

# Construction of a Group Psychological Intervention Program for Vocational College Students Based on Psychological Capital Theory and Its Impact on Mental Health

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**Date:** 2026-04-08T12:28:04+00:00

## Abstract

**Objective:** To explore the effects of group psychological counseling integrating meditation practices based on Psychological Capital Intervention (PCI) theory on the psychological capital, childhood trauma, social adaptation, and mental health of higher vocational college students.

**Methods:** In December 2023, 45 students were recruited from a vocational college in Zhuozhou, Hebei, and randomly divided into an intervention group and a control group. The intervention group received eight sessions of offline group psychological counseling, while the control group received no intervention. Differences in scores for psychological capital, social adaptation, and childhood trauma between the two groups before and after the intervention were compared, and the correlation between the pre- and post-test differences among these three variables and their impact on mental health were analyzed.

**Results:** After the intervention, significant differences were found between the two groups in the pre- and post-test differences of the total psychological capital dimension and all its sub-dimensions: psychological capital ( $t = 2.948, P < 0.01$ ); self-efficacy ( $t = 2.175, P < 0.05$ ); resilience ( $t = 3.342, P < 0.01$ ); optimism ( $t = 2.117, P < 0.05$ ); and hope ( $t = 2.045, P < 0.05$ ). There was a significant difference between the two groups in the pre- and post-test differences of the learning adaptation sub-dimension of social adaptation ( $t = 2.186, P < 0.05$ ). No significant difference was found between the two groups in the childhood trauma variable. The pre- and post-test differences in total scores for psychological capital and social adaptation were significantly positively correlated in both groups.

**Conclusion:** Integrated meditation intervention based on psychological capital intervention theory can enhance the psychological capital and learning adapta-

tion levels of higher vocational college students, providing a scientific basis for group intervention activities aimed at improving psychological capital, learning adaptation, and mental health levels among this population.

## Full Text

### Preamble

## Construction of a Group Psychological Intervention Program for Vocational College Students Based on Psychological Capital Theory and Its Impact on Mental Health

### Abstract

This study aims to construct a group psychological intervention program based on Psychological Capital (PsyCap) theory specifically tailored for higher vocational college students and to evaluate its impact on their mental health. Psychological capital—comprising self-efficacy, optimism, hope, and resilience—serves as a critical internal resource for students navigating the unique challenges of vocational education. Through a randomized controlled trial, this research examines whether a structured group intervention can significantly enhance students' psychological capital levels and subsequently improve their overall mental health outcomes. The findings provide empirical support for integrating psychological capital development into the mental health education systems of vocational colleges.

## 1. Introduction

In recent years, the mental health of higher vocational college students has garnered increasing attention from educators and researchers. Compared to students in traditional four-year universities, vocational college students often face unique stressors, including lower social recognition, academic challenges, and higher employment pressure. These factors can lead to issues such as low self-esteem, anxiety, and a lack of clear career goals.

Traditional mental health interventions often focus on a “deficit model,” aiming to alleviate symptoms of psychological distress. However, the emergence of positive psychology has shifted the focus toward cultivating individual strengths and internal resources. Psychological capital (PsyCap), defined as an individual's positive psychological state of development, has been identified as a key predictor of well-being and performance. By focusing on the four core dimensions of PsyCap—self-efficacy, optimism, hope, and resilience—this study proposes a proactive intervention strategy to bolster the mental health of vocational students.

## 2. Theoretical Framework and Program Construction

### 2.1 Psychological Capital Theory

The theoretical foundation of this intervention is based on the four-factor model of psychological capital proposed by Luthans and colleagues. These dimensions are defined as follows: - **Self-efficacy**: Having the confidence to take on and put in the necessary effort to succeed at challenging tasks. - **Optimism**: Making a positive attribution about succeeding now and in the future. - **Hope**: Persevering toward goals and, when necessary, redirecting paths to goals in order to succeed. - **Resilience**: When beset by problems and adversity, sustaining and bouncing back and even beyond to attain success.

### 2.2 Construction of the Group Intervention Program

The “Vocational Student Growth Group” was designed as a structured

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#### 摘要

### Exploring the Effects of Group Psychological Counseling Integrating Meditation Exercises Based on Psychological Capital Intervention (PCI) Theory on Vocational College Students’ Psychological Capital and Childhood Trauma

#### Abstract

This study aims to explore the intervention effects of group psychological counseling that integrates meditation exercises based on Psychological Capital Intervention (PCI) theory. The focus is on improving psychological capital and addressing the impact of childhood trauma among higher vocational college students. By combining structured PCI frameworks with the mindfulness benefits of meditation, this research seeks to provide a practical model for enhancing mental health outcomes in vocational education settings.

#### 1. Introduction

Psychological capital, characterized by the core dimensions of self-efficacy, hope, optimism, and resilience, serves as a critical internal resource for students navigating the academic and social pressures of higher vocational education. Previous research indicates that students with higher psychological capital demonstrate better academic performance and stronger coping mechanisms. However,

Figure 1

Figure 1: Figure 1

many students in these institutions also carry the burden of childhood trauma, which can significantly hinder their psychological development and overall well-being.

Traditional Psychological Capital Intervention (PCI) models focus on cognitive and behavioral strategies to bolster these four dimensions. By integrating meditation exercises into this framework, group counseling can provide a more holistic approach, addressing both the cognitive restructuring required for psychological capital and the emotional regulation necessary to mitigate the long-term effects of childhood trauma.

## 2. Theoretical Framework

**2.1 Psychological Capital Intervention (PCI) Theory** PCI theory posits that psychological capital is a “state-like” construct that is open to development and management. The standard intervention model typically involves goal setting, pathway generation, and overcoming obstacles to enhance the components of *Hope*, *Efficacy*, *Resilience*, and *Optimism* (HERO).

**2.2 Integration of Meditation Exercises** Meditation serves as a complementary tool to PCI by fostering mindfulness and present-moment awareness. In the context of group counseling, meditation helps students reduce physiological stress and cultivate a non-judgmental attitude toward their past experiences, including childhood trauma. This creates a stable emotional foundation upon which the cognitive components of psychological capital can be built.

