (SS8, SS9, SS10) for utilization of social support, as indicated in the Social Support Rating Scale. The measurement model for social support is illustrated in Figure 4-2.

**Figure 4-2:
Social Support Measurement Model**



4.10.1.2.2 Model Fitness Test

**Table 4- 22:
Summary of Social Support Measurement Model Fit Indices**

Statistical Test	Absolute Fit Index			Value-added Fit Index			Simple Fit Index		
	χ^2/df	RMSEA	GFI	NFI	IFI	CFI	PNFI	PCFI	PGFI
Adaptation Standards	<5	< 0.08	> 0.9	> 0.9	> 0.9	> 0.9	> 0.5	> 0.5	> 0.5
Parameters of This Model	3.045	0.057	0.971	0.911	0.939	0.938	0.648	0.667	0.565
Fitness Results	accept	good	good	good	good	good	accept	accept	accept

Other parameters: Sample size = 636, Chi-square value = 97.454, $p = 0.000$, $df = 32$

Table 4-22 presented the model fit index analysis, revealing the following results: $\chi^2 = 97.454$; $p < .001$ (significantly less than 0.05); $df = 32$; RMSEA = 0.057 (below the threshold of 0.08); $\chi^2/df = 3.045$ (below the cutoff of 5). Additionally, the NFI (0.911), IFI (0.939), and CFI (0.938) all exceed the acceptable value of 0.9. Furthermore, PNFI (0.648), PCFI (0.667), and PGFI (0.565) were all greater than 0.5. These findings indicated that the measurement model fit for social support was acceptable.

4.10.1.2.3 Model Reliability and Validity Test

The data in Table 4-23 indicate that the factor loadings for SS1 and SS2 were below 0.5. Additionally, the AVE values for the two dimensions of subjective support and utilization of social support were both less than 0.36. In contrast, the CR values for the three dimensions of social support exceeded 0.5. These findings suggested that the convergent validity was inadequate.

**Table 4- 23:
Factor Loadings, CR values, and AVE values of the Social Support Measurement Model**

Path	Estimate	AVE	CR
SS2<---objective support	0.114		
SS6<---objective support	0.688	0.4162	0.6157
SS7<---objective support	0.873		
SS1<---subjective support	0.401		
SS3<---subjective support	0.563	0.3159	0.6424
SS4<---subjective support	0.605		
SS5<---subjective support	0.648		
SS10<---utilization of social support	0.519		
SS9<---utilization of social support	0.509	0.2755	0.5327
SS8<---utilization of social support	0.546		

The question posed in SS1 was “How many close friends do you have who can support and help you?” In interpreting this question, it was easy to concentrate on the terms “close” and “friends”. SS3, SS4, and SS5 pertain to the support of roommates, classmates, and family members. However, it was important to note that roommates and classmates were not necessarily close friends, while family members did not fall under the category of friends. This distinction resulted in a relatively small number of close friends reported, while the scores for SS3 to SS5 tend to be relatively high. Consequently, the option presented in SS1 was not closely aligned with the subsequent three questions, leading to a diminished

convergent validity of the objective support measure.

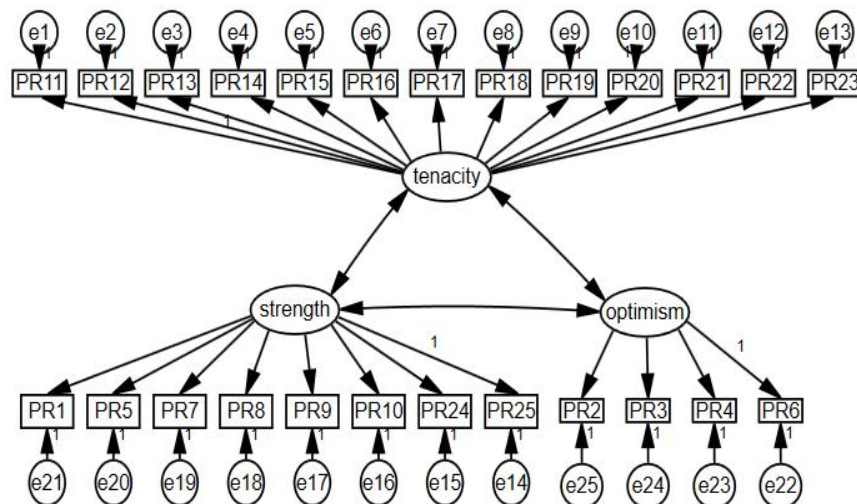
The question stem and options for SS2 were as follows: In the past year, you (select only one) (1) lived away from your family and resided alone in a room, (2) moved frequently and lived with strangers most of the time, (3) lived with classmates or friends, (4) lived with family. Given that the students have not yet graduated, most were preparing for exams either at school or home or engaged in related work on their graduation thesis at school. Furthermore, Weifang Institute of Technology had scheduled at least one month of courses in both semesters of the student's final academic year, leading to a predominance of responses indicating options (3) or (4). SS6 and SS7 participants also indicated that they sought financial support and psychological comfort from various sources. However, the relationship between living arrangements in SS2 and sources of support in SS6 and SS7 appeared tenuous, suggesting that the question regarding "subjective support" might not be well-constructed.

4.10.1.3 Measurement Model of Psychological Resilience

4.10.1.3.1 Measurement Model Setting

Psychological resilience is characterized by tenacity, strength, and optimism. These dimensions were assessed using 25 questions, categorized as follows: 13 questions (PR11-PR23) pertain to tenacity, eight questions (PR1, PR5, PR7-PR10, PR24, PR25) relate to strength, and four questions (PR2, PR3, PR4, PR6) focus on optimism. The measurement model for psychological resilience is illustrated in Figure 4-3.

Figure 4-3:
Psychological Resilience Measurement Model



4.10.1.3.2 Model Fitness Test

The initial model fit indices in Table 4-24 indicated that the model remained sub-optimal, necessitating adjustments to specific model parameters. The modification indices listed in Table 4-25 were arranged from largest to smallest.

**Table 4- 24:
Summary of Psychological Resilience Measurement Model Fit Indices**

Statistical Test	Absolute Fit Index			Value-added Fit Index				Simple Fit Index		
	χ^2	χ^2/df	RMSEA	GFI	NFI	IFI	CFI	PNFI	PCFI	PGFI
Adaptation Standards	$p < .05$	<5	< 0.08	> 0.85	> 0.9	> 0.9	> 0.9	> 0.5	> 0.5	> 0.5
Initial Model Fit	1165.657 ***	4.286	0.072	0.853	0.870	0.898	0.897	0.789	0.813	0.714
Final Model Fit	931.548 ***	3.489	0.063	0.884	0.896	0.924	0.924	0.798	0.822	0.726

**Table 4- 25:
Summary Table of Initial Model Parameter Modification Indices**

Variable	MI	Par Change
e6<-->e7	49.896	0.079
e8<-->e10	39.566	0.203
e5<-->e8	34.868	0.188
e3<-->e4	21.630	0.071

The MI value between e6 and e7 was 49.896, indicating a relatively strong relationship. Analyzing the question 16, “I will not be easily defeated by failure”, in conjunction with question 17, “When dealing with challenges and difficulties in life, I consider myself a strong person”, revealed a conceptual correlation between the two statements. Individuals who demonstrate resilience in the face of adversity might indeed possess strength of character. Consequently, the variables e6 and e7 were prioritized for further examination.

The MI value of e8<-->e10 was 39.566. Examining question 18 (If necessary, I would choose an unpopular or difficult decision to influence others) alongside question 20

(When dealing with life problems, sometimes I have to act on my intuition) within the scale revealed their reflection of the importance and complexity involved in making effective decisions across varying situations. Consequently, a specific correlation exists, elucidating the variables associated with e8 and e10.

The MI value between e5 and e8 was 34.868. Analyzing the stem of question 15, which states, “I would rather take the lead in solving problems than let others decide the overall situation”, alongside question 18, which asserts, “If necessary, I will choose an unpopular or difficult decision to influence others”, revealed that both questions embody a proactive attitude and strong leadership. They demonstrated a commitment to taking responsibility and the courage to influence and guide others through personal actions when confronted with challenges and decisions. In light of this analysis, the variables associated with e5 and e8 have been released.

The MI value between e3 and e4 was 21.630. Examining the stem of question 13, which states, “When pressure or crisis comes, I know where to get help”, alongside the stem of question 14, which states, “Under pressure, I can think about problems with concentration”, revealed that both questions convey the concept of addressing problems and seeking assistance with a clear objective during times of pressure. Considering this, researchers could analyze the release variables for e3 and e4.

The results of the fitness index analysis for psychological resilience measurement model, presented in Table 4.26, indicate the following: $\chi^2 = 931.548$; $p < .001$ (less than 0.05, indicating high significance); RMSEA = 0.063 (less than 0.08); $\chi^2/df = 3.489$ (less than 5); GFI = 0.884 (greater than 0.85); NFI = 0.896 (slightly below 0.9); IFI = 0.924 (greater than 0.9); CFI = 0.924 (greater than 0.9); PNFI = 0.798, PCFI = 0.822, and PGFI = 0.726, all of which exceed 0.5. These comprehensive analysis results suggested that the measurement model of psychological resilience demonstrated an acceptable degree of fit.

4.10.1.3.3 Model Reliability and Validity Test

Table 4-26 indicated that, except for PR18 and PR20, which had factor loadings below 0.5, all other factor loadings exceeded 0.5. The AVE values for the three dimensions were more significant than 0.36, and the CR values were above 0.5. In conclusion, the convergent validity of the scale could be considered average.

Table 4- 26:
Factor Loadings, CR and AVE values of the Psychological Resilience Measurement Model

Path	Estimate	AVE	CR
PR6<---optimism	0.728		
PR4<---optimism	0.778	0.4409	0.7553
PR3<---optimism	0.558		
PR2<---optimism	0.563		
PR10<---strength	0.659		
PR9<---strength	0.623		
PR8<---strength	0.744		
PR7<---strength	0.769	0.4766	0.8779
PR24<---strength	0.733		
PR25<---strength	0.617		
PR1<---strength	0.558		
PR5<---strength	0.785		
PR16<---tenacity	0.781		
PR17<---tenacity	0.783		
PR18<---tenacity	0.322		
PR14<---tenacity	0.727		
PR13<---tenacity	0.694		
PR12<---tenacity	0.73		
PR19<---tenacity	0.72	0.4535	0.9117
PR20<---tenacity	0.378		
PR23<---tenacity	0.626		
PR22<---tenacity	0.755		
PR21<---tenacity	0.697		
PR11<---tenacity	0.716		
PR15<---tenacity	0.636		

The factor loadings for questions PR18 and PR20 were both below 0.5. The two statements, question 18 (“If necessary, I will choose an unpopular or difficult decision to influence others”) and question 20 (“When dealing with life’s problems, sometimes I have to act on my intuition”), exhibited a weaker correlation with resilience based on the interpretation of their meanings. However, it was important to note that question 18

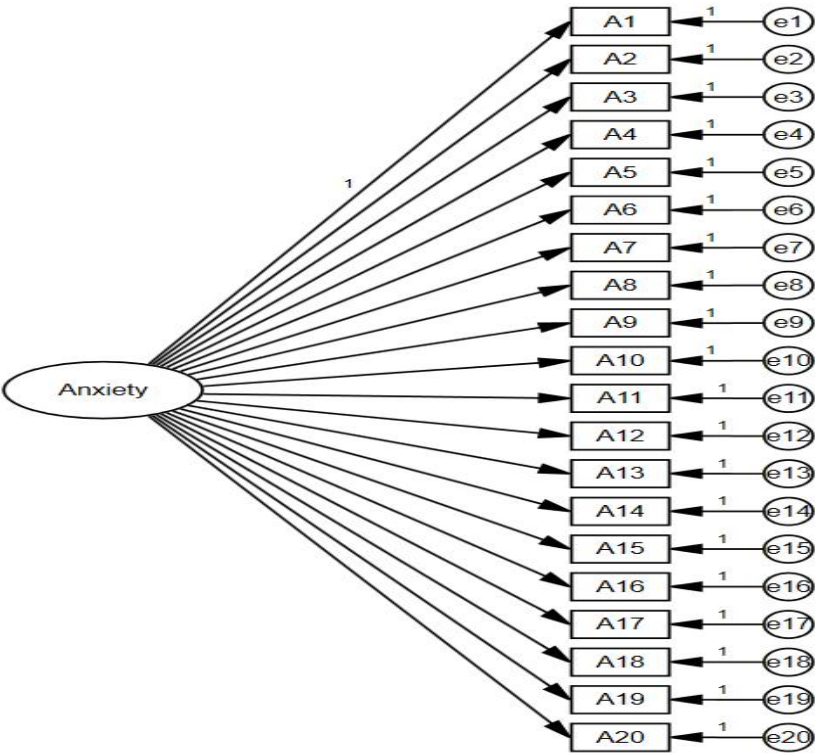
represented a rational decision-making process, while question 20 embodied an intuitive approach. Both forms of decision-making necessitate that individuals possess the ability to navigate challenges, exhibit confidence and decisiveness, and maintain composure and flexibility under pressure, all of which are related to tenacity to some extent.

