

Research on the Construction of a Collaborative Training System for Psychological Resilience of Higher Vocational Students

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Abstract

Vocational college students are in a growth stage where professional learning, skills training, enterprise internships and employment transitions overlap, and their psychological stress often occurs in vocational education scenarios. National policy requirements for students' mental health work suggest that mental health education in colleges and universities should not only focus on risk identification and crisis intervention, but also move forward to developmental support. Existing research suggests that mental health education in higher vocational colleges should not remain at the level of problem identification, crisis management and sporadic activities, but should be oriented towards positive psychological education and incorporate confidence, hope, resilience, social support and the ability to seek help proactively into the daily training process. Based on policy texts and locally collected literature on mental health education, positive psychology education and psychological resilience in higher vocational colleges, this paper analyzes problems such as unclear development goals, disconnection from curriculum practice, insufficient peer support boundaries, loose departmental collaboration and weak evaluation feedback in the cultivation of psychological resilience in higher vocational students, and proposes a training system of "needs diagnosis - stratification and classification - four-dimensional collaboration - evaluation and improvement". The system emphasizes cognitive empowerment, behavioral experience, peer assistance, environmental support and process evaluation in real tasks such as learning pressure, practical training and employment transition, and promotes the shift of mental health education from passive handling to sustainable developmental support. This paper adopts a narrative review approach. The literature and policy documents discussed herein were selected through purposive sampling based on the authors' research experience and familiarity with the field, rather than through a systematic search protocol.

Keywords

Higher Vocational Students, Psychological Resilience, Positive Psychological Education, Co-Cultivation, Mental Health Education

1. Practical Basis for Cultivating Psychological Resilience among Higher Vocational Students

As a narrative review, this paper selects policy documents and academic literature based on the authors' professional experience in higher vocational mental health education and psychological resilience research. Policy documents were identified through official government websites and ministry publications, while academic literature was drawn from databases including CNKI, Wanfang, and Web of Science, using keywords such as "psychological resilience", "higher vocational students", "positive psychology education", and "collaborative training". The selection prioritizes sources directly relevant to the four training domains proposed in this paper: cognitive empowerment, behavioral experience, peer support, and environmental support.

The target of mental health education in higher vocational colleges is not only students who have already shown obvious psychological crises, but also ordinary students who are constantly under adaptation pressure in study, life, training and employment. The Special Action Plan for Comprehensively Strengthening and Improving Student Mental Health Work in the New Era (2023-2025) proposes to improve the student mental health work system and enhance students' psychological adjustment ability¹; The Guidelines for Mental Health Education of College Students emphasize the formation of a "four-in-one" working pattern of education and teaching, practical activities, counseling services and preventive intervention². These policy requirements suggest that mental health education in colleges and universities should not only identify and deal with risks in a timely manner, but also move the work forward to the process of daily education, practical support and growth and development. Li Zhihong pointed out that it is difficult for higher vocational colleges to fully respond to the characteristics and training goals of higher vocational students by following the general model of mental health education in higher vocational colleges (Li, 2011), and thus the concept of positive psychology needs to be introduced to construct a more development-oriented model of mental health education. Chi Jing's analysis of the psychological characteristics of vocational college students also shows that lack of self-confidence, blind conformity, insufficient professional identity and weak psychological resilience are common sources of psychological distress among vocational college students (Chi, 2023). These problems suggest that the cultivation of

¹https://www.gov.cn/zhengce/zhengceku/202305/content_6857361.htm

²https://www.moe.gov.cn/srcsite/A12/moe_1407/s3020/201807/t20180713_342992.html

psychological resilience should not be initiated only after a crisis, but should be embedded in the daily growth process of students.

Psychological resilience does not require students to simply “endure” stress, but rather helps them mobilize personal resources and external support in the face of stress, setbacks and changes to achieve recovery, adaptation and continued development. Ren Li pointed out from the perspective of mental health work for students in the post-pandemic era that psychological resilience means resisting stress, self-recovery and dynamic development, and schools should enhance students’ ability to cope with adversity from the dimensions of individuals, families and society (Ren, 2021). Further research with diverse vocational student samples is needed to examine whether similar associations between life events and psychological resilience exist across different educational contexts and regions.