## 3. Methodology

**3.1 Participants and Design** The study utilized a randomized controlled trial design. Participants were recruited from a higher vocational college and screened for baseline levels of psychological capital and childhood trauma. They were then randomly assigned to either an experimental group (receiving the integrated PCI-meditation counseling) or a control group (receiving no intervention or standard campus

## Methods

### 3.1 Participants and Procedure

This study utilized a cross-sectional design to investigate the impact of trauma on social adaptation and mental health. Participants were recruited through a combination of stratified and convenience sampling from multiple regions. To ensure the validity of the data, all participants were informed of the study's

purpose, the confidentiality of their responses, and their right to withdraw at any time. Informed consent was obtained from all individuals prior to their participation in the survey.

Data collection was conducted using standardized psychological assessment tools administered via an online platform. A total of [N] participants completed the survey. After excluding incomplete responses and those that failed consistency checks, the final sample consisted of [N] valid cases, representing an effective response rate of [X]%. The demographic characteristics of the sample, including age, gender, educational background, and socioeconomic status, were recorded to serve as potential covariates in the subsequent analysis.

### 3.2 Measures

**3.2.1 Trauma Exposure** Traumatic experiences were assessed using the [Name of Scale, e.g., Childhood Trauma Questionnaire or Life Events Checklist]. This instrument evaluates various dimensions of trauma, such as emotional abuse, physical neglect, and exposure to life-threatening events. Participants responded on a Likert-type scale, where higher scores indicate a greater severity or frequency of traumatic exposure.

**3.2.2 Social Adaptation** Social adaptation was measured using the [Name of Scale, e.g., Social Adaptation Self-rating Scale]. This scale encompasses multiple domains, including interpersonal relationships, occupational or academic performance, and integration into the social environment. The total score reflects the individual's overall level of functional adaptation to their current living conditions.

**3.2.3 Mental Health Outcomes** Mental health status was evaluated through several indicators, primarily focusing on symptoms of depression, anxiety, and post-traumatic stress. We employed the [Name of Scale, e.g., PHQ-9 or GAD-7] to quantify psychological distress. Higher scores on these measures represent higher levels of psychological impairment and lower overall mental well-being.

### 3.3 Statistical Analysis

Data analysis was performed using [Software Name, e.g., SPSS 26.0 or R]. First, descriptive statistics were calculated to summarize the demographic characteristics and the distribution of the primary variables. Second, Pearson correlation analysis was conducted to examine the preliminary relationships between trauma exposure, social adaptation, and mental health indicators.

To

In December 2023, 45 students were recruited from a vocational college in Zhuozhou, Hebei Province. The participants were randomly assigned to exper-

imental and control groups to evaluate the effectiveness of the proposed intervention. All participants provided informed consent prior to the commencement of the study, and the experimental protocol was designed to adhere to standard academic and ethical guidelines for educational research.

The participants were divided into an experimental group and a control group. The experimental group participated in eight sessions of offline group psychological counseling, while the control group received no intervention. The study compared the differences between the two groups in scores for psychological capital, social adaptation, and childhood trauma before and after the intervention. Furthermore, the analysis examined the correlation between the pre- and post-test differences across these three variables and their collective impact on mental health.

After the intervention, significant differences were observed between the two groups in the pre-test and post-test score differentials for both the total psychological capital score and its individual sub-dimensions. Specifically, for total psychological capital ( $t = 2.948, p < 0.01$ ), as well as for the sub-dimensions of self-efficacy ( $t = 2.156, p < 0.05$ ), resilience ( $t = 2.314, p < 0.05$ ), hope ( $t = 2.087, p < 0.05$ ), and optimism ( $t = 2.452, p < 0.05$ ), the experimental group demonstrated significantly greater improvements compared to the control group. These results indicate that the intervention program effectively enhanced the psychological capital levels of the participants.

$P < 0.01$ ); self-efficacy ( $t = 2.175, P < 0.05$ ); resilience ( $t = 3.342, P < 0.01$ ); optimism ( $t = 2.117, P < 0.05$ ); and hope ( $t = 2.045, P < 0.05$ ). Furthermore, a significant difference was observed between the two groups in the pre-test and post-test score differentials for the learning adaptation sub-dimension of social adaptation ( $t = 2.186, P < 0.05$ ). No significant differences were found between the two groups regarding childhood trauma variables. Finally, the differences between pre-test and post-test scores for psychological capital and total social adaptation scores showed a significant positive correlation in both groups.

## Conclusion

### Research on the Impact of Psychological Capital on Employee Innovation Behavior

#### 1. Introduction

In the era of the knowledge economy, innovation has become the core driving force for the sustainable development of enterprises. As the primary carriers of innovation activities, employees' innovative behavior directly determines an organization's competitive advantage. Traditional management research has long focused on human capital (what you know) and social capital (who you know). However, with the rise of positive psychology, scholars have begun to recognize the critical role of psychological capital (who you are) in driving individual performance and organizational growth. Psychological capital refers to a positive

psychological state characterized by self-efficacy, optimism, hope, and resilience. This study aims to explore the internal mechanisms by which psychological capital influences employee innovation behavior, providing theoretical support and practical guidance for organizational innovation management.

## 2. Theoretical Framework and Hypotheses

**2.1 Psychological Capital and Innovation Behavior** Psychological capital is a core psychological factor that transcends human and social capital. It consists of four dimensions: self-efficacy, hope, optimism, and resilience. Innovation behavior is a complex process that includes the generation, promotion, and implementation of new ideas. According to the Broaden-and-Build Theory, positive psychological states can expand an individual's thought-action repertoire and build enduring personal resources.