4.10.1.4 Measurement Model of Anxiety

4.10.1.4.1 Measurement Model Setting

The Self-Rating Anxiety Scale comprised 20 questions (A1-A20) and was structured without dimensional divisions. The measurement model is illustrated in Figure 4-4, representing a first-order measurement model.

Figure 4-4:
Anxiety Measurement Model



4.10.1.4.2 Model Fitness Test

The initial model fit index presented in Table 4-27 indicated that the model remained sub-optimal, necessitating adjustments to specific model parameters. The modification indices listed in Table 4-28 were arranged in descending order from largest to smallest.

Table 4- 27:
Summary of the Anxiety Measurement Model Fit Indices

Statistical Test	Absolute Fit Index			Value-added Fit Index				Simple Fit Index		
	χ^2	χ^2/df	RMSEA	GFI	NFI	IFI	CFI	PNFI	PCFI	PGFI
Adaptation Standards	$p < .05$	< 5	< 0.08	> 0.85	> 0.9	> 0.9	> 0.9	> 0.5	> 0.5	> 0.5
Initial Model Fit	1386.855 ***	8.158	0.106	0.782	0.703	0.729	0.728	0.629	0.652	0.633
Final Model Fit	619.775 ***	3.850	0.067	0.913	0.898	0.898	0.735	0.761	0.700	0.685

Table 4- 28:
Summary Table of Initial Model Parameter Modification Indices

Variable	MI	Par Change
e1<-->e3	88.983	0.103
e1<-->e2	82.048	0.099
e2<-->e3	75.702	0.081
e5<-->e9	154.563	0.412
e5<-->e19	86.637	0.305
e9<-->e13	79.095	-0.391
e9<-->e17	73.772	0.278
e9<-->e19	92.659	0.297
e11<-->e12	86.099	0.064
e13<-->e17	78.119	-0.402
e17<-->e19	80.112	0.286

The MI value between e1 and e3 was 88.983, between e1 and e2 was 82.048, and between e2 and e3 was 75.702. Correspondingly, the questions associated with e1, e2, and e3 are A1 (I feel more nervous and anxious than usual), A2 (I feel scared for no reason), and A3 (I am easily upset or panicked). Although the expressions differed, the terms “nervous”, “anxious”, “scared”, and “upset” all represented manifestations of anxiety, indicating a correlation among these variables. Consequently, the variables e1, e2, and e3 were analyzed.

The MI values for the pairs e5<-->e9, e5<-->e19, e9<-->e13, e9<-->e17, e9<-->e19, e11<-->e12, e13<-->e17, and e17<-->e19 were 154.563, 86.637, 79.095, 73.772, 92.659,

86.099, 78.119, and 80.112, respectively. The items e5, e9, e13, e17, and e19 correspond to the following statements: A5 (I feel that everything is fine and nothing terrible will happen), A9 (I feel calm and find it easy to sit quietly), A13 (I find it easy to breathe in and out), A17 (My hands are often dry and warm), and A19 (I fall asleep quickly and sleep well at night). It was important to note that these five questions were reverse-scored. The phrase “excessive sweating”, and “sleep disturbances” were objective manifestations of autonomic dysfunction and motor tension. (Liu, et al., 1995; Liu, et al., 1995). Anxiety can elicit physical reactions to a certain extent, and there exists a correlation among these physical responses. Given this context, the corresponding variables were subsequently released.

Table 4.27 showed the results of the fitness index analysis of the anxiety measurement model: $\chi^2 = 619.775$; $p < .001$ (far less than 0.05, very significant); $df = 161$; $\chi^2/df = 3.850$ (less than 5); RMSEA = 0.067 (less than 0.8); GFI = 0.913 (greater than 0.90); IFI = 0.898 (slightly less than 0.9); CFI = 0.898 (somewhat less than 0.9); PNFI (0.761), PCFI (0.700), PGFI (0.685) were all greater than 0.5. The comprehensive analysis results showed that the fitness of the anxiety measurement model was barely acceptable.

4.10.1.4.3 Model Reliability and Validity Test

Table 4-29 illustrated that the factor loadings for the five reverse-scoring questions (A5, A9, A13, A17, A19) were all below 0.5, which ultimately failed AVE. Some researchers mistakenly believed that reverse-stated and positively stated questions did not measure the same construct, suggesting that including both types in a single scale complicated the factor structure (Mook et al., 1992; Roberts et al., 1993). Furthermore, the impact of both positive and reverse questions on the reliability and validity of assessments has been noted. For instance, Weems and Onwuegbuzie (2001) found that employing a mix of positive and reverse questions can lead to extreme artificial responses, thereby diminishing the reliability of the test. Similarly, Schriesheim and Hill (1981) reported that while using reverse questions may enhance the validity of the test, it does not necessarily improve reliability among college students.

Additionally, the anxiety standard score was calculated, and the comparison with national norms was based on the scores from all 20 questions. Consequently, deleting any questions could result in lower scores, which would decrease the perceived anxiety level and reduce the detection rate of anxiety. Therefore, the reverse-scoring questions were retained.

Table 4- 29:
Factor Loadings, CR values, and AVE values of the Anxiety Measurement Model

Path	Estimate	AVE	CR
A1<---Anxiety	0.495		
A2<---Anxiety	0.637		
A3<---Anxiety	0.695		
A4<---Anxiety	0.6		
A5<---Anxiety	0.028		
A6<---Anxiety	0.631		
A7<---Anxiety	0.647		
A8<---Anxiety	0.694		
A9<---Anxiety	0.038		
A10<---Anxiety	0.682		
A11<---Anxiety	0.698	0.2835	0.8619
A12<---Anxiety	0.685		
A13<---Anxiety	0.11		
A14<---Anxiety	0.591		
A15<---Anxiety	0.601		
A16<---Anxiety	0.435		
A17<---Anxiety	0.025		
A18<---Anxiety	0.506		
A19<---Anxiety	0.145		
A20<---Anxiety	0.514		

4.10.2 Stage Two: Structural Model

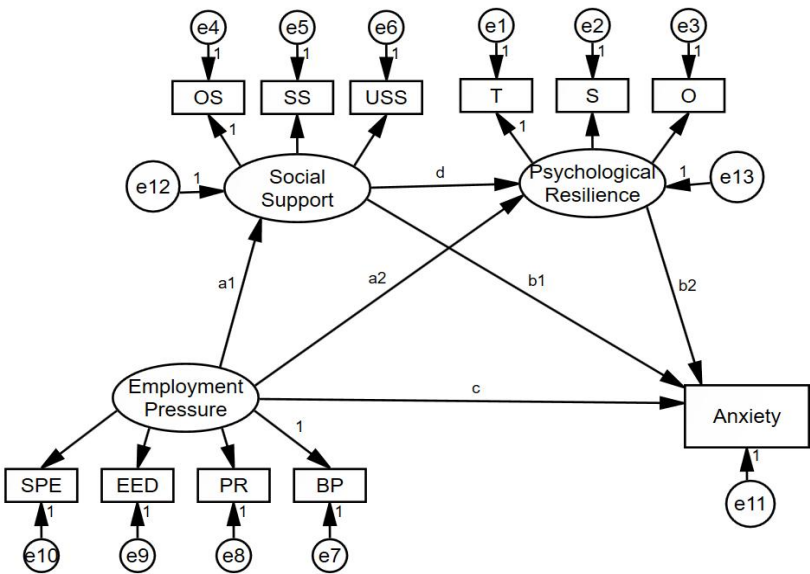
To further examine the validity of the path relationship assumptions in the theoretical model regarding the impact of employment pressure on anxiety, this study employed the path analysis functionality of AMOS 23.0 statistical software. The analysis utilized the “maximum likelihood estimation method” to estimate the relevant parameters and simulate the pathways and interpretations of the research model. Capability analysis was conducted,

and the causal relationships among the latent variables were verified by estimating the model path coefficients and performing significance tests.

4.10.2.1 Structural Model Setting

Following the research hypothesis presented in Chapter 1, the pertinent latent variables, employment pressure, social support, psychological resilience, and anxiety, were integrated (Wu & Wen, 2011). The structural model is illustrated in Figure 4-5.

Figure 4-5:
Structural Model of Employment Pressure Effecting Anxiety



4.10.2.2 Path Analysis of the Structural Model

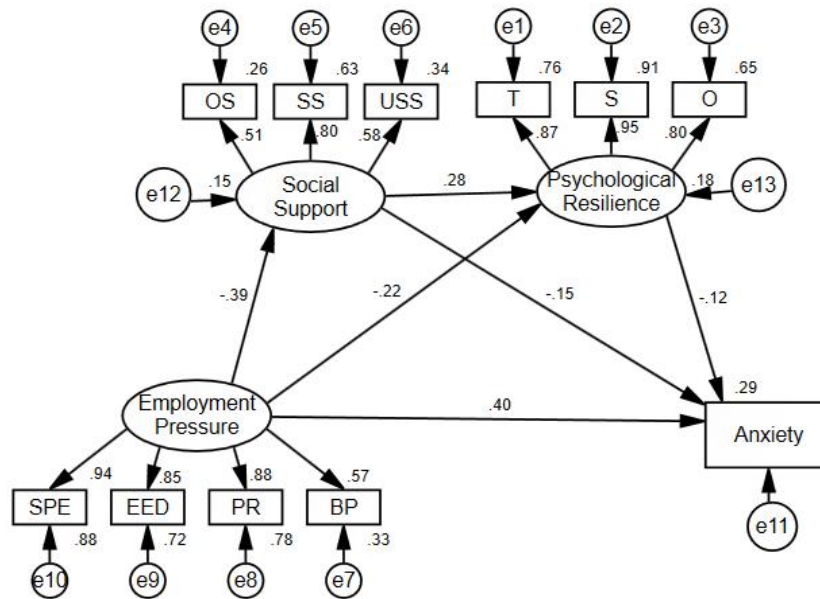
In the path analysis, researchers first constructed the structural model based on the path hypotheses of the theoretical framework. Subsequently, researchers utilized the path analysis function of AMOS to import 636 valid samples for estimating the path coefficients and conducting significance tests. The relevant parameter estimation results are presented in Table 4-30.

Table 4- 30:
Structural Model Path Coefficient Analysis Results

Path relationships between variables	Estimate	SE	CR	P	Standardized Path Coefficients
Social Support<---Employment Pressure	-0.404	0.063	-6.455	***	-0.391
Psychological Resilience<---Employment Pressure	-1.239	0.26	-4.756	***	-0.223
Psychological Resilience<---Social Support	1.53	0.297	5.149	***	0.284
Anxiety <---Psychological Resilience	-0.123	0.041	-3.002	0.003	-0.12
Anxiety <---Social Support	-0.852	0.269	-3.171	0.002	-0.154
Anxiety <---Employment Pressure	2.272	0.266	8.553	***	0.398
T<---Psychological Resilience	1				0.873
S<---Psychological Resilience	0.647	0.02	32.012	***	0.952
O<---Psychological Resilience:	0.302	0.012	25.867	***	0.804
OS<---Social Support	1				0.512
SS<---Social Support	2.267	0.237	9.559	***	0.796
USS<---Social Support	0.801	0.085	9.469	***	0.583
BP<---Employment Pressure	1				0.571
PR<--- Employment Pressure	1.891	0.12	15.812	***	0.883
EED<---Employment Pressure	4.949	0.32	15.485	***	0.849
SPE<---Employment Pressure	8.793	0.542	16.234	***	0.94

The results from the AMOS output revealed six hypothesized path relationships within the theoretical model developed by the research institute. Table 4.30 showed that the standardized coefficients for these path relationships are all statistically significant, confirming that each path relationship in the constructed theoretical model had been validated. The relevant parameters for path analysis within the structural model are also illustrated in Figure 4-6.

**Figure 4- 6:
Structural Model Analysis Results**



4.10.2.3 Model Fitness Test

**Table 4- 31:
Structural Model Fitness Parameters**

Statistical Test	Absolute Fit Index			Value-added Fit Index			Simple Fit Index		
	χ^2/df	RMSEA	GFI	NFI	IFI	CFI	PNFI	PCFI	PGFI
Adaptation Standards	<3	< 0.08	> 0.9	> 0.9	> 0.9	> 0.9	> 0.5	> 0.5	> 0.5
Parameters of This Model	2.796	0.053	0.968	0.971	0.981	0.981	0.688	0.696	0.572
Fitness Results	good	good	good	good	good	good	accept	accept	accept
Sample size = 636, Chi-square value = 109.947, $p = 0.000$, degrees of freedom = 39									

The results of the structural model fitness index analysis presented in Table 4-31 indicate the following: $\chi^2 = 109.947$; $p < .001$ (far less than 0.05, indicating high significance); degrees of freedom = 39; RMSEA = 0.053 (less than 0.08); $\chi^2/df = 2.796$ (less than 3); GFI = 0.968 (greater than 0.9); NFI = 0.971 (greater than 0.9); IFI = 0.981 (greater than 0.9); CFI = 0.981 (greater than 0.9); PNFI = 0.688, PCFI = 0.696, and PGI = 0.572, all exceeding 0.5. These analysis results demonstrated that the structural model depicting the effect of employment pressure on anxiety exhibited a good fit, suggesting that the path

relationships outlined in the theoretical hypothesis align well with the actual measurement data, thereby affirming the construction and hypotheses of the structural model.