Positive psychology provides a more appropriate theoretical entry point for cultivating psychological resilience in higher vocational students. Li Zhihong emphasized that mental health education in higher vocational colleges should incorporate the concept of positive psychology and focus on cultivating students’ positive psychological experiences and positive personality qualities (Li, 2011). Fu Xinmin proposed that vocational college students should be re-recognized from the perspective of positive psychology, guiding students to positively recognize the past, face the present and plan for the future in order to reshape students’ image and improve the quality of education (Fu, 2008). Therefore, the focus of developing psychological resilience for higher vocational students is not to label them as “vulnerable” or “poor at coping with stress”, but to help them develop more stable self-efficacy, stress interpretation methods and the ability to seek help through courses, practices, relationships and institutional arrangements.

2. The Main Problems in Current Training Efforts

2.1. Insufficient Developmental Goals, with a Focus on Risk Management

Mental health screening, counseling services and crisis intervention are essential components of school mental health work, but these links mainly answer “which students have already been at risk”. Psychological resilience development also needs to answer “how students accumulate coping resources before problems occur”. If mental health education has long been dominated by screening, lectures and case handling, the average student is likely to understand psychological services as only for “people with problems”, and positive character development, active assistance and daily support will be difficult to fully develop.

2.2. The Curriculum Is Disconnected from Practice, Making It Difficult to Translate Psychological Knowledge into Action

Mental health courses can help students recognize stress, emotions, and relationships, but knowledge understanding does not automatically translate into coping

skills. The scenarios in which higher vocational students truly test their psychological strategies often occur in equipment operation failures, setbacks in skill tests, team conflicts, maladjustment to corporate internships, and failed job hunting. From the perspective of entrepreneurship education, Liu Yan suggests that the cultivation of psychological resilience should be combined with positive cognition, self-efficacy, failure learning, social support, etc. (Liu, 2019). This suggests that higher vocational colleges need to incorporate psychological education into professional practice and career development tasks rather than remain at the conceptual lecturing level.

2.3. Insufficient Carriers for Cultivating Positive Qualities and Lack of Continuity between Activities

Positive psychological education emphasizes positive experiences, positive personality, and positive organizational systems. Deng Zhaowei pointed out that art education, due to its unique content and form, can serve as an important vehicle for cultivating positive psychological qualities in higher vocational students (Deng, 2013). In reality, although some schools carry out cultural and sports activities, volunteer services, club activities and psychological theme months, there is a lack of common goals and continuous design among the activities, making it difficult for students to form stable experiences of emotional regulation, cooperative communication and self-affirmation through repeated practice.

2.4. Unclear Boundaries between Peer Support and Professional Referrals

A large amount of emotional expression among higher vocational students occurs in classes, dormitories, clubs and online groups, where peers tend to detect changes in their status earlier and are more likely to provide timely support. But peer support does not replace professional counseling, nor does it leave student leaders alone to handle the crisis. Zhang Mimi suggests that preventive intervention for psychological crises among vocational college students should be strengthened from the perspective of positive psychology, and targeted measures should be taken based on the psychological characteristics of students (Zhang, 2021). Therefore, peer support requires training, supervision, confidentiality rules and referral processes as safeguards.

2.5. The Evaluation Methods Are Monotonous and There Is Insufficient Basis for Continuous Improvement

The number of lectures, the number of participants, and the quantity of promotional materials are easy to count, but they only reflect the input of work and do not indicate whether students are truly supported. Evaluating students based solely on the total score of the scale may also lead to new labeling. Psychological resilience development should also focus on whether students can transfer coping

strategies, whether teachers' feedback methods improve, whether peer support networks work, and whether risk identification and professional referrals are timely and standardized.