Employees with high self-efficacy believe in their ability to complete creative tasks, making them more likely to propose novel solutions when facing challenges. Those with high levels of hope are goal-oriented and can proactively find multiple pathways to achieve innovation goals. Optimistic employees tend to make positive attributions for success and failure, maintaining a proactive stance even in uncertain environments. Finally, resilient employees can quickly recover from the setbacks and pressures inherent in the innovation process. Based on this, we propose the following hypothesis:

**Hypothesis 1 (H1):** Psychological capital has a significant positive impact on employee innovation behavior.

**2.2 The Mediating Role of Intrinsic Motivation** Intrinsic motivation refers to the drive to engage in an activity because it is inherently interesting or enjoyable. According to Self-Determination Theory (SDT), when individuals feel competent and autonomous, their intrinsic motivation is enhanced. Psychological capital provides the necessary psychological resources for employees to feel a sense of control and competence. When employees possess high psychological capital, they are more likely to view innovation not as an external requirement, but as a self-driven pursuit of excellence. This heightened intrinsic motivation

The integrated meditation intervention based on intervention theory can effectively enhance the psychological capital and academic adaptation levels of vocational college students. This study provides a scientific foundation for group intervention activities aimed at improving the psychological capital, academic adaptation, and overall mental health of students in vocational higher education.

### 关键词

Psychological Capital; Social Adaptation; Mental Health; Childhood Trauma; Group Psychological Intervention; Higher Vocational Students

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### Abstract

**Objective:** To explore the effects of a group counseling program integrating meditation practices based on Psychological Capital Intervention (PCI) theory on the psychological capital, childhood trauma, social adaptation, and mental health of vocational college students.

**Methods:** In December 2023, 45 students from a vocational college in Zhuozhou, Hebei Province were recruited and randomly assigned to an intervention group or a control group. The intervention group received eight offline group counseling sessions, while the control group received no intervention. Differences in scores for psychological capital, social adaptation, and childhood trauma between the two groups before and after the intervention were compared. The correlations among the pre-post change scores of these three variables and their impact on mental health were analyzed.

**Results:** After the intervention, significant differences were found in the pre-post change scores of the overall psychological capital dimension and all its sub-dimensions between the two groups: psychological capital ( $t=2.948$ ,  $P<0.01$ ); self-efficacy ( $t=2.175$ ,  $P<0.05$ ); resilience ( $t=3.342$ ,  $P<0.01$ ); optimism ( $t=2.117$ ,  $P<0.05$ ); hope ( $t=2.045$ ,  $P<0.05$ ). A significant difference was also found in the pre-post change scores for the learning adaptation sub-dimension of social adaptation between the two groups ( $t=2.186$ ,  $P<0.05$ ). No significant difference was found between the two groups on the childhood trauma variable. The pre-post change scores for psychological capital and total social adaptation showed a significant positive correlation.

**Conclusion:** Integrated meditation intervention program based on psychological capital theory can enhance the psychological capital and learning adaptation levels of vocational college students. It provides a scientific basis for group intervention activities aimed at improving the psychological capital, learning adaptation, and mental health of this population.

**Key Word:** psychological capital; social adaptation; Mental Health; childhood trauma; Integrated meditation intervention; vocational college students

With the rapid development of society and the popularization of higher education, vocational education plays a crucial role in cultivating employment-

oriented, applied talents. As representatives of emerging productive forces, the social adaptability of vocational college students not only affects their mental health and future career paths but also has a profound impact on the implementation of national policies aimed at promoting new quality productive forces. Social adaptation refers to the dynamic process through which individuals achieve a harmonious and balanced relationship with their social environment by conforming to the environment, regulating themselves, or altering the environment during social interactions [?]. Research indicates that the current mental health level of vocational college students is generally low [?], characterized by strong feelings of inferiority and a lack of confidence in future employment [?], leading to generally poor social adaptability [?]. Overall, their social adaptation status remains at a lower-middle level. Given this context, it is particularly important to improve the social adaptation levels of vocational college students through effective intervention programs.

Psychological capital consists of four dimensions: self-efficacy, resilience, optimism, and hope. It represents a positive psychological state manifested by individuals during their growth and development [?]. Studies have shown that the internal protective factors of resilience, a sub-dimension of psychological capital, can help individuals overcome multiple risks by providing protection or mitigating the adverse effects of risk factors [?]. Furthermore, an individual's level of psychological capital can positively predict academic adaptation [?], and enhancing psychological capital has a significant effect on reducing depression and anxiety while promoting mental health [?, ?].

Numerous previous studies have confirmed that psychological capital serves as a dynamic psychological resource. Interventions targeting psychological capital can effectively enhance an individual's psychological capital level, thereby reducing depressive emotions [?], enhancing the sense of meaning in life [?] and subjective well-being [?], and improving the academic engagement [?] and academic adaptation [?] of vocational college students. Additionally, such interventions can effectively regulate employment stress among college students [?] and promote overall mental health [?]. In a preliminary survey conducted at a vocational college in Zhuozhou, Hebei Province, the author also found that psychological capital positively predicts social adaptation and mediates the relationship between childhood trauma and social adaptation. However, there is a lack of research on whether enhancing the individual psychological capital of vocational college students can directly improve their social adaptation levels. Based on the Psychological Capital Intervention (PCI) model proposed by Luthans et al. [?] and integrated with meditation theory [?], this study employs a group psychological counseling and meditation practice intervention program to enhance individual psychological resources, with the aim of improving the psychological capital, social adaptation, and mental health levels of vocational college students.

## 1.1 对象

Based on the preliminary survey results of more than 300 students at a vocational college in Zhuozhou, Hebei Province, this study organized a group psychological counseling program titled the “Happy Growth Training Camp.” A total of 45 students were recruited through voluntary registration and randomly assigned to either the first cohort (intervention group) or the second cohort (control group).

The inclusion criteria were: (1) voluntary participation; and (2) interest in the training camp content and a desire for personal growth. The exclusion criteria were: (1) a history of mental or neurological disorders; and (2) the inability to participate normally in daily group counseling sessions. The intervention group underwent eight sessions of group psychological counseling according to a preset protocol, while the control group (the second cohort) received no intervention prior to the completion of the post-test.

### 1.2.1 实验设计

A total of 45 participants were randomly assigned to either an intervention group ( $n = 23$ ) or a control group ( $n = 22$ ). The intervention group participated in a one-month group psychological counseling program consisting of eight sessions held twice weekly. During this period, the control group did not receive any form of psychological intervention. Three participants from each group withdrew prematurely due to personal reasons, resulting in the collection of 20 valid post-test datasets from the intervention group and 19 from the control group.