4.10.2.4 Mediating Effect Analysis

This study proposed three hypotheses regarding the mediating effect. However, the indicators discussed in 4.10.2.2 and 4.10.2.3 only provided the magnitude of the influence coefficients between variables and did not indicate whether these coefficients were statistically significant. Furthermore, since mediating effects were typically non-normally distributed, the aforementioned indicators might not accurately reflect the existence of a mediating effect (MacKinnon, 2012). To overcome this limitation, the study used the mediating effect testing methods proposed by MacKinnon (2012), which provide two approaches to determine the presence of a univariate mediating effect. The first approach ensures that the mediating effect's confidence interval does not include 0. The second requires that the mediating effect point estimate ratio to the standard deviation coefficient (Z value) is greater than or equal to 1.96. For testing the mediating effects of social support and psychological resilience, this study adopts the first method, confirming that the mediating effect confidence interval does not contain 0. Additionally, the 95% bias correction and the 95% percentile method are two statistical techniques used to assess the range of model prediction errors. Both methods evaluate the predictive capability of the model and the accuracy of parameter estimation, enhancing our understanding of the model's stability and reliability. A detailed introduction follows:

(1) The 95% Bias Correction (95% Confidence Interval): Bias correction is a technique employed to estimate the actual range of a parameter's value. In the context of regression analysis, 95% bias correction indicates that, at a specified confidence level (typically 95%), there is a 95% probability that the parameter's actual value lies within the upper and lower bounds of the estimated value. For instance, in linear regression, the confidence interval of the regression coefficient can be calculated to evaluate the stability and reliability of the parameter.

(2) The 95% Percentile Method estimates the range of prediction errors. In regression analysis, this method can be utilized to calculate the confidence interval of predicted values, thereby assessing the model's predictive capability for unknown data. Specifically, the 95% percentile method indicates that, at a specified confidence level (typically 95%), there is a 95% probability that the true value of the predicted outcome lies within the established

confidence interval.

This study employed AMOS 23.0 software to conduct a Bootstrap mediation test to investigate the mediating roles of social support and psychological resilience. The Bootstrap method is a resampling technique that treats the original sample as a complete entity, extracting numerous new sub-samples and obtaining statistics through repeated sampling with replacement. By performing this procedure 5,000 times and calculating the 95% confidence interval, the mediating effects of social support and psychological resilience on the relationship between employment pressure and anxiety were examined. The AMOS script utilized for this analysis was as follows: “ind1=p.a1*p.b1 ind2=p.a2*p.b2 ind3=p.a1*pd*p.b2 total=ind1+ind2+ind3+c”. The results of the test are presented in Table 4-32.

**Table 4- 32:
Mediating Effect Analysis**

Mediating Path	Effect Estimates	Bootstrapping			
		Bias-Corrected		Percentile	
		95% CI		95% CI	
		Lower	Upper	Lower	Upper
Employment Pressure → Social Support → Anxiety	0.0585	0.128	0.643	0.112	0.624
Employment Pressure → Psychological Resilience → Anxiety	0.0264	0.041	0.337	0.034	0.319
Employment Pressure → Social Support → Psychological Resilience → Anxiety	0.0131	0.025	0.168	0.020	0.158

Table 4-32 assessed the mediating effect of social support on the relationship between employment pressure and anxiety. After applying a 95% bias correction, the results ranged from 0.128 to 0.643, and using the percentile method, the range was 0.112 to 0.624. Notably, Bootstrap’s upper and lower limits did not include 0, indicating that the mediating effect was statistically significant. This result suggested that social support served as a mediating factor in the relationship between employment pressure and anxiety.

The mediating effect of psychological resilience on the relationship between employment pressure and anxiety was assessed. After applying a 95% bias correction, the

confidence interval ranged from 0.041 to 0.337, and using the percentile method, the interval ranged from 0.034 to 0.319. Notably, the upper and lower limits of the Bootstrap confidence interval did not include 0, indicating that the mediating effect was significant. This result suggested that psychological resilience served as a mediating factor in the relationship between employment pressure and anxiety.

The chain mediating effect of social support and psychological resilience on the relationship between employment pressure and anxiety was examined. The bootstrap 95% confidence intervals, based on bias correction (0.025 to 0.168) and the percentile method (0.020 to 0.158), did not include zero, indicating statistical significance. This finding indicated that the mediating effect was significant, suggesting that social support and psychological resilience served as important chain mediators in the impact of employment pressure on anxiety.

The effect analysis of the model can be categorized into three components: direct effect (standardized path coefficient), mediating effect (the product of each path coefficient within the same pathway), and total effect (the sum of direct and mediating effects). The reference standards for effect analysis are as follows: an absolute value of the standardized path coefficient less than 0.10 is considered a small effect, approximately 0.30 is regarded as a medium effect, and values greater than 0.50 are considered a significant effect (Huang, 2005). According to Table 4.32 and Figure 4.6, the direct effect of employment pressure on anxiety levels is 0.40. The mediating effect of social support on the relationship between employment pressure and anxiety levels was 0.0585, while the mediating effect of psychological resilience was 0.0264. The combined mediating effect of social support and psychological resilience was 0.0131. The total effect was calculated to be 0.5111. Notably, the mediating effects account for 21.74% of the total effect, indicating that employment pressure not only directly impacted anxiety levels but also exerted an indirect influence through social support and psychological resilience. Thus, 21.74% of the variation in anxiety levels attributed to employment pressure was mediated by these two factors.

4.11 Research Results

This study aimed to investigate the levels of anxiety experienced by final-year students in preschool education. It sought to explore the impact of employment pressure on anxiety and to examine the roles of social support and psychological resilience in the

relationship between these two factors. The research findings were presented as follows:

(1) The average employment pressure score for final-year students in preschool education majors was 59.54, indicating a lower-middle level of employment pressure. In contrast, these final-year students' average social support score was 39.80, reflecting a medium level of social support. The average psychological resilience score was 90.70, categorized as upper-middle-level resilience. Lastly, the average standard score for anxiety among final-year students in preschool education majors was 43.24, which also falls within the upper-middle level.

(2) Employment pressure exhibited a significant negative correlation with social support ($r = -.319$) and psychological resilience ($r = -.309$). Conversely, it demonstrated a significant positive correlation with anxiety ($r = .470$). Additionally, social support was significantly positively correlated with psychological resilience ($r = .306$) while also showing significant negative correlations with both social support and anxiety ($r = -.292$) and psychological resilience and anxiety ($r = -.277$).

(3) Social support partially mediates the relationship between employment pressure and anxiety. The value of the indirect effect is 0.344, and the confidence intervals do not include 0 (0.128 to 0.643, 0.112 to 0.624).

(4) Psychological resilience also partially mediates the relationship between employment pressure and employment anxiety, with an indirect effect value of 0.152 and a confidence interval that does not contain 0 (0.041 to 0.337, 0.034 to 0.319).

(5) Employment pressure, social support, psychological resilience, and anxiety form a chain mediation model. The value of the indirect effect in this model is 0.076, and the overall confidence interval does not include 0 (0.025 to 0.168, 0.020 to 0.158).

4.12 Summary of Research Hypothesis Verification

The research results were compared with the relevant hypotheses of this study, leading to the verification results presented in Table 4-33.

Table 4- 33:
Summary of Research Hypothesis Test Results

	Detailed Description of Research Hypothesis	Result
H ₁	Final-year students majoring in preschool education experience employment pressure and anxiety at an upper-middle level, while their social support and psychological resilience are at a middle level.	
	The employment pressure of final-year students in preschool education majors is at an above-average level.	Not Supported
	The anxiety of final-year students in preschool education majors is at an above-average level.	Supported
	The social support of final-year students in preschool education majors is at a medium level.	Supported
	The psychological resilience of final-year students in preschool education majors is at a medium level.	Not Supported
H ₂	There exists a significant correlation among employment pressure, anxiety, social support, and psychological resilience among final-year students majoring in preschool education.	
	Employment pressure is significantly positively correlated with anxiety.	Supported
	Employment pressure is significantly negatively correlated with social support.	Supported
	Employment pressure is significantly negatively correlated with psychological resilience.	Supported
	Social support is significantly positively correlated with psychological resilience.	Supported
	Anxiety is significantly negatively correlated with social support.	Supported
	Anxiety is significantly negatively correlated with psychological resilience.	Supported
H ₃	There is a mediating effect of social support between employment pressure and anxiety for final-year students majoring in preschool education..	Supported
H ₄	There is a mediating effect of psychological resilience between employment pressure and anxiety among final-year students majoring in preschool education.	Supported
H ₅	There is a chain-mediating effect of social support and psychological resilience on the relationship between employment pressure and anxiety among final-year students majoring in preschool education.	Supported

4.13 Chapter Summary

This chapter discusses the development of the pilot study and the subsequent data processing, concluding that the chosen research tool demonstrates reliability. Following this, the data cleaning for the formal study was performed, along with the introduction of the cleaned samples. Once the test data was determined to be approximately normally distributed, researchers analyzed the current status description, pairwise correlation, measurement model test, and structural model test concerning the four variables: employment pressure, social support, psychological resilience, and anxiety, in alignment with the research hypothesis.

DISCUSSION AND CONCLUSIONS

5.1 Introduction

The objective of the current study is to take final-year students majoring in preschool education as the research subjects, determine the mediating roles played by the two variables of social support and psychological resilience in the process of how employment pressure affects anxiety, and further provide a theoretical basis for school psychological counseling and mental health education. This chapter mainly discusses this study. Additionally, the limitations of this study and suggestions for future research are also presented. Finally, the educational implications derived from the results of this study are illustrated.

5.2 The Level of Employment Pressure, Social Support, Psychological Resilience and Anxiety among Final-year Students in Preschool Education

5.2.1 The Current Employment Pressure Faced by Final-year Students in Preschool Education

The findings indicated that the employment pressure levels of these final-year students were categorized as lower-middle, which contradicted the initial hypothesis but was consistent with previous studies (e.g., Fu, 2013; Luo, 2010; Ma, 2016). For instance, Fu (2013) reported a mean score of 2.893 among master's graduates (close to the theoretical midpoint of 3). Similarly, studies by Luo (2010) and Ma (2016) on undergraduate students using different validated instruments found mean scores of 2.8354 and 2.8, respectively, both described by the authors as falling within a moderate-low range. This result may be explained by a combination of situational and structural factors.

First, the timing of the survey (late April to early May) coincided with a period when students were primarily engaged in thesis writing and defense preparations (for

undergraduate and upgrading students) or course examinations (for junior college students). This likely temporarily diverted their attention from job seeking, leading to a lower immediate perception of employment pressure at the time of data collection.

Second, broader socio-structural buffers may have played a role. The rising trend of “slow employment” (Ma & Deng, 2019), supported by improved family economic conditions, allows final-year students to extend their job search or pursue post-graduation exam preparation (e.g., for civil service or teaching positions; Mao, 2020; Zuo & Ding, 2022), thereby mitigating acute pressure. Furthermore, while the declining birth rate may reduce traditional kindergarten posts, the diversification of career paths—such as early education, children’s arts training, and emerging digital professions (e.g., online content creation)—could provide alternative avenues and reduce perceived job market constraints. However, it should be noted that this study did not directly measure final-year students’ awareness or readiness toward these alternative careers; thus, this explanation remains speculative and warrants further investigation.

In summary, the lower-middle level of reported employment pressure may reflect both a temporary attenuation due to academic demands and a structural buffering effect from evolving career landscapes and “slow employment” practices.

From the perspective of ecological systems theory, this finding clearly illustrates how multi-layered environmental systems jointly shape an individual’s experience of stress. The academic tasks at the time of the survey represent an immediate, high-priority micro- event within the mesosystem (the school context), which temporarily overshadowed stressors originating from the macrosystem (the labor market). At the same time, family support (mesosystem) and emerging career opportunities (macrosystem) constitute a stable protective environment, providing students with buffering resources and alternative pathways. Consequently, the lower-middle level of perceived stress reflects an adaptive outcome of the dynamic balance between risk and protective factors across different systemic levels. This underscores the necessity of adopting a holistic and context-sensitive perspective in understanding the origins of stress and validates intervention strategies aimed at enhancing supportive environments within both the meso- and macrosystems—such as strengthening career guidance and diversifying employment channels.

5.2.2 The Current Social Support Faced by Final-year Students in Preschool Education

This study employed Xiao Shuiyuan's Social Support Rating Scale to assess the social support experienced by final-year students majoring in preschool education prior to graduation. The findings revealed that the total social support score ($M = 39.799$) was significantly lower than the national norm ($M = 40$), although the numerical difference was minimal. Wu et al. (2023) indicated that a moderate level of social support corresponds to a score range of 23–44. Qiu and Dai (2014), in a study involving 321 college students, reported a social support score of 39.91. Similarly, Huang and Pu (2024), based on a sample of 1,187 college students, found a social support score of 38.35. Both results suggest that the social support level among college students is at a moderate level.

The medium level of social support can be interpreted through the lens of the buffering effect model (Bell et al., 1982; Cohen & Wills, 1985). According to this model, social support functions as a psychological buffer during stressful periods, intervening in the pathway between stress appraisal and psychological adaptation. Among final-year students, this support system may operate through two mechanisms. First, on the cognitive appraisal level, tangible parental support—such as financial assistance for tutoring, interview expenses, or living costs—may help students perceive the job search as less threatening and enhance their perceived self-efficacy and available coping resources. Second, in the coping process itself, emotional support from parents after setbacks, such as unsuccessful interviews, provides direct psychological resources that help maintain emotional stability and foster resilience. Thus, even at a medium level, the available social support may be actively engaged in buffering employment-related stress, facilitating adaptive responses, and contributing to the preservation of psychological well-being during this transitional stage.