3. Construction of a Synergistic System for Cultivating Psychological Resilience in Higher Vocational Students

In this paper, psychological resilience is understood as the dynamic adaptive ability formed under the combined effect of individual psychological resources and the external supportive environment, and based on this, a training system of "needs diagnosis - hierarchical classification - four-dimensional collaboration - evaluation feedback" is constructed. Unlike general mental health promotion, this system emphasizes starting from the learning pressure, practical training and employment transition of higher vocational students, with cognitive empowerment, behavioral experience, peer assistance and environmental support as the main training contents, and evaluation feedback as the process monitoring and continuous improvement mechanism. Recent peer-reviewed reviews and intervention studies suggest that school- and university-based resilience interventions often include cognitive coping, behavioral skill practice, peer or social support, and supportive environmental conditions (Llistosella et al., 2023; Ang et al., 2022; González-Martín et al., 2023; Osborn et al., 2022). Drawing on these common components, the proposed training system is organized around four complementary domains rather than treating them as isolated activities (Figure 1).

3.1. Establish a Hierarchical and Categorized Support Mechanism Starting with Demand Diagnosis

Psychological resilience development begins with understanding students' real situations. School counselors, together with the mental health education center and academic affairs offices, can identify the main development tasks and risk signals at different stages by integrating freshman adaptation surveys, psychological surveys, counselors' heart-to-heart talks, academic warnings, practical training performance, enterprise internship feedback and daily observations. Based on this, support resources are divided into three levels: basic psychological education and development support for all students; Group counseling, academic assistance, and career support are provided to students who have difficulty adapting at different stages; School counselors, in consultation with the mental health education center director, assign students to each support tier based on comprehensive assessment results. Professional assessment rather than routine developmental support is prompted by specific risk signals, including: persistent depressive symptoms lasting more than two weeks, expressed suicidal ideation or self-harm behaviors, severe anxiety interfering with daily functioning, sudden dramatic changes in academic performance or social withdrawal, and reports of abuse or trauma. Such students are promptly referred to professional counseling services or external medical institutions.