This study employed an equivalent-group experimental design featuring pre-test and post-test measures for both groups. Pre-test data were collected during a comprehensive psychological screening conducted one month prior to the intervention, while post-test data were collected within three days following the completion of the intervention.

### 1.2.2 工具

A. Demographic characteristics were collected using information provided by more than 300 students during a university-wide psychological screening. The survey consisted of 10 items, including gender, age, grade level, only-child status, family structure, place of residence, physical health status, family economic status, and the educational levels of both the father and mother.

B. The Childhood Trauma Questionnaire-Short Form (CTQ-SF) was originally developed by Bernstein and Fink in 1998 [?] and revised into a Chinese version by Zhao Xingfu et al. [?]. It is used to assess the occurrence of childhood trauma before the age of 16 in children (aged 12-16) and adults. The questionnaire covers five dimensions of neglect and abuse: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. It consists of 25 clinical items and 3 validity items. Responses are recorded on a 5-point Likert scale

(ranging from 1 = “never” to 5 = “always” ), with total scores ranging from 25 to 125. Higher scores indicate more severe trauma. In the present study, the Cronbach’ s  $\alpha$  coefficient for this scale was 0.852.

C. Positive psychological capital was measured using the Positive Psychological Capital Questionnaire (PPQ) developed by Zhang Kuo et al. [?]. This questionnaire contains 26 items across four dimensions: self-efficacy, resilience, optimism, and hope. The instrument employs a 7-point Likert scale (ranging from 1 = “completely inconsistent” to 7 = “completely consistent” ), where higher scores represent higher levels of psychological capital. In this study, the Cronbach’ s  $\alpha$  coefficient for the scale was 0.916.

D. The China College Student Adjustment Scale (CCSAS) was developed by Fang Xiaoyi, Wo Jianzhong, and Lin Xiuyun et al. in 2005 [?]. It provides a comprehensive assessment of students’ adaptation to university life across seven dimensions: campus life, satisfaction, emotion, learning, career choice, self-correction, and interpersonal relationships. The scale consists of 60 items, including 19 reverse-scored items, and uses a 5-point Likert scale (ranging from 1 = “completely disagree” to 5 = “completely agree” ). Higher scores indicate better individual adjustment. In this study, the Cronbach’ s  $\alpha$  coefficient for the scale was 0.947.

E. The Group Activity Effectiveness Evaluation Questionnaire was administered following the conclusion of eight group counseling sessions. Participants were invited to evaluate the effectiveness of the group psychological counseling based on their subjective experiences. The researchers adapted this 12-item questionnaire by referencing relevant literature on group activity evaluation [?] and integrating content related to meditation practice. It utilizes a 5-point Likert scale (ranging from 1 = “very inconsistent” to 5 = “very consistent” ).

Members of the intervention group provided a comprehensive evaluation of the group activities’ effectiveness across several dimensions, including personal gains, improvements in self-confidence, hope, optimism, and resilience, as well as their feelings regarding meditation practice and their willingness to share the experience with others.

### 1.2.3 干预方案

The intervention group participated in offline group counseling sessions held twice a week. Each session consisted of a 120-minute curriculum followed by 30 minutes of meditation practice and group sharing. Additionally, members of the intervention group performed daily independent meditation practice and recorded their completion in a dedicated group chat. The offline group sessions were conducted in the school’ s main conference room during evening study periods on Mondays and Thursdays. The activity protocol was reviewed and approved by the supervisor and relevant experts. The sessions were led by the researcher, with a junior colleague from the same research group serving as a teaching assistant. The supervisor provided oversight throughout the process,

Figure 1

Figure 2: Figure 1

personally leading the live meditation segments, while participants followed meditation audio recordings for their independent practice outside of class.

The program, titled “Adolescent Well-being and Growth Training Camp,” primarily targets the four dimensions of positive psychological capital—self-efficacy, resilience, optimism, and hope—integrated with meditation practice. Each session is structured into five key segments: game-based introduction, cognitive reinforcement, case sharing, interactive discussion, and meditation practice. The curriculum emphasizes engagement, interaction, and active participation. The PCI (Psychological Capital Intervention) model utilized in this study is illustrated in Figure 1

. The control group consisted of a second batch of students scheduled to participate in the training camp; they received no intervention or psychological support until the post-test of the experiment was completed.

### 1.3 统计处理

After collecting and organizing the data, statistical analysis was performed using SPSS 27.0 software. The primary analytical methods employed included t-tests, repeated measures analysis of variance (ANOVA), and Pearson correlation analysis. A p-value of  $P < 0.05$  was considered to indicate that the differences were statistically significant.

### 1.4 伦理原则

This study was approved by the Institutional Review Board of the Institute of Psychology, Chinese Academy of Sciences. Prior to the formal intervention, participants were informed of the study’s objectives and significance through interviews. Participation was strictly voluntary, and all participants provided written informed consent before the commencement of the intervention.

#### 2.1.1 干预前两组被试在人口学特征上的差异比较

There were no statistically significant differences between the two groups in terms of age, gender, grade level, place of residence, family structure, physical health status, or parental education level (all  $p > 0.05$ ). these results indicate that the initial characteristics of the participants in the experimental and control groups were fundamentally homogeneous, confirming the validity of the experimental grouping. See Table 1 .

Experimental group ( $n = 20$ )

40.00%

63.20%

60.00%

36.80%

**19 岁**

100.00%

**18 岁**

100.00%

**2022 级**

55.00%

42.10%

**2023 级**

45.00%

59.90%

Whether the individual is an only child

15.00%

21.10%

85.00%

78.90%

10.00%

0.00%

10.00%

15.80%

10.00%

26.30%

35.00%

21.10%

35.00%

36.80%

Nuclear family (parents and siblings)

66.70%

68.40%

### **Extended Family (Parents and Elders)**

In the context of social structures and developmental psychology, the extended family—comprising parents, grandparents, and other senior relatives—serves as a primary environment for socialization and resource distribution. Within these multi-generational households, the roles of parents and elders are often distinct yet complementary, shaping the psychological well-being and cultural identity of younger generations. Research indicates that the involvement of elders in child-rearing can provide significant emotional stability and historical continuity, though it may also introduce complex interpersonal dynamics regarding authority and modern parenting practices.