5.2.3 The Current Psychological Resilience Faced by Final-year Students in Preschool Education

This study employed the Psychological Resilience Scale, revised by Yu and Zhang (2007), to assess the resilience of final-year preschool education students. The findings indicated an upper-middle level of resilience among these graduates. While this outcome did not align with the initial hypothesis, it was consistent with prior studies. For instance, Lian (2022) reported a mean resilience score of 94.13 (item mean: 3.59) among 1,130 college students from four universities in Jiangxi Province, indicating moderate to high resilience.

Similarly, Tan (2025) found a mean overall score of 77.60 among 1,009 college students, suggesting relatively good psychological resilience in this population.

The relatively high level of psychological resilience demonstrated by final-year students can be interpreted through the resilience framework proposed by Kumpfer (1999, 2002). Specifically, at the environmental level, support from family, friends, and teachers during the final academic year constitutes significant protective factors, buffering the potential risks associated with employment pressure. At the individual level, systematic training through psychology-related courses (e.g., general psychology, developmental psychology, educational psychology, and mental health education for college students) likely enhanced students' resilience-related traits in cognitive, emotional, and behavioral domains, thereby improving their strategies for emotion regulation and stress coping. The continuous interaction between these protective environmental factors and individual traits facilitates a positive resilience process, wherein individuals integrate resources and adapt to their environment, ultimately achieving reorganization and enhancement of psychological resilience—an outcome consistent with the positive adaptation described in Kumpfer's resilience framework.

Therefore, the higher level of psychological resilience identified in this study is not an exception to theoretical expectations but rather reflects the dynamic nature of resilience development. It highlights how educational preparedness and social support systems collaboratively foster individual resilience during transitional challenges. This finding further validates the explanatory power of Kumpfer's framework in understanding complex adaptive processes and provides a theoretical basis for systematically cultivating student resilience in educational contexts.

5.2.4 The Current Anxiety Faced by Final-year Students in Preschool Education

This study utilized Zung's Self-Rating Anxiety Scale to assess the anxiety levels of recent final-year students majoring in preschool education. The findings indicate that the anxiety levels among these graduates exceed the national average, which is categorized as upper-middle level, thereby supporting the study's hypothesis. This outcome aligns with the research conducted by Fu (2013), Du et al. (2020), and Zhou (2021). More specifically, Li (2002) found that college students' anxiety scores (44.44) were significantly higher than the

norm, and Lu (2011) reported elevated state anxiety (mean score 45.45) among computing undergraduate graduates compared to the general population. The heightened anxiety observed in this study's participants—preschool education majors on the verge of graduation—can be reasonably understood within their specific context. During their final academic year, these students actively engage in various strategies to secure employment, such as preparing for higher-level academic examinations to enhance their qualifications. The inherent uncertainty regarding the outcomes of these efforts is a significant contributor to their increased anxiety levels.

Additionally, while preparing for the teacher recruitment examination, they face significant competitive pressure due to the disparity between the limited number of available positions and the large pool of applicants, further exacerbating their anxiety. Moreover, when seeking direct employment in preschool education-related roles, final-year students may face concerns about low social status and salary levels, which can lead to worries about their career prospects. Simultaneously, they must navigate the challenges of adapting to new environments, colleagues, and job responsibilities. These various uncertainties and challenges collectively contribute to heightened anxiety levels.

When assessing the anxiety detection rate among final-year students in preschool education, it was found that the overall detection rate of anxiety was 20.60%, which aligns closely with the findings of Cao (2022). In contrast, Li (2020) reported that graduates exhibited mild anxiety, representing 44.44%, while those with moderate anxiety accounted for 11.11%, and those with severe anxiety accounted for 8.33%. This finding resulted in a total anxiety detection rate of 63.88%, significantly differing from the current study's findings. These discrepancies may be closely related to the impact of the COVID-19 pandemic and could also stem from variations in sample size. Furthermore, Hou et al. (2023) reported that the anxiety symptom detection rate among college students was 21.9% before the pandemic and increased to 24.2% during the pandemic. This result indicates that the detection rate during the pandemic was higher than before (Zhai et al., 2022). Since the present study was conducted after the pandemic's conclusion, the anxiety levels attributed to the epidemic may be lower, resulting in a comparatively reduced anxiety detection rate. After experiencing the significant event of the pandemic, college students gained a deeper understanding of life and their own lives. They might have cherished the present more and had clearer plans and goals for the future. Such positive cognitive changes enabled them to

face life's challenges with a more optimistic attitude, reducing uncertainty about the future and anxiety.

In summary, the level and variation of anxiety observed in this study can be more specifically interpreted through the “Social Support Theory of Anxiety” (Shu et al., 2021). This theory emphasizes that social support serves as a key buffer against stress and negative emotions. Although the final-year students in this study faced considerable transitional pressures, the moderate level of social support they reported may have provided some emotional buffering. However, this level of support might have been insufficient to fully counteract the impact of multiple stressors, thereby contributing to the upper-middle level of anxiety. Furthermore, the notable difference compared to findings from the peak of the pandemic may suggest that in the post-pandemic period, support systems from family and peers have become more stable or effective, or that students have become more proactive in seeking and utilizing supportive resources. This improvement in the supportive environment could be an important socio-psychological mechanism underlying the relatively lower anxiety detection rate in the present study.

5.3 The Relationship between Employment Pressure, Anxiety, Social Support, and Psychological Resilience of Final-year Students in Preschool Education

5.3.1 The Relationship between Employment Pressure and Anxiety among Final-year Students in Preschool Education

The study's results revealed a significant positive correlation between employment pressure and anxiety, $r = .47, p < .01$, which supports the research hypothesis. The results of this study are consistent with those of Ruan et al.(2013), Liu (2019), and Wu (2023).

From the perspective of the transactional theory of stress, this relationship can be explained as follows: When final-year students perceive that the demands of the employment environment exceed their coping resources, they are likely to appraise the situation as threatening. This “demand–resource” mismatch triggers a sustained stress response, which manifests physiologically and psychologically as symptoms of anxiety. Furthermore, within the Chinese cultural context, employment is often closely tied to the concept of “face”. Pressures stemming from familial expectations and peer comparisons can lead students to

underestimate their own capabilities in the process of cognitive appraisal, thereby amplifying perceived stress and exacerbating anxiety.

Consequently, as employment pressure increases, anxiety levels rise accordingly, potentially overwhelming students' psychological resources and resulting in symptoms such as tension, worry, and insomnia. To mitigate these effects, it is essential for higher education institutions to systematically consolidate employment resources and provide structured support during the transition period. By enhancing students' access to quality opportunities and strengthening their perceived coping efficacy, universities can help alleviate employment-related stress, safeguard students' mental well-being, and thus prevent the onset of severe anxiety or other psychological issues.

5.3.2 The Relationship between Employment Pressure and Social Support among Final-year Students in Preschool Education

This study found a significant negative correlation between the employment pressure experienced by final-year students majoring in preschool education and their level of social support ($r = -.319, p < .01$). This finding aligns with the research hypotheses and the results reported by Qiu and Dai (2014), Liu (2015), and Chen (2022), indicating that increased social support is associated with reduced employment pressure. Cao et al. (2015) also discovered that college students who receive adequate social support exhibit better social adaptability and are better equipped to leverage their strengths when facing pressure. Furthermore, Gu et al. (2024) found that high levels of social support may enhance college students' emotional regulation abilities and promote their mental health.

Theoretically, this relationship can be interpreted through the buffering effect model of social support (Cohen & Wills, 1985), which posits that social support mitigates the negative impacts of stressful events on individuals' physical and mental well-being. Specifically, in the context of employment pressure, social support may function through two key pathways: at the cognitive appraisal level, supportive interactions can help final-year students reappraise the threat value of employment challenges and enhance their perceived self-efficacy and coping resources; at the coping process level, support networks often provide tangible resources such as job information, referral opportunities, or practical guidance, thereby directly facilitating problem-solving and stress management. Moreover, within the Chinese cultural context where relationships (*guanxi*) embody both affective

bonds and instrumental exchanges, social support—especially from family, teachers, and peers—not only serves as an emotional buffer but also acts as a critical resource converter, transforming relational capital into concrete employment advantages.

Consequently, in addressing employment pressure, final-year students should recognize the supportive role of their social networks, focus on optimizing their use of social support, actively seek assistance during challenging times, stay informed about employment opportunities, and utilize government employment support policies and internships offered by employers. Final-year students can alleviate the burdens associated with employment pressure by continually enhancing their skills and seizing available employment opportunities. Educational institutions and policymakers are also encouraged to strengthen systemic support mechanisms—such as structured mentoring programs, peer support groups, and family-involved counseling—to foster a more resilient and resource-rich environment for students transitioning from school to work.

5.3.3 The Relationship between Employment Pressure and Psychological Resilience among Final-year Students in Preschool Education

In this study, the employment pressure experienced by final-year students majoring in preschool education was significantly negatively correlated with their psychological resilience ($r = -.309, p < .01$). These findings are consistent with the results reported by Fu (2013), Liu (2015), and Chen and Peng (2022), indicating that higher levels of psychological resilience are associated with lower perceived employment pressure among final-year students. Furthermore, Smith and Yang (2017) and He et al. (2018) suggest that psychological resilience may be a strong predictor of mental health. Individuals with higher levels of psychological resilience tend to experience more positive emotions and are more inclined to adopt constructive coping strategies when confronted with adverse life events, thereby mitigating their impact. Conversely, individuals with lower psychological resilience may find it more difficult to navigate adversities, often falling into feelings of helplessness and negative outcomes. Furthermore, enhancing psychological resilience can strengthen an individual's sense of self-efficacy, which serves as a critical factor in achieving career success.

According to Kumpfer's resilience framework theory, psychological resilience develops dynamically through person–environment interactions. In this context,

employment pressure acts as a risk factor, while resilience serves as a protective factor that operates through cognitive appraisal and coping processes. More resilient students tend to appraise employment challenges as manageable and mobilize internal and external resources more effectively. This aligns with socio-ecological theory, which emphasizes that resilience is shaped by multiple systemic levels—such as family, school, and culture—that jointly buffer the impact of employment stress on mental health.

Conversely, individuals with low psychological resilience may struggle to navigate adverse situations, leading to feelings of helplessness and negative outcomes. Enhanced psychological resilience can also bolster an individual's sense of self-efficacy, a crucial factor in achieving career success. Therefore, final-year students must cultivate psychological resilience by enhancing their self-efficacy, developing practical emotional regulation skills, maintaining an optimistic outlook, and leveraging social support systems to manage employment pressure effectively.

5.3.4 The Relationship between Social Support and Psychological Resilience among Final-year Students in Preschool Education

This study found a significant positive relationship between the social support and psychological resilience of final-year students in preschool education ($r = .306, p < .01$), which aligns with the research hypothesis and corroborates existing findings (Hou et al., 2023; Wang et al., 2019; Han et al., 2023). Social support is a crucial external protective factor for psychological resilience; higher levels of social support correlate with enhanced psychological resilience. Furthermore, social support has a significant influence on the formation and development of psychological resilience (Wu & Cai, 2023).

This relationship can be further understood through the lens of psychological resilience theory. Based on the “Person-Process-Context” framework proposed by Kumpfer in psychological resilience theory, social support serves as a key environmental protective factor that continuously interacts with individuals' internal resilience resources, jointly influencing the development process of psychological resilience. The theory posits that social support from mesosystems such as family and schools not only provides emotional and resource buffers for individuals coping with external pressures (e.g., employment challenges) but also, through interaction with individuals' cognitive, emotional, and behavioral factors, promotes the adoption of positive coping strategies. This facilitates the

enhancement, reconstruction, or maintenance of psychological resilience within the "person-environment" interaction process. Therefore, higher levels of social support enable individuals to more effectively mobilize internal and external resources in stressful situations, thereby fostering the natural development and strengthening of psychological resilience. This aligns with the core mechanism of dynamic integration between environmental factors and individual adaptation processes in the development of psychological resilience. Such findings underscore the critical role of strengthening social support systems as a practical pathway to enhance individual resilience in educational and counseling settings.

5.3.5 The Relationship between Social Support and Anxiety among Final-year Students in Preschool Education

This study found a significant negative correlation between social support and anxiety among final-year students in preschool education ($r = -.292, p < .01$), thereby validating the research hypothesis and aligning with existing literature (Mo, 2019; Mai et al., 2021). Previous research has indicated that social support serves as a crucial indicator of various mental health conditions (White, 2009; Zhang et al., 2018; Harandi et al., 2017) and is associated with an increased prevalence of generalized anxiety disorder (Liu, 2012).