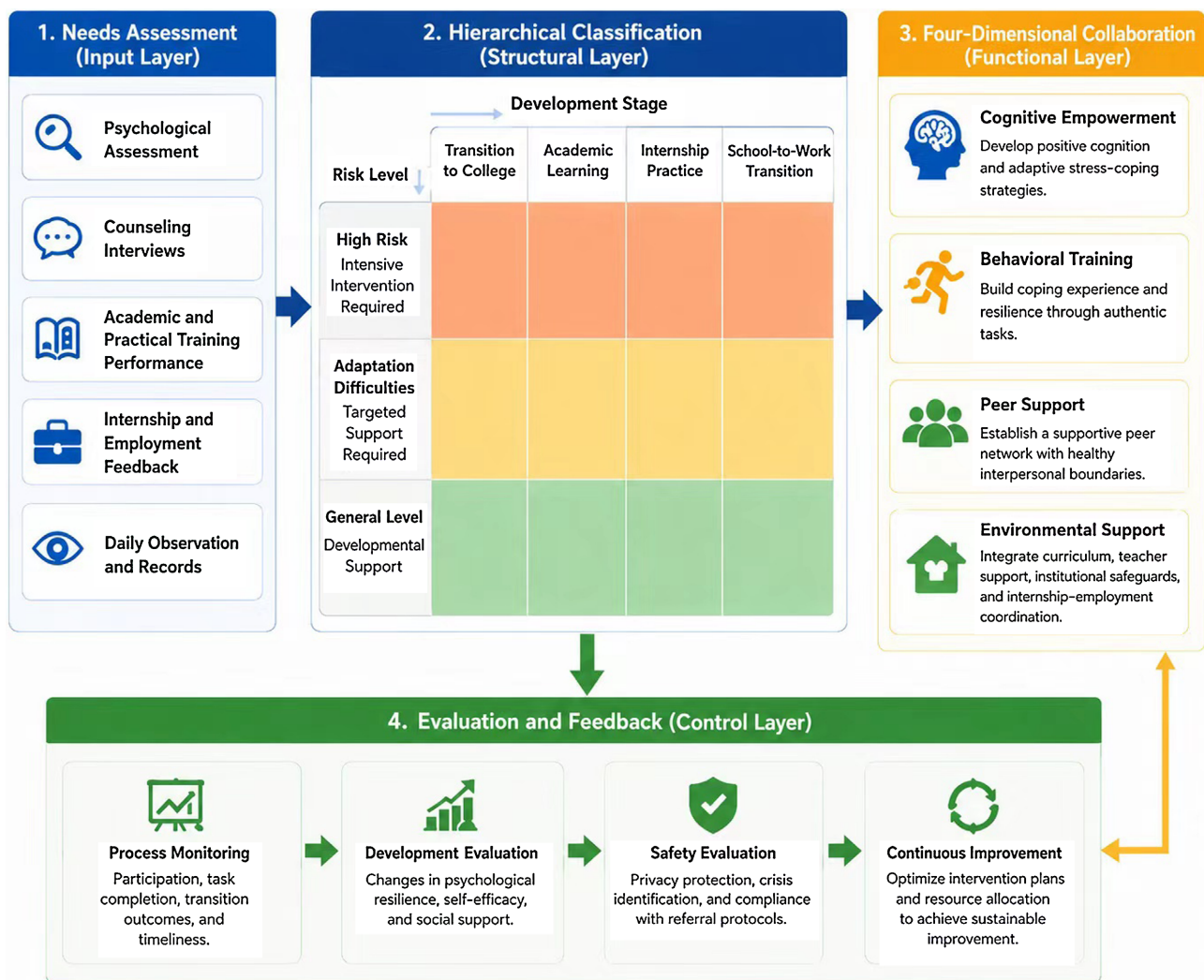


Figure 1. Structure diagram of collaborative development of psychological resilience for higher vocational students.

Stratification and classification should also reflect grade and task differences. For freshmen, focus on environmental adaptation, life management, and relationship building; For middle and upper grades, focus on skill stress, learning engagement, teamwork, and self-efficacy; During the internship and employment stage, focus on role transitions, workplace communication, labor rights, and career uncertainty. This avoids over-medicalizing normal development difficulties and prevents serious risks from being masked by general activities.

3.2. Form an Adjustable Way of Interpreting Stress Based on Cognitive Empowerment

The goal of cognitive empowerment is not to keep students optimistic all the time, but to help them develop accurate, flexible and actionable ways of interpreting stress. Schools can guide students to distinguish between temporary failures and ability stereotypes through strengths identification, personal resource lists, growth mindset training, and attribution analysis, while seeing controllable factors, situ-

ational limitations, and available support.

Goal management is an important part of the implementation of cognitive empowerment. Professional teachers and counselors can break down long-term tasks into phased goals, defining basic requirements, improvement goals, and feedback nodes. After students complete tasks, record the strategies used, the help received, and the areas that need to be adjusted. For experiences such as failure in skills competitions, maladjustment to internship positions, and setbacks in job hunting, a structured review can be conducted following the process of “fact identification - emotion expression - cause analysis - resource search - action plan”.

3.3. Use Behavioral Experience as a Vehicle to Accumulate Recovery Experience in Practical Tasks

Psychological resilience cannot be formed merely through classroom instruction. Higher vocational colleges can rely on practical training programs, skills competitions, labor education, volunteer services, entrepreneurial practices and enterprise internships to design progressive training sequences from low-risk attempts, stage challenges to real tasks. The difficulty of the tasks should match the students' abilities and leave room for them to choose, try and ask for help. Teacher evaluation focuses on both results and planning, persistence, cooperation, assistance, and adjustment.

The key to behavioral experience is “support after the challenge and review after the failure”. For example, organize students to analyze the operation process and emotional response after the skills assessment; Stage feedback can be provided by both on-campus instructors and enterprise mentors during internships; After being frustrated in job hunting, the next steps can be planned in combination with job matching, expression methods and resource utilization. Discipline or disciplinary education can also be part of a sense of responsibility, but it should be based on respect, care and legal boundaries. High-pressure management should not be simply equated with resilience training (Yao, 2012).