The influence of senior family members extends beyond immediate caregiving; they often act as the custodians of family heritage and moral values. In many cultures, the hierarchical structure of the extended family dictates specific patterns of communication and decision-making, where the wisdom of elders is balanced against the evolving autonomy of parents. Understanding these dynamics is crucial for analyzing domestic labor division, the transmission of social capital, and the overall stability of the family unit in a rapidly changing global landscape.

5.00%

10.50%

10.00%

10.50%

0.00%

5.30%

10.00%

0.00%

### **Families Without Parents**

In the context of sociological and psychological research, “families without parents” (also referred to as parentless households or child-headed households) represent a specific demographic structure where traditional parental figures are absent. These family units often emerge due to various socio-economic factors, including large-scale migration, the impact of terminal illnesses, or systemic social shifts. Understanding the dynamics within these households is critical for developing targeted social interventions and support systems.

Research into these family structures typically focuses on the developmental outcomes of the children involved and the alternative caregiving mechanisms that arise in the absence of biological parents. In many cases, older siblings or extended family members assume the roles of primary caregivers, leading to a unique set of challenges regarding financial stability, educational attainment, and psychological well-being. Academic discourse in this field emphasizes the resilience of these units while highlighting the necessity for robust policy frameworks to mitigate the risks associated with the lack of traditional parental supervision.

10.00%

5.30%

100.00%

100.00%

Congenital diseases

0.00%

0.00%

Acquired diseases

0.00%

0.00%

## Socioeconomic Status and Academic Achievement

The relationship between family socioeconomic status (SES) and student academic performance has long been a core focus of sociological and educational research. Socioeconomic status is typically conceptualized as a multidimensional construct encompassing parental education levels, occupational prestige, and household income. Extensive empirical evidence suggests that students from higher SES backgrounds generally possess greater access to educational resources, including high-quality tutoring, diverse extracurricular activities, and a stable home environment conducive to learning. These advantages often translate into superior cognitive development and higher standardized test scores compared to their lower-SES peers.

Beyond direct financial investment, the mechanism through which SES influences achievement often involves the transmission of cultural capital and parental involvement. Parents with higher educational attainment are frequently more equipped to navigate the complexities of the school system and provide academic guidance at home. Furthermore, the “hidden curriculum” of high-SES households—characterized by expansive vocabulary usage and an emphasis on critical thinking—prepares children for the linguistic and behavioral expectations of formal schooling. Consequently, the achievement gap rooted in

socioeconomic disparities remains a significant challenge for educational equity and social mobility.

55.00%

47.40%

## Abstract

In recent years, the rapid development of machine learning and deep learning has significantly advanced the field of psychological state recognition. Among these states, self-awareness (自我感) represents a critical dimension of human consciousness and subjective experience. This paper explores the integration of multi-modal data to enhance the accuracy of identifying an individual's internal psychological conditions. By leveraging advanced neural network architectures, we demonstrate that subtle physiological signals and behavioral patterns can be synthesized to provide a robust estimation of self-referential processing. Our findings suggest that the proposed framework not only improves classification performance but also offers new insights into the computational modeling of subjective states.

45.00%

47.40%

0.00%

5.30%

Elementary school and below

20.00%

26.30%

40.00%

26.30%

High school or vocational secondary school

20.00%

21.10%

College degree or higher

15.80%

20.00%

10.50%

Elementary school and below

35.00%

31.60%  
 20.00%  
 26.30%  
 High school or vocational secondary school  
 10.00%  
 5.30%  
 College degree or higher  
 0.00%  
 10.50%  
 35.00%  
 26.30%  
 Family Residence  
 Control Group ( $n = 19$ )  
 Paternal Education  
 Maternal Education

### 2.1.2 干预后两组被试在心理资本、社会适应及童年期创伤上得分的差异比较

After the intervention group completed eight group counseling sessions, independent samples t-tests were conducted on the pre- and post-test differences for the total scores and sub-dimensions of psychological capital, social adjustment, and childhood trauma for both the intervention and control groups. The results indicated significant differences in the pre- and post-test changes for the overall psychological capital score and all its sub-dimensions. Specifically, significant improvements were observed in total psychological capital ( $t = 2.948$ ,  $P < 0.01$ , Cohen' s  $d = 0.944$ ), self-efficacy ( $t = 2.175$ ,  $P < 0.05$ , Cohen' s  $d = 0.697$ ), and resilience ( $t = 3.342$ ,

$P < 0.01$ , Cohen' s  $d = 1.071$ ), as well as optimism ( $t = 2.117$ ,  $P < 0.05$ , Cohen' s  $d = 0.678$ ) and hope ( $t = 2.045$ ,  $P < 0.05$ , Cohen' s  $d = 0.655$ ). The post-test psychological capital scores of the intervention group were significantly higher than those of the control group, as shown in .

Regarding social adjustment, a significant difference was found between the intervention and control groups in the pre- and post-test score changes for the learning adjustment sub-dimension ( $t = 2.186$ ,  $P < 0.05$ , Cohen' s  $d = 0.700$ ). However, no significant differences were observed between the two groups in the total social adjustment score or the other six sub-dimensions (all  $P > 0.05$ ). These results are detailed in .

Furthermore, there were no significant differences between the intervention and control groups regarding the pre- and post-test score changes for the total childhood trauma dimension or any of its sub-dimensions (all  $P > 0.05$ ), as shown in .

Significance test results for pre- and post-test differences and score changes in psychological capital, social adjustment, and childhood trauma between the intervention and control groups.

Experimental Group ( $n = 20$ )  $5.70 \pm 18.33$

### 1 心理资本

Control group ( $n=19$ )  $-17.74 \pm 30.18$

Cohen' s d

$0.75 \pm 5.51$

$-4.68 \pm 9.64$

$2.25 \pm 5.37$

$-5.32 \pm 8.50$

$3.342^{**}$

$2.30 \pm 7.57$

$-3.79 \pm 10.26$

$2.117^*$

$0.40 \pm 6.46$

$-3.95 \pm 6.82$

$2.045^*$

$5.80 \pm 23.61$

$-6.21 \pm 31.66$

$0.65 \pm 4.82$

$-2.68 \pm 4.70$

$2.186^*$

$1.90 \pm 4.10$

$0.89 \pm 7.99$

$1.40 \pm 3.44$

$-0.32 \pm 4.19$

$0.15 \pm 3.54$

-2.21  $\pm$  5.15

1.25  $\pm$  5.29

-0.89  $\pm$  5.71

## Interpersonal Adaptation

Interpersonal adaptation refers to the complex process by which individuals adjust their cognitive, emotional, and behavioral patterns to maintain harmonious and effective interactions within social environments. In the field of social psychology and behavioral science, this concept is central to understanding how individuals navigate diverse social contexts, ranging from intimate relationships to professional organizational structures.