This finding can be systematically explained by the Social Support Theory of Anxiety. This theory posits that social support serves as a key buffering factor in alleviating stress and anxiety, playing a particularly significant role during major life transitions. As final-year students majoring in preschool education navigate the shift from campus to the workplace, stressors such as inadequate job preparation and uncertain career prospects can easily trigger negative self-assessments of their capabilities and qualifications, thereby generating anxiety. Social support exerts its buffering effect through a dual-path mechanism: at the cognitive level, emotional care and informational feedback from support networks such as family and schools help individuals evaluate employment challenges more objectively, thereby reducing perceived threats; at the coping level, tangible support resources—such as career guidance, skills training, and opportunity referrals—enhance individuals' self-efficacy and problem-solving abilities, thus mitigating anxiety stemming from a perceived "lack of coping resources". Therefore, enhancing final-year students majoring in preschool education's perception of social support and constructing effective support networks not only helps alleviate their employment-related anxiety but also aligns

with the core mechanism of “support–adaptation–emotion regulation” within social support theory, providing a theoretical basis for targeted mental health education.

5.3.6 The Relationship between Psychological Resilience and Anxiety among Final-year Students in Preschool Education

This study found that the psychological resilience of final-year students in preschool education was significantly negatively correlated with anxiety ($r = -.227, p < .01$). Specifically, higher levels of psychological resilience were associated with lower anxiety levels, which aligns with existing research findings (Zhou, 2014; Liang et al., 2019) and supports the research hypothesis. Enhancing psychological resilience significantly promotes positive mental health, as research shows a strong correlation between the two (Gibbons et al., 2011; He et al., 2018; Ríos-Risquez et al., 2018), and it can help mitigate anxiety and depression (Zhou, 2021). Psychological resilience is also highly correlated with optimism (Daniel, 2015).

According to Kumpfer’s psychological resilience theory, resilience is defined as a dynamic psychological process through which individuals effectively adapt, recover, and even achieve positive growth when confronting stress, adversity, or challenges. The theory emphasizes that the development of resilience results from continuous interaction between internal individual factors—such as cognition, emotion, and self-efficacy—and external environmental resources, such as internship experiences and social support. For final-year students in preschool education who have completed at least five months of teaching internship, this practical experience not only enhances their pedagogical skills and clarifies career directions but, more importantly, strengthens their self-efficacy through the accumulation of successful experiences. The belief of “I can cope” is regarded within the resilience framework as a key internal protective factor, which enables individuals to adopt more adaptive cognitive appraisals when facing employment pressure—that is, they tend to perceive challenges as manageable rather than threatening, thereby effectively buffering the onset of anxiety. Furthermore, the emotional regulation capacity, optimistic disposition, and interpersonal skills inherent in resilience help individuals maintain functional balance and mobilize supportive resources in stressful situations, forming a virtuous cycle of “resilience enhancement – stress adaptation – anxiety reduction”. Therefore, systematically improving psychological resilience by cultivating optimism, enhancing emotional regulation, and strengthening interpersonal abilities represents a crucial pathway to alleviating employment

anxiety among final-year students in preschool education from the perspective of internal resources. This aligns with the core proposition of resilience theory, which highlights how individuals achieve adaptation and growth through ongoing interaction with their environment.

5.4 The Mediating Role of Social Support

The results of this study indicate that employment pressure, social support, and anxiety are significantly correlated. Specifically, higher levels of employment pressure are associated with lower levels of social support and increased anxiety. Furthermore, the mediation analysis reveals that social support partially mediates the relationship between employment pressure and anxiety, accounting for 11.45% of the variance in anxiety levels induced by employment pressure.

Theoretically, this mediating role is best understood by integrating the buffering effect model (Cohen & Wills, 1985) with Lazarus's transactional theory (1984). Support mitigates stress by operating within the cognitive appraisal process: it strengthens secondary appraisal by enhancing the perception of available resources ("I have help"), thereby reducing the threat significance of the pressure and the ensuing anxiety. Thus, support actively reshapes cognitive evaluation.

However, positioning social support as the sole mediator carries inherent limitations. Firstly, it treats the process as a "black box", failing to fully elucidate how external resources are translated into coping efficacy. Secondly, it neglects the role of stable personal traits, unable to explain why individuals with similar support levels exhibit different anxiety outcomes. This points to the omission of key internal factors, such as psychological resilience, which determine how support is perceived and utilized (Masten, 2001).

These limitations underscore the need for a more integrative model. Therefore, this study moves beyond examining social support in isolation and proposes a chain mediation model. This model posits that social support (external resource) first nurtures psychological resilience (internal capacity), which then becomes the more proximal agent in stress appraisal and anxiety reduction, thereby offering a sequential and comprehensive account of the adaptation process.

5.5 The Mediating Role of Psychological Resilience

The results of this study indicate a significant correlation between employment pressure, psychological resilience, and anxiety. Specifically, higher levels of employment pressure are associated with lower psychological resilience and increased severity of anxiety. The structural equation model analysis revealed a significant mediating effect of psychological resilience on the relationship between employment pressure and anxiety levels. Notably, it was found that 5.165% of the variation in anxiety levels induced by employment pressure is mediated by psychological resilience.

This mediating role is best explained through Lazarus and Folkman's (1984) transactional theory of stress. Resilience functions as a critical internal filter within the cognitive appraisal process. Individuals with higher resilience are more likely to appraise a stressor (e.g., employment pressure) as a challenge rather than a threat (primary appraisal). More crucially, during secondary appraisal, they possess a stronger belief in their personal coping competencies, which reduces the perceived mismatch between environmental demands and their own capabilities, thereby attenuating anxiety.

While this explains how resilience operates, it inevitably raises a deeper theoretical question: From where does this critical capacity originate, and how is it sustained? The transactional model, focused on the proximal appraisal process, offers limited insight into the developmental origins of resilience. This directs our inquiry toward the broader ecological and social contexts that cultivate such personal resources.

Consequently, a model relying solely on psychological resilience as an independent mediator presents a significant theoretical shortcoming. It risks portraying resilience as a static, decontextualized personal trait, thereby underestimating the fundamental role of environmental and social nourishment in its development and maintenance. This perspective cannot adequately explain why individuals in similar stressful situations develop differing levels of resilience. By overemphasizing internal attributes, it may inadvertently overstate personal responsibility for coping while obscuring the structural and relational resources essential for fostering resilience in the first place.

These limitations underscore the necessity of moving beyond a single-mediator framework. Therefore, the present study proposes and tests a chain mediation model that integrates both environmental and personal factors. This model posits that social support (the

environmental resource) serves as a vital antecedent that nurtures and sustains psychological resilience (the personal capacity), which in turn acts as the more proximal agent in the cognitive appraisal of stress and the reduction of anxiety. This sequential pathway provides a more ecologically valid and comprehensive account of the adaptation process.

5.6 The Chain Mediating Effect between Social Support and Psychological Resilience

Based on the social bio-ecological theory and the social-psychological model perspective, this study identifies two significant variables: social support (external/environmental factors) (Zhou & Lin, 2016) and psychological resilience (internal/personal factors) (Oishi & Roth, 2009) as mediating variables. This chained mediation has also yielded similar results in some studies (Sun, 2023; Han et al., 2023; Wu & Cai, 2023). The chain mediation analysis confirms that employment pressure influences anxiety both directly and indirectly through this serial pathway. Crucially, this empirical finding can be powerfully elucidated by Lazarus and Folkman's (1984) transactional theory of stress, which allows us to unpack the specific cognitive and emotional mechanisms underlying this ecological interaction.

Within the transactional framework, the chain mediation reveals a dynamic appraisal process. First, social support operates during the secondary appraisal stage by bolstering the individual's perception that effective external resources are available ("I have help"), thereby initially buffering the threat appraisal of employment pressure. However, the mere presence of support is insufficient. Its translation into effective coping and emotional regulation is critically contingent upon psychological resilience. Resilience enables the positive reappraisal of the stressor, sustains self-efficacy in the face of challenges, and facilitates the strategic mobilization of both internal (personal skills) and external (social support) assets. Therefore, the pathway is sequential: social support enhances the perceived resource pool, which is then optimally utilized and acted upon through the filter of psychological resilience, leading to reduced anxiety.

This model provides a micro-psychological account of the macro-ecological principle that person-environment interactions drive adaptation (Bronfenbrenner, 2013). It demonstrates how environmental provisions (support) are cognitively processed and transformed by personal attributes (resilience) to shape emotional outcomes. Consequently,

interventions for preschool education final-year students should be dual-focused: (1) systematically enriching the quality and accessibility of social support (e.g., through structured mentoring, peer networks), and (2) explicitly cultivating psychological resilience (e.g., via cognitive-behavioral training in reappraisal and self-efficacy), thereby ensuring that external resources are effectively converted into durable personal coping strength.

5.7 Limitations

This study synthesizes existing research findings while integrating the development of preschool education in China with the current population birth rate. It focuses on preschool education final-year students, examining their employment pressure and anxiety, and draws meaningful conclusions that hold significant implications for the mental health of these students. Overall, the study has successfully met its research objectives. However, it acknowledges limitations due to research time, conditions, and level constraints.

(1) Regarding sample representativeness, the subjects were confined to the Weifang University of Technology, which restricts the generalizability of the findings and limits the study's external validity. Additionally, the gender ratio among the subjects was not balanced, reflecting the disparity in the male-to-female ratio within preschool education programs.

(2) The study's cross-sectional design presents limitations. By employing this research approach, the study explores the relationships among employment pressure, social support, psychological resilience, and anxiety. However, it does not account for potential changes in these variables over time, making it challenging to establish causal relationships.

(3) There is the challenge of selecting model variables. Researchers typically design theoretical models based on the study's objectives, which can result in the incomplete consideration of potential factors. This study selected social support and psychological resilience based on the theory of the interaction between internal and external factors. However, drawing on ecological systems theory, a broader range of research variables could be identified to investigate further the anxiety mechanisms affecting preschool education final-year students.

5.8 Recommendations for Further Research

With the advancement of China's economy and society, the government and families have increasingly prioritized preschool education. To enhance the quality of preschool education, it is essential to first address the development of the teaching staff, making the pre-service training of preschool education students in colleges and universities critically important. Focusing on the mental health education of these students can significantly enhance the mental well-being of future kindergarten teachers, which in turn positively impacts the mental health development of young children. This study constructs a theoretical model to explore methods for alleviating the anxiety experienced by preschool education final-year students. However, due to limitations in article length, many aspects of this research remain unaddressed and warrant further investigation in subsequent studies.

(1) A broader range of research subjects can be selected. It is advisable to include participants from colleges and universities with preschool education majors in various cities across Shandong Province; if funding permits, subjects from different provinces nationwide could also be considered. The conclusions are more universally applicable when a wider range of subjects is selected. Additionally, efforts should be made to achieve a balanced ratio of male and female students to investigate better the differences in employment pressure and anxiety experienced by students of different genders within preschool education majors.

(2) A longitudinal research design could be implemented in future studies, such as measuring anxiety levels at the beginning and end of two different semesters during the final academic year of students. By comparing sample data collected at multiple time points, researchers can ascertain the changes in students' anxiety levels resulting from employment pressure during their last year. Furthermore, experimental research methods may also be employed. Prior to the experiment, the anxiety levels of students in both the experimental and control groups are assessed. Subsequently, the head teacher of the experimental group provides employment guidance education three times a month. In contrast, the head teacher of the control group can focus solely on routine class management. Finally, the anxiety levels of both groups are measured again and compared, allowing for the identification of the causal relationship between employment pressure and anxiety.

(3) Future studies should include additional variables to investigate the influence of factors such as the educational environment, the degree of home-school cooperation, peer relationships, the employment outlook of peer groups, parental work stress, media exposure,

and current preschool education policies on anxiety among preschool education students. This approach facilitates a comprehensive and effective strategy for alleviating anxiety and promoting mental health.

5.9 Implications

The implications of this study are introduced from four aspects: theoretical implication, research implication, practical implication, and policy implication. These will be discussed in detail below, highlighting their respective contributions to the field.

5.9.1 Theoretical Implication

Previous research on the impact of employment pressure on anxiety has often focused on specific variables, such as psychological resilience and coping style, through the lens of positive psychology. This study is grounded in the interaction theory of internal and external factors, considering social support as an environmental factor and psychological resilience as a key internal factor. The selection of variables was somewhat arbitrary, leading to the construction of a chain mediation model. This approach facilitates a shift from the traditional “monistic” perspective to a “dual” or “multiple” perspective. Testing the chain mediation model enables a more comprehensive exploration of the mechanisms by which employment pressure influences anxiety.

5.9.2 Research Implication

While previous research has examined the impact of employment pressure on anxiety, there has been limited focus on preschool education final-year students, particularly regarding the relationships among employment pressure, psychological resilience, social support, and anxiety in this population. This study explicitly targets final-year students from preschool education majors, providing a more focused analysis of this student group.

It introduces two mediating variables: social support and psychological resilience, and constructs a chain mediation model to explore the intricate mechanisms through which employment pressure affects anxiety. Understanding this impact mechanism benefits individual preschool education students, their parents, and educators and may help alleviate the anxiety experienced by preschool education final-year students due to employment

pressures. This article also analyzes the current status and variations in employment pressure, psychological resilience, social support, and anxiety among preschool education final-year students, contributing to the research on related demographic variables.

5.9.3 Practical Implication

According to the research results, this study offers two suggestions from the perspectives of “relieving employment pressure and anxiety” and “improving social support and psychological resilience”. In the two suggestions, the specific measures are written from the four perspectives of students themselves, teachers, schools, and parents. The detailed recommendations are presented as follows.