3.4. Build a Bounded Network of Daily Support, Supplemented by Peer Assistance

Schools can establish distributed peer support networks based on classes, dormitories and clubs, and select students who are responsible, willing to listen and able to abide by confidentiality norms to serve as peer psychological backbones. Evidence from a university-based feasibility study suggests that structured peer support is feasible, acceptable, and safe, although sustained implementation requires clear role definitions, training, and supervision (Osborn et al., 2022). The training should include basic listening, emotional support, common stress identification, introduction to help-seeking resources, privacy protection and risk referral, and protect the status of peer leaders through case supervision, regular communication, job rotation and exit mechanisms.

Peer activities should revolve around the real development tasks of students, such as mutual assistance for freshmen adaptation, communication in dormito-

ries, learning support and career mutual assistance, etc. Their duties are limited to listening, accompanying, messaging and helping with requests for help, and they do not take responsibility for diagnosing, treating and handling crises alone. When there is a risk of self-harm, suicidal ideation, or severe mental symptoms, it should be reported in a timely manner in accordance with the school plan and referred to a professional.

3.5. With Environmental Support as a Guarantee, Resilience Development Should Be Integrated into the Entire Educational Process

Supportive environments are first and foremost reflected in the synergy of courses and scenarios. Mental health courses can include topics on stress cognition, emotion regulation, social support, and coping with setbacks; Professional courses can arrange process retrospectives in project failures, equipment operation, and team collaboration; Employment education can include job rejections, career adaptation, and labor rights. Different courses do not have to repeat psychological concepts, but should complement each other around students' adaptability.

The way teachers provide feedback is also an important component of environmental support. Shaming, sarcasm, and simple rankings tend to reinforce students' fixed explanations of failure, while concrete, respectful, and action-oriented feedback is more conducive to recovery. Schools should reduce the stigmatization of counseling, make the service process and confidentiality boundaries public, and provide multiple access points for seeking help both online and offline. For students entering the enterprise internship stage, the school should also clarify with the internship unit the responsibility for daily contact, feedback of abnormal situations and handling of emergency risks.

3.6. Use Evaluation Feedback as a Closed Loop to Promote Continuous Improvement of the System

The evaluation system can establish indicators in four aspects: input, process, development, and security. Input indicators focus on whether teachers, courses, venues, systems and funds are in place; Process metrics focus on activity engagement, task completion, peer oversight, and referral timeliness; Development indicators focus on changes in students' psychological resilience, assessed with a validated resilience measure such as the Connor-Davidson Resilience Scale [CD-RISC] or the Resilience Scale for Adults [RSA], along with self-efficacy (Generalized Self-Efficacy Scale [GSES]), social support (Multidimensional Scale of Perceived Social Support [MSPSS]), and willingness to seek help proactively. The final instrument set should be selected according to the target population and supported by appropriate validation evidence for the study context; Safety indicators focus on privacy protection, crisis identification, professional supervision, and whether medical referrals are standardized.

In operation, a cycle of "needs diagnosis - resource allocation - organization and implementation - phase feedback - program adjustment" can be adopted. Un-

derstand the main development tasks of students at the beginning of the semester, configure courses, practices and support resources in the middle of the semester, and evaluate the implementation process by integrating scales, interviews, activity records and teacher feedback at the end of the semester. The purpose of the evaluation is not to prove that the established system is necessarily effective, but to determine which modules need to be retained, adjusted or stopped, and to provide a basis for the next round of resource allocation. To distinguish genuine changes in psychological resilience from ordinary developmental fluctuations during a semester, the evaluation employs a pre-test/post-test design with a control group where feasible, uses multiple measurement time points (beginning, midpoint, and end of semester), and uses validated reliable-change procedures based on the selected scale's measurement error and test-retest reliability to determine whether observed score changes exceed expected measurement error and normal variation. Additionally, qualitative data from student interviews, teacher observations, and implementation records are triangulated with quantitative scores to assess whether changes are sustained across data sources and reflect substantive resilience growth rather than temporary mood fluctuations or test-retest effects.