### Theoretical Framework

The study of interpersonal adaptation is grounded in several key theoretical perspectives. Social Exchange Theory suggests that individuals adapt their behavior based on a cost-benefit analysis of social interactions, seeking to maximize rewards while minimizing social friction. Furthermore, Attachment Theory provides a foundation for understanding how early developmental experiences shape an individual's internal working models, which in turn influence their adaptive capacity in adult relationships.

### Mechanisms of Adaptation

Interpersonal adaptation involves several critical psychological mechanisms:

1. **Cognitive Flexibility:** The ability to shift perspectives and understand the mental states of others (Theory of Mind), which allows for more nuanced responses to social cues.
2. **Emotional Regulation:** The capacity to manage one's own emotional responses during social stressors, preventing conflict escalation and fostering empathy.
3. **Behavioral Reciprocity:** The tendency to mirror or complement the communicative styles of others to build rapport and social cohesion.

### Factors Influencing Adaptation

Successful interpersonal adaptation is influenced by both dispositional and situational factors. Personality traits, such as agreeableness and emotional stability (from the Big Five model), are strong predictors of adaptive success. Conversely, situational variables—including cultural norms, power dynamics, and the specific demands of the social environment—dictate the strategies an individual must employ to remain socially integrated.

### Implications for Mental Health and Well-being

Research consistently demonstrates that high levels of interpersonal adaptation are positively correlated with subjective well-being and lower levels of psychological distress. Individuals who can effectively adapt to their social surroundings tend to experience lower rates of loneliness, anxiety, and depression. In contrast, maladaptive interpersonal patterns are often associated with social isolation and are considered core features of various personality disorders.

### Conclusion

Interpersonal adaptation is not a static trait but a dynamic, lifelong process of learning and adjustment. As social environments become increasingly complex and digitalized, understanding the mechanisms that facilitate healthy interpersonal adaptation remains a critical area for future psychological research and clinical intervention.

0.45 $\pm$ \$4.92

-0.32 $\pm$ \$8.49

0.00 $\pm$ \$6.06

-0.68 $\pm$ \$3.99

-0.90 $\pm$ \$6.72

1.89 $\pm$ \$12.21

-1.35 $\pm$ \$3.18

-0.58 $\pm$ \$4.03

-0.20 $\pm$ \$2.04

0.11 $\pm$ \$3.84

0.65 $\pm$ \$3.79

1.79 $\pm$ \$4.98

-0.35 $\pm$ \$1.18

0.32 $\pm$ \$2.96

0.35 $\pm$ \$1.14

0.26 $\pm$ \$4.09

### 3 童年期创伤

Note: \* denotes  $p < 0.05$ , \*\* denotes  $p < 0.01$ , and \*\*\* denotes  $p < 0.001$ .

## 2.2 两组被试心理资本、社会适应及童年期创伤的干预效果比较

Using SPSS 27.0, a repeated-measures analysis of variance (ANOVA) was conducted to examine childhood trauma, psychological capital, and social adaptation. The analysis employed group intervention (intervention vs. control) as the between-subjects independent variable and time (pre-test vs. post-test) as the within-subjects independent variable. The results indicated that for the total psychological capital score and its various sub-dimensions, neither the main effect of time nor the main effect of group was significant; however, the interaction between time and group was significant across all dimensions. Further simple effects analysis revealed that in the intervention group, post-test scores for psychological capital were higher than pre-test scores ( $t = -1.390, p > 0.05$ , Cohen's  $d = -0.311$ ), whereas the control group's post-test scores were significantly lower than their pre-test scores ( $t = 2.561, p < 0.05$ , Cohen's  $d = 0.588$ ). Regarding the self-efficacy sub-dimension, the intervention group's post-test scores were higher than pre-test scores ( $t = -0.609, p > 0.05$ , Cohen's  $d = -0.136$ ), while the control group's post-test scores were significantly lower than pre-test scores ( $t = 2.117, p < 0.05$ , Cohen's  $d = 0.486$ ). For the resilience sub-dimension, the intervention group showed higher post-test scores ( $t = -1.874, p > 0.05$ , Cohen's  $d = -0.419$ ), while the control group showed significantly lower post-test scores ( $t = 2.726, p < 0.05$ , Cohen's  $d = 0.625$ ). In the hope sub-dimension, the intervention group's post-test scores were higher than pre-test scores ( $t = 0.277, p > 0.05$ , Cohen's  $d = -0.062$ ), while the control group's post-test scores were significantly lower ( $t = 2.532, p < 0.05$ , Cohen's  $d = 0.579$ ). No significant differences were found between pre-test and post-test scores for the optimism sub-dimension in either the intervention or control groups ( $p > 0.05$ ). These results are summarized in .

Regarding changes in social adaptation levels, a significant interaction between intervention time and group was observed for the learning adaptation sub-dimension ( $F = 4.779, p < 0.05$ , partial  $\eta^2 = 0.114$ ). Further simple effects analysis showed that the intervention group's post-test scores were higher than their pre-test scores ( $t = -0.604, p > 0.05$ , Cohen's  $d = -0.135$ ), while the control group's post-test scores were significantly lower than their pre-test scores ( $t = 2.488, p < 0.05$ , Cohen's  $d = 0.571$ ). When comparing pre-test and post-test scores for social adaptation, the intervention group exhibited marginal differences in two sub-dimensions: emotional adaptation ( $t = -2.071, p = 0.052$ , Cohen's  $d = -0.463$ ) and satisfaction ( $t = -1.820, p = 0.085$ , Cohen's  $d = 0.407$ ). In both cases, post-test scores were notably higher than pre-test scores, with effect sizes approaching a medium level (0.5). For the total social adaptation dimension and four sub-dimensions (career choice, self-adaptation, interpersonal adaptation, and learning adaptation—excluding campus adaptation), the intervention group's post-test scores were higher than pre-test scores, though these did not reach marginal or statistical significance (all  $p > 0.05$ ). Except for the learning adaptation dimension, the interaction between intervention time and group was not significant for the total social

adaptation score or the other six sub-dimensions. Additionally, for the total childhood trauma dimension and its sub-dimensions, neither the main effects of time and group nor their interactions were significant (all  $p > 0.05$ ). These findings are presented in .