5.9.3.1 Relieving Employment Pressure and Anxiety

First, final-year students majoring in preschool education should clarify their academic plans and change their employment concepts. Preparation is essential for success. Students in preschool education should proactively plan their studies, identify their future employment direction, and prepare for job searches in advance to mitigate anxiety and avoid missing valuable opportunities. (1) It is crucial to establish clear academic goals, stay informed about trends in the field, and engage in thorough preparation. Additionally, students should actively participate in relevant activities to enhance their skills and professional identity as they prepare for future employment. (2) Students should maximize their winter and summer vacations by pursuing part-time jobs related to their field of study. Engaging in relevant part-time work helps accumulate work experience and provides insights into actual market demands, alleviates fears of the unknown, generates a personal income, and aids in financial preparation, thereby reducing employment-related stress. (3) While preparing for employment, it is essential to shift their employment perspective. Final-year students should not solely focus on passing the examination for public kindergarten positions but recognize the diverse career opportunities available to preschool education majors. Finally, it is expected to experience employment pressure and anxiety in the current job market. Final-year students can benefit from participating in employment guidance courses to address and adjust irrational employment beliefs, joining peer support groups to find constructive outlets for stress, and seeking assistance from the school’s psychological counseling center.

Second, relevant training should be provided to front-line educators to enhance their

ability to intervene throughout the process. Educators should stay informed about students' employment psychology, with a focus on strengthening daily early warning systems. Class monitors, members of the psychological committee, and dormitory heads can establish a proactive early warning network to achieve this goal. Regular questionnaire surveys, interviews, and other activities should be conducted to monitor each student's employment psychology and identify any changes promptly. When students experience employment-related pressure and anxiety, they must report these feelings promptly to their class teacher or educational tutor through the established early warning network. The student's circumstances should be documented and reported to the school administration if necessary. Subsequently, the class teacher, educational tutor, and full-time psychological counselor can collaborate to analyze the specific issues and assist medical students in overcoming negative emotions as quickly as possible. Furthermore, the class teacher or educational tutor should enhance communication between home and school by routinely organizing online employment-themed activities for students' parents. Such activities help convey accurate professional values and career choices to parents, thereby fostering a synergistic relationship between home and school.

Third, schools should establish a complete career planning mechanism. For instance, from the enrollment stage, pertinent information regarding all majors offered by the institution, including program structures and development prospects, should be prominently displayed on the school's official website. Once students are enrolled, full-time faculty should conduct career planning courses tailored to their needs. Additionally, career planning-related activities should be organized regularly each semester to help students understand and engage with career planning at various stages of their development. Organize various practical activities related to coping with employment stress. For example, hold a mock job-hunting competition with sections on resume writing, interview skills, and workplace scenario simulations. Before internships, relevant career development information should be compiled and made accessible to students, who should be encouraged to identify existing challenges through practical experience during their internships, followed by discussions with faculty upon completion. Furthermore, specialized job search guidance should be provided for graduating classes to facilitate students' transition into the workforce. Moreover, schools should enhance collaboration with relevant entities, such as kindergartens and early childhood education institutions. By fostering direct interactions between students and enterprises, a constructive exchange can be established, aiding students in refining their

career values and recognizing the strengths of their majors while offering businesses a direct avenue to identify potential talent, thereby creating a mutually beneficial situation.

Fourth, parents should lower their expectations and look at their children's employment issues rationally. An old Chinese saying expresses the heartfelt aspirations of parents: "I hope my son will become a dragon and my daughter will become a phoenix". However, such high expectations can create a high-pressure environment for parents and their children, leading to heightened sensitivity, increased suspicion, and stricter self-imposed standards. When children fail to meet these lofty goals, they may experience significant emotional distress. It is essential to recognize that employment constitutes only one aspect of life; personal growth and development are equally vital. Children must engage in continuous learning and gain experience in the workplace to discover their interests and areas of expertise. Parents should consider moderating their expectations, encouraging their children to explore and experiment, providing them with more excellent choices and opportunities for development, and assisting them in identifying a career path that aligns with their unique strengths.

5.9.3.2 Improving Social Support and Psychological Resilience

First, students majoring in preschool education should actively participate in social activities and seek professional help. Students often share common secrets, form friendships with peers of similar ages, and cultivate closer relationships. As friends, it is essential to encourage final-year students by patiently listening to their job-hunting challenges, providing timely encouragement, and offering suggestions to help them navigate various psychological barriers associated with the job search. When employment pressure and anxiety become overwhelming, seeking help from professional institutions or individuals is crucial. For instance, when encountering difficulties in life or academics, students can contact their class teacher or educational tutor, consult a psychological counselor through the school's counseling center, or seek assistance from off-campus organizations or institutions. In summary, when faced with seemingly insurmountable problems, seeking help can yield positive results more swiftly than attempting to resolve the issues alone.

Second, front-line educators should seize educational opportunities to improve the mental health of preschool education students. Preschool education students often face challenges in their learning due to the diverse skills they are required to acquire, which can lead to an increased fear of learning. Front-line educators should capitalize on the

opportunity to foster psychological resilience in these students by guiding them through the process of encountering, perceiving, and adapting to challenges. Creating an inclusive and error-tolerant classroom atmosphere is essential, as it can significantly enhance preschool education students' problem-solving and stress-resistance abilities through various activities. Furthermore, daily teaching practices should emphasize cultivating a growth mindset among preschool education students to bolster their sense of self-efficacy.

Third, schools should attach great importance to employment guidance and establish a professional support team. (1) Schools should offer relevant employment guidance courses to help students acquire essential skills and gain experience for job interviews. They should also raise awareness of channels for rights protection and educate students on pertinent laws and regulations. Actively recommending professional-related employment information can help students establish information channels for job opportunities. Additionally, facilitating exchanges with experienced seniors can help students develop psychological strategies for employment, enabling them to take preventive measures against excessive frustration and psychological pressure during the job search process. Schools should establish a comprehensive professional support team operating at four levels: class, department, college, and school. This team would assist students in navigating various challenges they encounter in life and study while promoting healthy physical and mental development. (2) Schools should organize annual training sessions for class teachers, educational mentors, and leaders involved in teaching at the college and school levels. The training should encompass students' academic performance and mental health, ensuring timely and effective support when students face difficulties and fostering a robust support system at the school level.

Fourth, Parents should respect and support their children's decisions, providing spiritual and material encouragement. The pressure on final-year students is already quite significant. Parents should offer their children ample understanding and support during their job search while respecting their choices. It is essential for parents to monitor their children's progress in finding employment and to provide timely psychological support when their children encounter setbacks. Emotional conversations should begin with genuine empathy, allowing parents to connect deeply with their children and thereby maximize the effectiveness of the family support system in addressing challenges. Additionally, providing appropriate material support can help final-year students navigate the initial economic difficulties associated with job searching, enabling them to take the initiative and actively

engage in the employment market. A strong parent-child relationship can provide students with valuable social support, enhancing their psychological resilience and better equipping them to overcome life's challenges.

5.9.4 Policy Implication

5.9.4.1 Education Policy Level

The preschool education curriculum shall incorporate occupational resilience training modules, utilizing scenario simulations and adversity education to enhance psychological resilience. Workplace adaptability workshops shall be established to help students navigate employment uncertainties (e.g., contractual/non-staff positions).

A three-phase social support network ("enrollment-internship-employment") shall be implemented. The enrollment phase will feature a career planning mentorship system, the internship phase will establish school-enterprise collaborative psychological counseling stations, and the employment phase will create an alums resource mutual aid platform.

5.9.4.2 Mental Health Intervention Level

Early screening for high-stress populations in employment settings shall be conducted, with brief, focused intervention protocols designed to improve cognitive flexibility (addressing occupational biases) and emotional regulation (managing high-stress scenarios). These interventions specifically target challenges such as gender stereotypes against male preschool teachers and difficult parent-teacher communication.

Precision social support mechanisms will be implemented for students who lack adequate family support. Such mechanisms include intergenerational communication bridge services to facilitate parental understanding of the value of preschool education, as well as a tripartite support network comprising mentors (experienced teachers), senior peers (alums), and peer supporters.

5.9.4.3 Government Policy Level

The industry employment ecology shall be improved through dynamic staffing quota adjustment mechanisms responsive to fluctuations in the birth rate, along with preschool education-specific employment subsidies, such as tuition reimbursement for service in

remote areas.

Career development pathways will be constructed through cross-sectoral qualification recognition systems (preschool-early intervention-special education) and pilot programs for emerging occupational models, including integrated childcare education and STEM-focused preschool teaching.

5.10 Conclusion

This study, grounded in the buffering effect model, investigates how employment pressure influences anxiety among final-year students majoring in preschool education, with particular emphasis on the mediating roles of social support and psychological resilience. The findings indicate that employment pressure has both direct and indirect effects on anxiety. Indirectly, it impacts anxiety through the mediating effects of social support and psychological resilience, thereby confirming the buffering roles of these two factors.

By accurately assessing the levels of employment pressure and anxiety among this specific group, the study provides a relatively comprehensive understanding of their mental health status. These results have important educational implications. In addition to directly addressing employment pressure, educators can alleviate students' anxiety by enhancing their access to social support and fostering their psychological resilience. For instance, offering employment guidance courses, encouraging collaboration among educators, class teachers, and parents, and helping students develop practical skills to boost their employment self-confidence can be effective strategies.

However, several limitations should be acknowledged, such as the representativeness of the sample, the constraints of the cross-sectional research design, and challenges related to variable selection within the model. Future research should further explore other possible mediating or moderating variables and adopt longitudinal or experimental approaches to provide a more comprehensive understanding of how to protect students' mental health from multiple dimensions and through various interventions.

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APPENDICES

Appendix 1: Journal Publications

1. **Shi, J., & Siok Ping, V.** (2025). The impact of social support on anxiety among college students majoring in preschool education: The mediating role of psychological resilience. *Environment and Social Psychology*, 10(4), ESP-3391.
<https://doi.org/10.59429/esp.v10i4.3391>
2. **Shi, J., & Voon, S.** (2026). A Bibliometric and Visualization Analysis of Social Support among College Students: Insights from the Web of Science Core Collection. *International Journal of Academic Research in Business and Social Sciences*, 16(3), 1473–1493.

Appendix 2:
Summary of Charts for the Participant Demographic Information Section