4. Implementation Assurance

4.1. Define Organizational Responsibilities and Professional Boundaries

Schools may have their training programs coordinated by mental health education-related institutions, but they should not delegate all tasks to mental health centers. The psychological center is responsible for professional standards, training supervision, counseling services and crisis referrals; The student affairs department and counselors are responsible for daily organization and development support; Professional teachers, physical education teachers, career teachers and internship instructors are responsible for contextualized training; Internship enterprises are responsible for job adaptation information feedback and emergency assistance; Off-campus medical and social service institutions undertake professional services beyond the educational capacity of the school.

4.2. Strengthen the Training of Teachers and Peers

Teacher training should focus on operational capabilities, including supportive communication, basic listening, risk signal identification, referral processes, and privacy protection. Peer backbone should establish access, training, supervision, assessment and exit mechanisms. Schools should also pay attention to the stress of teachers and students who undertake psychological support tasks, provide necessary supervision and emotional support, and avoid role exhaustion due to unlimited expansion of responsibility.

4.3. Regulate the Use of Information and Professional Referrals

Mental health information is sensitive, and departmental collaboration should fol-

low the principles of being informed, necessary and confidential. When schools combine psychological records with academic and internship information, the following safeguards must be implemented: 1) Informed consent: Students (or their guardians, where applicable) must provide written informed consent before their psychological records are accessed or shared, with clear explanation of what information will be shared, with whom, and for what purpose; 2) Access controls: Only authorized personnel—including designated mental health professionals, trained counselors, and specific administrative staff with a legitimate educational interest—may access combined records, with all access logged and auditable; 3) Data anonymization: For research, evaluation, or aggregate reporting purposes, all personally identifiable information must be removed or pseudonymized prior to analysis; 4) Data-sharing agreements: Formal data-sharing agreements must be established with internship enterprises and external service providers, specifying permitted uses, storage security standards, retention periods, and destruction protocols; 5) Student rights: Students retain the right to access their own records, request corrections to inaccurate information, and file complaints regarding unauthorized disclosures. Schools need to clarify which information is only available to professionals, which risk signals can be reported in accordance with procedures, and under what circumstances emergency referrals must be initiated. In principle, information about adult students should not be disclosed at will to their families or internship sites without consent; Emergency risk situations are handled in accordance with legal norms and school contingency plans.

4.4. Accumulate Local Experience through Small-Scale Trials

The collaborative training system should not be fully rolled out without adequate preparation. Higher vocational colleges may first select a grade, a major or an internship stage to conduct a trial, record the activity content, implementation intensity, student participation and abnormal events, and then examine the feasibility through pre- and post-tests, interviews, observations and case reviews. There are significant differences in student structure, major Settings and regional resources among different schools, and the system modules should be allowed to be adjusted according to the specific conditions of each school.

5. Conclusion

The focus of developing psychological resilience for higher vocational students is to help them accumulate cognitive resources, action experience, relationship support and environmental safeguards in real learning and professional situations. Starting with needs diagnosis and based on stratification and classification, integrating cognitive empowerment, behavioral experience, peer support and environmental support throughout the student growth process, and constantly adjusting resource allocation through evaluation feedback, can promote mental health education to expand from single risk management to developmental support for all students.

This system cannot be accomplished by the psychological center alone, nor can it be replaced by a single course or a single thematic activity. It is more like a set of support mechanisms throughout the student's growth process: providing developmental education when the student has not yet shown obvious crises, providing timely companionship and opportunities for reflection when encountering setbacks, and initiating professional referrals when risks exceed the educational capacity of the school. It is still necessary to carry out normative trials and continuous evaluations in different types of vocational colleges, compare the applicable conditions, implementation costs and potential risks of different modules, and gradually form local solutions that are more in line with the vocational education scenarios.

Author Contributions

L.X.P. conceptualized the study, and drafted the original manuscript. Z.D.H. supervised the study and critically reviewed and edited the manuscript.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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