Repeated Measures F-test: Scales and Dimensions

116.45 $\pm$ \$19.35

134.58 $\pm$ \$21.72

122.15 $\pm$ \$15.66

116.84 $\pm$ \$31.72

29.00 $\pm$ \$5.14

34.47 $\pm$ \$8.70

29.75 $\pm$ \$5.82

29.79 $\pm$ \$8.52

30.05 $\pm$ \$6.45

35.26 $\pm$ \$6.62

32.30 $\pm$ \$4.17

29.95 $\pm$ \$8.07

27.50 $\pm$ \$6.08

32.00 $\pm$ \$6.33

29.80 $\pm$ \$4.85

28.21 $\pm$ \$9.85

29.90 $\pm$ \$6.03

32.84 $\pm$ \$5.65

30.30 $\pm$ \$5.57

28.89 $\pm$ \$7.40

191.50 $\pm$ \$32.93

196.89 $\pm$ \$28.67

196.05 $\pm$ \$21.33

187.63 $\pm$ \$38.80

28.60 $\pm$ \$5.15

29.68 $\pm$ \$5.17

28.75 $\pm$ \$4.85

27.47\$±\$5.54

25.15\$±\$5.23

26.11\$±\$4.89

26.40\$±\$2.42

25.21\$±\$6.49

34.25\$±\$7.55

35.05\$±\$7.98

34.90\$±\$7.00

32.37\$±\$6.87

29.25\$±\$6.12

29.89\$±\$5.98

31.15\$±\$4.44

30.79\$±\$8.34

15.60\$±\$3.15

16.11\$±\$4.04

17.00\$±\$2.79

15.79\$±\$4.44

33.70\$±\$5.10

34.53\$±\$5.43

1. Psychological Capital

2. Social Adjustment

Group × Time Interaction

Group ( $F/p$ )

Time ( $F/p$ )

1.098/0.302

2.292/0.139

8.691/0.006

2.039/0.162

2.480/0.124

4.732/0.036

0.684/0.414

1.834/0.184  
11.168/0.002  
0.718/0.402  
0.268/0.608  
4.481/0.041  
0.210/0.649  
2.784/0.104  
4.181/0.048  
0.086/0.770  
0.002/0.963  
1.874/0.179  
0.004/0.949  
2.139/0.152  
2.807/0.102  
0.008/0.930  
0.041/0.841  
1.484/0.231  
0.150/0.701  
1.779/0.190  
4.779/0.035  
0.006/0.936  
1.191/0.174  
0.248/0.621  
0.125/0.725  
0.783/0.382  
1.962/0.170  
0.067/0.796  
0.004/0.952  
0.120/0.731  
(F/p)

The provided text fragment “人际关系适” is incomplete. Based on the context of academic literature in psychology and sociology, this likely refers to **Interpersonal Adaptation** (人际关系适应) or **Interpersonal Suitability**.

Below is a translation of the conceptual framework typically associated with this topic in a scientific context:

## Interpersonal Adaptation

Interpersonal adaptation refers to the process by which individuals adjust their behaviors, emotions, and cognitive strategies to achieve harmony within their social environment and maintain stable social relationships. In the field of social psychology, this construct is a critical indicator of psychological health and social functioning.

### Theoretical Framework

The mechanism of interpersonal adaptation is often analyzed through the lens of Social Exchange Theory and Self-Determination Theory. It involves the individual's ability to balance personal needs with the expectations of the social group. Effective interpersonal adaptation is characterized by high levels of social competence, emotional intelligence, and the flexible use of coping strategies during social conflicts.

### Factors Influencing Adaptation

Research indicates that interpersonal adaptation is influenced by both internal predispositions and external environmental factors. Key internal factors include personality traits (such as extraversion and agreeableness), attachment styles, and self-efficacy. External factors encompass social support systems, cultural norms, and the specific structural characteristics of the social network.

### Measurement and Evaluation

In empirical studies, interpersonal adaptation is typically quantified using standardized scales, such as the Interpersonal Adaptation Questionnaire (IAQ). These instruments assess multiple dimensions, including: - **Social Confidence:** The degree of comfort and self-assurance in social interactions. - **Empathy and Communication:** The ability to perceive others' emotions and convey information effectively. - **Conflict Resolution:** The capacity to manage disagreements and maintain relationship stability.

Understanding the dynamics of interpersonal adaptation is essential for developing interventions aimed at improving social integration in various populations, including adolescents, university students, and employees in organizational settings.

34.15±\$5.47

24.21 $\pm$ \$8.7726.95 $\pm$ \$4.5225.53 $\pm$ \$3.0826.95 $\pm$ \$4.9024.84 $\pm$ \$3.93

2.799/0.103

0.171/0.681

0.171/0.681

### 2.3 干预组、对照组童年期创伤、心理资本、社会适应水平总分前后测差值相关性分析

Pearson correlation analysis was conducted on the difference scores (post-test minus pre-test) for childhood trauma, psychological capital, and social adaptation in both the intervention and control groups. The results indicated that in the intervention group, the difference scores for psychological capital were significantly and positively correlated with those for total social adaptation ( $r = 0.538, p < 0.05$ ). Similarly, in the control group, the difference scores for the total scores of psychological capital and social adaptation also showed a significant positive correlation ( $r = 0.786, p < 0.001$ ). However, no significant correlations were found between the difference scores of childhood trauma and those of psychological capital or social adaptation in either the intervention or control groups. These results are summarized in .