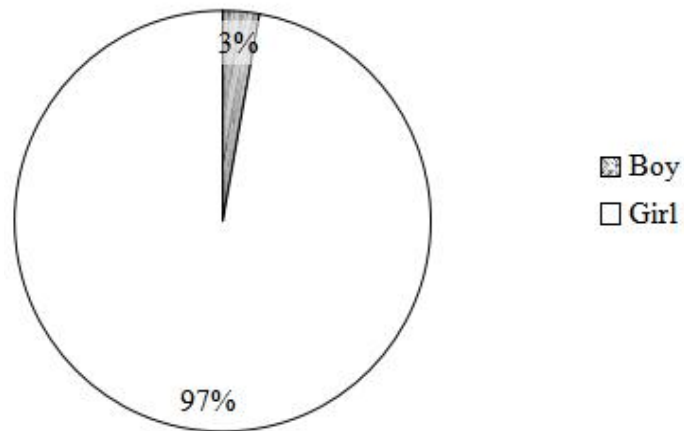


Figure 1: Bar Chart of Participant Gender Distribution by Count

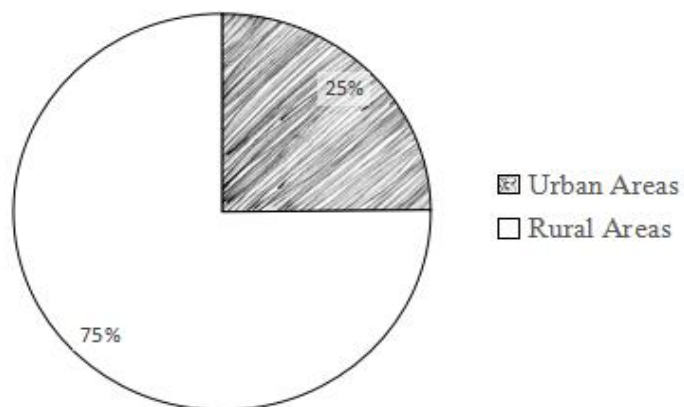


Figure 2: Bar Chart of Participant' Place of Origin by Count

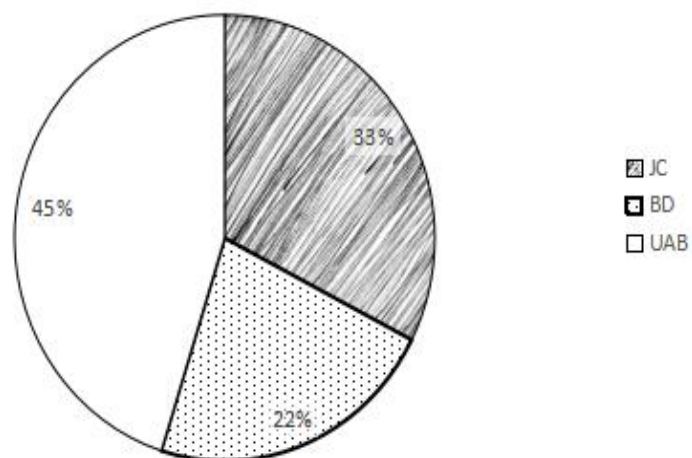


Figure 3: Bar Chart of Participants' Education Level by Count

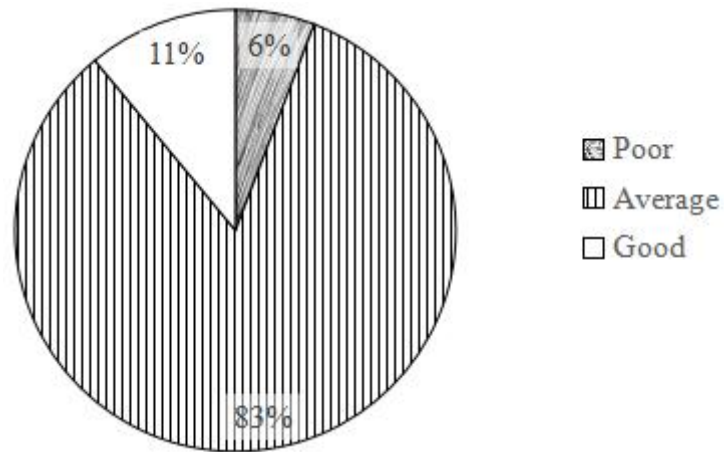


Figure 4: Bar Chart of Participants' Family Income by Count

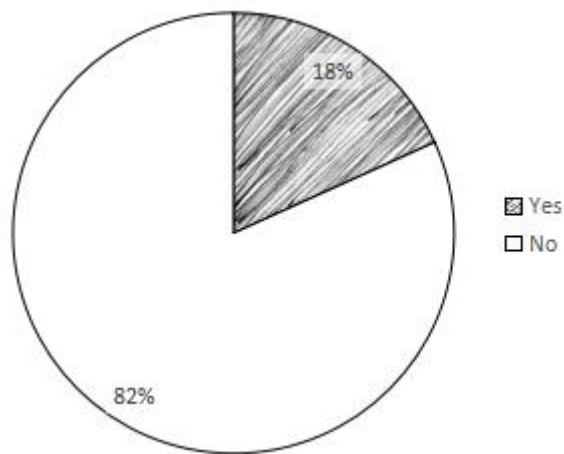


Figure 5: Bar Chart of Participants' Only Child Status by Count

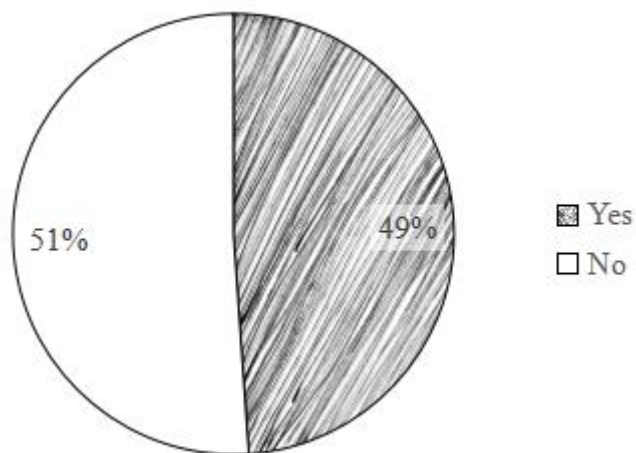


Figure 6: Bar Chart of Participants' Participation in Higher Education Examinations by

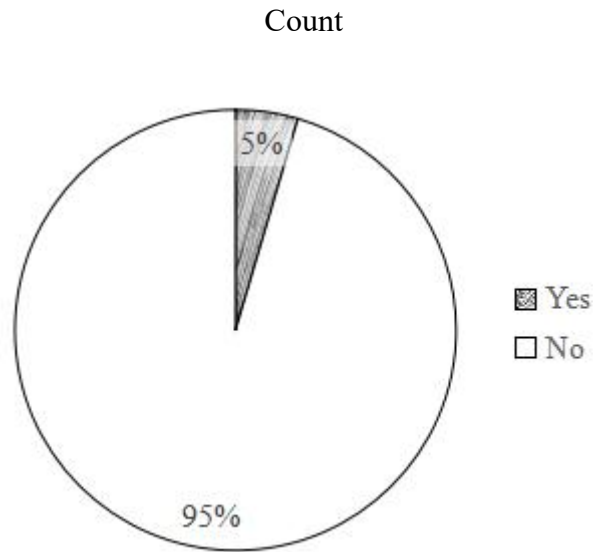


Figure 7: Bar Chart of Participant'' Employment Status by Count

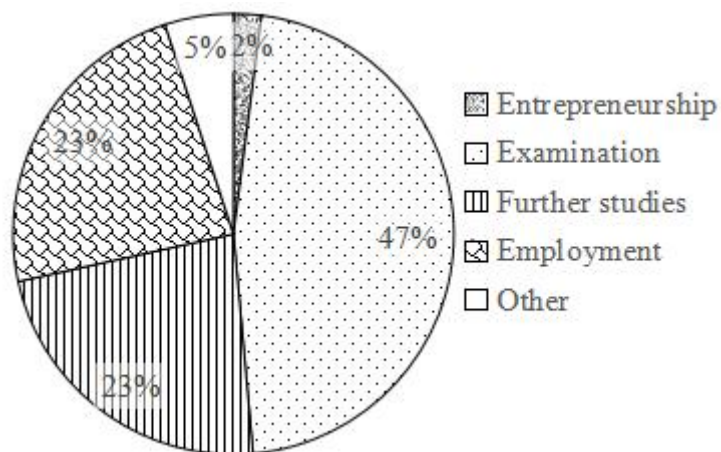


Figure 8: Bar Chart of Participants' Participation in Higher Education Examinations by

Count

Appendix 3: Questionnaires

Thank you for taking the time to complete this questionnaire. Your responses, which should accurately reflect your situation, will assist us in understanding the psychological state of graduates from the preschool education major as they confront employment pressure. There are no right or wrong answers; no good or bad response.

Please respond based on your **actual circumstances**, as this is crucial for our study.
We appreciate your support and cooperation.

Please fill in the information in the blank or type “√” directly on the number that suits you.

1. Your gender: (1) Male (2) Female
2. Your place of origin: (1) Urban Areas (2) Rural Areas
3. Your educational level: (1) Junior college (2) Undergraduate
(3) Upgrade from junior college student to university student
4. Your family income status: (1) Poor (2) Generally (3) Good
5. Are you the only child: (1) Yes (2) No
6. Have you applied for the higher degree examination this year: (1) Yes (2) No
7. Your employment status: (1) Yes (2) No
8. Your future employment options:
(1) Entrepreneurship (2) Examination (3) Further studies (4) Employment (5) Other

2. Employment Pressure Scale for College Students (Zhang & Qiu, 2007)

Please carefully evaluate each sentence to assess how well the description aligns with your situation. Use a scale from 1 to 5 to indicate your assessment, where 1 represents “complete inconsistency”, 2 indicates “relative inconsistency”, 3 denotes “uncertainty”, 4 signifies “consistency”, and 5 means “total consistency”. Thoroughly review each topic before responding. You may denote your answers by typing “√” next to the corresponding answer code.					
1. As I contemplate graduation and employment, I feel a sense of apprehension.	1	2	3	4	5
2. The challenges associated with job hunting often lead to feelings of unhappiness.	1	2	3	4	5
3. I have not succeeded at job fairs.	1	2	3	4	5
4. While searching for a job, I frequently find myself in a daze in my dormitory.	1	2	3	4	5
5. The thought of potentially not securing a job fills me with anxiety.	1	2	3	4	5
6. The job search leaves me feeling disoriented.	1	2	3	4	5
7. I experience discomfort when I hear that someone else has found employment.	1	2	3	4	5
8. Before interviews, my heart races, and my hands and feet tremble.	1	2	3	4	5
9. I struggle to sleep well during my job search.	1	2	3	4	5
10. Despite knowing that everyone else is also seeking employment, I often feel isolated.	1	2	3	4	5
11. While job hunting, I tend to go out for drinks and conversations with my classmates.	1	2	3	4	5
12. Playing video games allows me to forget the pressures of job searching temporarily.	1	2	3	4	5
13. The job search has been challenging, leading me to skip classes frequently.	1	2	3	4	5
14. I find myself feeling more fatigued than I did previously.	1	2	3	4	5
15. Recently, during my job search, I have experienced gastrointestinal issues.	1	2	3	4	5
16. The difficulties inherent in finding a job often provoke feelings of anger.	1	2	3	4	5
17. When job hunting, I struggle to engage with many interests.	1	2	3	4	5

18. I feel increasingly bored while searching for employment.	1	2	3	4	5
19. The job search exacerbates my restlessness.	1	2	3	4	5
20. When faced with setbacks in my job search, I often feel like throwing things or expressing frustration.	1	2	3	4	5
21. I hold a very pessimistic view of the current employment landscape.	1	2	3	4	5
22. Throughout my job search, I have either lost or gained weight.	1	2	3	4	5
23. Confronted with employment challenges, I find it psychologically difficult to articulate my feelings of depression.	1	2	3	4	5
24. During my job search, I frequently experience a sense of helplessness.	1	2	3	4	5
25. I harbor fears about potential conflicts within the workplace.	1	2	3	4	5
26. The challenges of finding a job hinder my ability to concentrate on essential tasks.	1	2	3	4	5

3. Psychological Resilience Scale(Yu & Zhang,2007)

Please indicate your level of agreement with the following statements based on your experiences over the past month. If a specific situation has not occurred, please select the “Never” option. The response scale is as follows: 1 represents “never”, 2 indicates “rarely”, 3 signifies “sometimes”, 4 denotes “often”, and 5 means “always”. Choose the options that best reflect your feelings.					
1. I am capable of adapting to changes.	1	2	3	4	5
2. When under pressure, I have at least one close and reliable person who can assist me.	1	2	3	4	5
3. Occasionally, fate or chance can provide support when I am unable to resolve my problems.	1	2	3	4	5
4. Regardless of the circumstances in my life, I possess the ability to manage them.	1	2	3	4	5
5. My past successes instill confidence in my ability to confront new challenges and difficulties.	1	2	3	4	5
6. When faced with problems, I strive to find the humorous aspects of the situation.	1	2	3	4	5
7. My training experiences have contributed to my resilience.	1	2	3	4	5
8. I can readily adjust following illness, injury, or hardship.	1	2	3	4	5
9. I believe that there is a cause for everything, whether positive or negative.	1	2	3	4	5
10. Regardless of the outcome, I will exert my utmost effort.	1	2	3	4	5
11. Even in the face of obstacles, I maintain belief in my ability to achieve my goals.	1	2	3	4	5
12. Although situations may appear hopeless, I remain persistent and refuse to give up.	1	2	3	4	5
13. In times of pressure or crisis, I know where to seek assistance.	1	2	3	4	5
14. Under pressure, I am capable of maintaining focus and critical thinking.	1	2	3	4	5
15. I prefer to take the initiative in problem-solving rather than allowing others to dictate the entire process.	1	2	3	4	5
16. I do not easily succumb to failure.	1	2	3	4	5

17. I consider myself a strong individual when confronting life's challenges and difficulties.	1	2	3	4	5
18. If necessary, I would make an unwelcome or difficult decision to influence others positively.	1	2	3	4	5
19. I have learned to manage unpleasant or painful emotions, such as sadness, fear, and anger.	1	2	3	4	5
20. When navigating complex life issues, I sometimes rely on my intuition.	1	2	3	4	5
21. I have established clear goals in my life.	1	2	3	4	5
22. I believe I have control over my life.	1	2	3	4	5
23. I enjoy taking on challenges.	1	2	3	4	5
24. No matter the obstacles I face in life, I will strive to achieve my goals.	1	2	3	4	5
25. I take pride in my accomplishments.	1	2	3	4	5

4.Social Support Rating Scale (Xiao, 1994)

The following questions reflect the support you receive within your social environment. Please respond to each question based on your actual circumstances by marking “√” next to the appropriate option. Thank you!

1. How many close friends can you rely on for support and assistance? (Please select only one option)

(1) Neither one has

(2) 1-2

(3) 3-5

(4) 6 or more

2. Over the past year, your living situation has been: (Please select only one option)

(1) Stay away from the family and live alone in a room

(2) Residence often changes, most of the time living with strangers

(3) Stay with your classmates or friends

(4) Stay with your family

3. Regarding your relationship with your dormitory mates: (Please select only one option)

(1) No mutual concern

(2) Some concern regarding difficulties

(3) A few dorm mates show significant concern for you

(4) Most dorm mates are concerned about your well-being

4. Concerning your interactions with classmates: (Please select only one option)

(1) No mutual concern, merely acknowledging each other

(2) Some concern when facing difficulties

(3) A few classmates show considerable concern for you

(4) Most classmates demonstrate significant concern for you

5. Support and care received from family members (delimit “√” in the appropriate box)

	1: None Support	2: Few Support	3: Average Support	4: Full Support
A. Sweetheart	1	2	3	4
B. Father and Mother	1	2	3	4
C. Brothers and Sisters	1	2	3	4
D. Other Members (such as the sister-in-law)	1	2	3	4

6. In the past, when faced with difficult situations, the sources of financial support and assistance in solving practical problems were as follows:

(1) has no source (2) the following sources (multiple options)

A.Lovers B. Parents and other family C. Friend D.Relative E. Classmate

F. Teacher G.Official or semi-official organizations (e. g. party organizations)

H. Unofficial Organizations (e.g., societies, religious organizations)

I. Other (please listed)

7. In the past, when you encountered emergencies, the sources of comfort and attention were:

(1) has no source (2) the following sources (multiple options)

A.Lovers B. Parents and other family C. Friend D.Relative E. Classmate

F. Teacher G.Official or semi-official organizations (e. g. party organizations)

H. Unofficial Organizations (e.g., societies, religious organizations)

I. Other (please listed)

8. How do you discuss your troubles? (Choose only one option)

(1) Never discuss with anyone

(2) Only share with one or two very close individuals

(3) If a friend inquires, you will respond

(4) Actively communicate your troubles to seek support and understanding.

9. How do you seek help when faced with difficulties? (Choose only one option)

(1) Rely solely on yourself; do not accept help from others

(2) Rarely request assistance from others

(3) Occasionally ask others for help

(4) Frequently seek assistance from family, friends, and organizations.

10. Regarding activities organized by various organizations (such as political parties, religious groups, student unions, classes, colleges, etc.), how do you participate? (Choose only one option)

(1) Never attend

(2) Occasionally attend

(3) Often attend

(4) Actively participate and engage in activities

5.Zung's Self-Rating Anxiety Scale (Zung, 1971)

This rating scale consists of 20 items. Please select the response that best reflects your situation based on your feelings over the past week. Indicate your choice by marking “√” under the corresponding score in the range of 1 to 4. The scoring is defined as follows: 1 indicates “none or a little of the time”, 2 represents “some of the time”, 3 signifies “a good part of the time”, and 4 denotes “most of the time”.

1. I am experiencing heightened levels of nervousness and anxiety.	1	2	3	4
2. I feel an irrational sense of fear.	1	2	3	4
3. I become upset quickly or experience feelings of panic.	1	2	3	4
4. I have the sensation of falling apart and losing control.	1	2	3	4
5. I perceive that everything is fine and that nothing adverse will occur.	1	2	3	4
6. My arms and legs tremble and shake.	1	2	3	4
7. I frequently suffer from headaches, as well as neck and back pain.	1	2	3	4
8. I feel weak and easily fatigued.	1	2	3	4
9. I experience a sense of calm and can remain still with ease.	1	2	3	4
10. I can feel my heart racing.	1	2	3	4
11. I often experience episodes of dizziness.	1	2	3	4
12. I have fainting spells or sensations that suggest fainting.	1	2	3	4
13. I can breathe in and out without difficulty.	1	2	3	4
14. I experience numbness and tingling sensations in my fingers and toes.	1	2	3	4
15. I frequently experience stomachaches or indigestion.	1	2	3	4
16. I frequently need to empty my bladder.	1	2	3	4
17. My hands are typically dry and warm.	1	2	3	4
18. My face often becomes hot and flushed.	1	2	3	4
19. I fall asleep easily and get a good night's rest.	1	2	3	4
20. I have nightmares.	1	2	3	4

Thank you again for your cooperation.I wish you a bright future !

Questionnaire (Chinese version)

亲爱的同学：

您好！感谢您花费时间完成这一问卷。您对这一问卷与您实际情况符合的
回答，有助于我们真实地了解有关学前教育专业应届毕业生面对就业压力时的心理状
况，感谢您对科学研究做出的贡献！这一问卷中所有答案都没有对错、好坏、高低
之分，与您的生活、学习和工作没有任何利害关系。

问卷采用**匿名方式**，并且对您的回答我们会**绝对保密**。填写本问卷即表示您已
理解本研究的目的，并自愿同意参与。

请您根据自己的**实际情况填写**，这对本研究很重要！衷心感谢您的支持和合
作！

一、个人情况调查表

请您在空白处填写各项情况，或直接在适合自己情况的编号上打“√”。

- 1.您的性别：①男 ②女
- 2.您的生源地：①城镇 ②农村
- 3.您的学历层次：①专科 ②本科 ③专升本
- 4.您的家庭收入状态：①较差 ②一般 ③良好
- 5.您是否为独生子女？①是 ②否
- 6.您今年是否报考了更高学历考试？①是 ②否
- 7.您是否已经找到工作？①是 ②否
- 8.毕业后你选择：①创业 ②考编 ③升学 ④就业 ⑤其他

二、就业压力量表 (Zhang & Qiu, 2007)

序号	请认真阅读下面的每个句子，判断句中的描述符合您情况的程度。请选择 1-5 来表示您认为的符合程度，数字越大表示越符合。请您仔细阅读每道题目。在相应的答案代码上打“√”即可。	完全不符合	比较不符合	不确定	基本符合	完全符合
1	想到毕业、就业，我就忧心忡忡	1	2	3	4	5
2	找工作的烦心事常常让我茶饭不香	1	2	3	4	5
3	一次一次招聘会上的失败让我心灰意冷	1	2	3	4	5
4	找工作没有着落，我经常在宿舍发呆	1	2	3	4	5
5	想到可能找不到工作，我就焦虑不安	1	2	3	4	5
6	找工作的事搞得我头昏脑胀	1	2	3	4	5
7	听到别人已经找到工作，我心里会不舒服	1	2	3	4	5
8	面试前，我会心跳极速，手脚发抖	1	2	3	4	5
9	找工作这段时间，我睡眠状况不好	1	2	3	4	5
10	尽管同样大家都在找工作，可我经常会有孤独感	1	2	3	4	5
11	找工作这段时间，我常常会同同学出去喝酒聊天	1	2	3	4	5
12	打游戏可以让我暂时忘却找工作带来的不愉快	1	2	3	4	5
13	找工作不顺利，我经常逃课	1	2	3	4	5
14	找工作这段时间，我比以前更容易感到疲惫	1	2	3	4	5
15	最近找工作忙碌，我感到肠胃功能紊乱	1	2	3	4	5
16	找工作不顺利使我经常莫名其妙生气	1	2	3	4	5
17	找工作这段时间，我对许多事情提不起来兴趣	1	2	3	4	5
18	找工作这段时间，我更加感到烦闷	1	2	3	4	5
19	找工作这段时间，我更感到心浮气躁	1	2	3	4	5
20	找工作遇到挫折时，我会想摔东西或者骂人	1	2	3	4	5
21	对当前的就业形式，我感到很悲观	1	2	3	4	5
22	找工作这段时间，我的体重明显减轻或增重	1	2	3	4	5

23	面对就业困难,我心理有难以诉说的压抑	1	2	3	4	5
24	找工作这段时间,我常常有一种无助感	1	2	3	4	5
25	我很恐惧职场上的明争暗斗	1	2	3	4	5
26	找工作的烦恼使我不能集中精力做一些必要的事情	1	2	3	4	5

三、心理韧性量表(Yu & Zhang, 2007)

序号	请指出从上个月以来,您对以下陈述的同意程度。如果有些特殊情境并未发生,则在“从来不”选项上打√;如果真的发生了,您的感受会是怎样,请在最能描述您的感觉的选项上打√。	从 来 不	很 少	有 时	经 常	一 直 如 此
1	当发生变化时,我能够适应	1	2	3	4	5
2	当面对压力时,我至少拥有一个亲近而且安全的人可以帮助我	1	2	3	4	5
3	当问题无法清楚地获得解决时,有时命运或机缘能够帮助我	1	2	3	4	5
4	不管我的人生路途中发生什么事情,我都能处理	1	2	3	4	5
5	过去的成功让我有信心去处理新的挑战 and 困难	1	2	3	4	5
6	当面对问题时,我试着去看事情幽默的一面	1	2	3	4	5
7	由于经历过磨炼,我变得更坚强了	1	2	3	4	5
8	在生病、受伤或苦难之后,我很容易就能调整过来	1	2	3	4	5
9	不管好坏,我相信事出必有因	1	2	3	4	5
10	不管结果如何,我都会尽最大的努力	1	2	3	4	5
11	纵然有障碍,我相信我能够实现我的目标	1	2	3	4	5
12	纵然看起来没有希望,我仍然不放弃	1	2	3	4	5
13	当压力或危机来到时,我知道在哪里可以获得帮助	1	2	3	4	5
14	在压力下,我能够精神集中地思考问题	1	2	3	4	5
15	我宁愿在解决问题时自己起带头作用,而不是让别人决定全局	1	2	3	4	5
16	我不会轻易地被失败打倒	1	2	3	4	5
17	当处理生活中的挑战和困难时,我想我是一个坚强的人	1	2	3	4	5
18	如果有必要,我会选择一个不受欢迎或困难的决定去影响别人	1	2	3	4	5

19	我能够处理一些不愉快或痛苦的感觉，例如悲伤、害怕和生气	1	2	3	4	5
20	在处理生活难题时，有时我不得不按直觉办事	1	2	3	4	5
21	在我的生活中，我有明确的目标	1	2	3	4	5
22	我觉得可以控制自己的生活	1	2	3	4	5
23	我喜欢挑战	1	2	3	4	5
24	不管在人生路途上遇到什么障碍，我都会努力达到我的目标	1	2	3	4	5
25	我为自己的成就而感到自豪	1	2	3	4	5

四、社会支持量表 (Xiao, 1994)

指导语：下面的问题用于反映您在社会中所获得的支持，请按各个问题的具体要求，根据您的实际情况回答。请在合适的选项上打“√”。谢谢！

1. 你有多少关系密切，可以得到支持和帮助的朋友?(只选一项)

- ①一个也没有 ②1-2 个 ③3-5 个 ④6 个或 6 个以上

2. 近一年来你(只选一项)

- ①远离家人，且独居一室 ②住处经常变动，多数时间和陌生人住在一起
③和同学或朋友住在一起 ④和家人住在一起

3. 你与同宿舍的人(只选一项)

- ①相互之间从不关心 ②遇到困难可能稍微关心
③有些同宿舍的人很关心你 ④大多数同宿舍的人都很关心你

4. 你与同学(只选一项)

- ①相互之间从不关心，只是点头之交 ②遇到困难可能稍微关心
③有些同学很关心你 ④大多数同学都很关心你

5. 从家庭成员得到的支持和照顾(在合适的框内划“√”)

	无	极少	一般	全力支持
A、恋人				
B、父母				
C、兄弟姐妹				
D、其他成员(如嫂子)				

6. 过去, 在你遇到急难情况时, 曾经得到的经济支持和解决实际问题的帮助的来源有:

①无任何来源

②下列来源(可多选)

- A. 恋人 B. 父母等家人 C. 朋友 D. 亲戚 E. 同学 F. 老师
G. 官方或半官方组织(如党团组织) H. 非官方组织(如社团, 宗教组织)
I. 其他(请列出)

7. 过去, 你遇到急难情况时, 曾经得到的安慰和关注的来源有:

①无任何来源

②下列来源(可多选)

- A. 恋人 B. 父母等家人 C. 朋友 D. 亲戚 E. 同学 F. 老师
G. 官方或半官方组织(如党团组织) H. 非官方组织(如社团, 宗教组织)
I. 其他(请列出)

8. 你遇到烦恼的倾诉方式(只选一项)

- ①从不向任何人倾诉 ②只向关系极密切的 1-2 个人诉说
③如果朋友主动询问你会说出来 ④主动诉说自己的烦劳, 以获得支持和理解

9. 你遇到烦恼的求助方式(只选一项)

- ①只靠自己, 不接受别人帮助 ②很少请求别人帮助
③有时请求别人帮助 ④有困难时经常向家人、亲友、组织求援

10. 对于团体(如党团组织、宗教组织、学生会、班集体、院校等)组织活动, 你(只选一项)

- ①从不参加 ②偶尔参加 ③经常参加 ④主动参加并积极活动

五、焦虑自评量表(Zung, 1971)

序号	本评定量表共有 20 个项目，请您根据最近一星期以来您的实际感受，选择一个与您的情况最相符合的答案，在分数栏 1~4 分适当的分数下划“√”。	从 无	有 时	经 常	总 是 如 此
1	我觉得比平常容易紧张和着急	1	2	3	4
2	我无缘无故地感到害怕	1	2	3	4
3	我容易心里烦乱或觉得惊恐	1	2	3	4
4	我觉得我可能将要发疯	1	2	3	4
5	我觉得一切都很好，也不会发生什么不幸	1	2	3	4
6	我手脚发抖打颤	1	2	3	4
7	我因为头痛，颈痛和背痛而苦恼	1	2	3	4
8	我感觉容易衰弱和疲乏	1	2	3	4
9	我觉得心平气和，并且容易安静坐着	1	2	3	4
10	我觉得心跳很快	1	2	3	4
11	我因为一阵阵头晕而苦恼	1	2	3	4
12	我有晕倒发作或觉得要晕倒似的	1	2	3	4
13	我呼气吸气都感到很容易	1	2	3	4
14	我手脚麻木和刺痛	1	2	3	4
15	我因为胃痛和消化不良而苦恼	1	2	3	4
16	我常常要小便	1	2	3	4
17	我的手常常是干燥温暖的	1	2	3	4
18	我脸红发热	1	2	3	4
19	我容易入睡并且一夜睡得很好	1	2	3	4
20	我做恶梦	1	2	3	4

再次感谢您的配合，祝前程似锦！