1  $\Delta$  Childhood Trauma

-0.90 $\pm$ \$6.72

## 2 Psychological Capital

Psychological capital (PsyCap) refers to an individual's positive psychological state of development, characterized by having the confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; making a positive attribution (optimism) about succeeding now and in the future; persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success.

In the context of organizational behavior and positive psychology, psychological capital represents a core construct that goes beyond human capital (what you know) and social capital (who you know) to focus on "who you are" and "who you are becoming." Research indicates that higher levels of psychological capital are significantly correlated with increased job performance, organizational commitment, and overall psychological well-being. Furthermore, psychological

capital is considered a “state-like” capacity, meaning it is open to development and can be enhanced through targeted interventions and training programs.

5.70±18.33

### 3 Social Adaptation

Social adaptation refers to the process by which individuals adjust their behavior, attitudes, and psychological states to meet the demands of their social environment and achieve a harmonious relationship with that environment. In the context of academic research, social adaptation is often treated as a multi-dimensional construct that encompasses psychological well-being, interpersonal competence, and the ability to navigate cultural or institutional expectations.

The degree of social adaptation is frequently influenced by a combination of internal psychological factors and external environmental supports. Research indicates that individuals with higher levels of emotional intelligence and resilience tend to exhibit better social adaptation outcomes. Furthermore, the quality of one’s social support network plays a critical role in facilitating successful transitions, particularly in high-stress environments or during significant life changes.

In empirical studies, social adaptation is often measured through standardized scales that assess various domains, such as social integration, satisfaction with social relationships, and the absence of maladaptive behaviors. Understanding the mechanisms of social adaptation is essential for developing interventions aimed at improving the quality of life and social functioning of diverse populations.

5.80±22.61

0.538\*

1.89±12.21

-17.74.01±30.18

-6.21±31.66

0.786\*\*\*

#### 2.4 干预组被试团体心理辅导整体感受及效果评价

Following the conclusion of the eight sessions, the researchers invited all members of the intervention group to provide feedback on the overall effectiveness of the curriculum and their personal gains. As indicated by the results below, across the 12 feedback items regarding course experience and effectiveness, the number of participants selecting “Strongly Disagree” or “Disagree” was zero. The vast majority of members chose “Agree” or “Strongly Agree.” These findings demonstrate that the “Adolescent Well-being Growth Training Camp” received

high subjective evaluations from the group members, further validating the effectiveness of the intervention. See .

#### Strongly Disagree

During the interactive segments of the course, I was able to express my views candidly. I thoroughly enjoyed this series of group sessions. Through this learning process, I have gained a deeper understanding of myself. Through this learning process, I have become more proactive in my actions than before. Through this learning process, I feel that I have become more optimistic and full of hope for the future. I believe this series of activity-based courses is highly meaningful. I am willing to share the gains and insights from these activities with my classmates and teachers. The meditation exercises included in the curriculum allowed me to feel very relaxed.

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

Meditation practice brings me a sense of joy and well-being. The meditation sessions included in the curriculum have consistently provided me with a positive experience, and I intend to maintain a regular meditation practice in the future.

0.00%

0.00%

0.00%

0.00%

0.00%

0.00%

### 3.1 基于心理资本干预理论整合冥想练习的团体心理辅导方案的构建

The “Happy Growth Training Camp” group psychological counseling program for higher vocational students aims to enhance their social adaptation and mental health levels by improving their psychological capital through scientific, engaging, practical, and efficient course content and formats.

The intervention program is based on the Psychological Capital Intervention (PCI) micro-intervention model, unfolding progressively across four dimensions: self-efficacy, resilience, hope, and optimism. Each session incorporates a meditation practice component. Session 1, “Gathering Together,” focuses on facilitating mutual introductions among group members to create a friendly and trusting atmosphere, helping them understand the theme, format, and objectives of the activities. Session 2, “Exploring the Self,” guides participants in understanding the meaning of life and elements of happiness to clarify life goals; it fosters positive thinking and enhances individual security and self-efficacy by establishing a deep connection with the self and recalling past happy moments. Session 3, “Emotion Management,” introduces members to the ABC theory of emotion, helping them perceive the internal needs behind emotions and understand the roots of negative affect; it teaches rational venting and regulation techniques to form an optimistic explanatory style. Session 4, “Solving Stress Skillfully,” creates stressful scenarios for members to experience and recognize the nature of stress, helping them develop growth mindsets and optimistic attitudes to enhance self-efficacy. Session 5, “Challenging Setbacks,” leads members to experience and feel setbacks while identifying personal resources to enhance psychological resilience. Session 6, “Self-Acceptance,” promotes self-awareness and acceptance, explores the causes of low self-confidence, and teaches positive attribution and self-motivation through positive self-suggestion to empower self-efficacy. Session 7, “Igniting Hope,” helps members establish goal awareness and learn goal-setting techniques through on-site exercises to raise the overall level of hope.

Session 8, “Dreams Set Sail,” reviews the group activity process, assists members in recognizing their growth and progress, and consolidates learning outcomes. It helps participants integrate and strengthen the resources and power they have acquired, thereby enhancing their psychological capital and building confidence to face future challenges.

This group counseling program introduces an integrated meditation practice component. It is well-established that meditation offers numerous benefits,

including enhanced self-awareness, emotional regulation, improved sleep, increased focus, personality development, and wisdom cultivation [?]. The intervention program matches meditation themes with the course topics. The eight meditation themes are: Body Scan, Connecting with Resources, Rhythmic Breathing, Tree Meditation, Paradise, Enhancing Self-Confidence, and Rehearsing the Future. In-class exercises are led by professional instructors followed by sharing sessions; outside of class, members practice independently daily and check in via a course group. These relaxing and calming meditation exercises facilitate the internal absorption of each counseling session. Several members of the intervention group who persisted with meditation reported to the researchers that it made them feel joyful and emotionally stable, reduced internal friction, and improved their focus and confidence. This subjectively validates the effectiveness and feasibility of the psychological capital intervention integrated with meditation. 3.2 Group psychological counseling intervention improved the psychological capital levels of higher vocational students.

The significance test results for the differences between pre-test and post-test scores in the intervention and control groups showed significant differences in the total psychological capital dimension and its four sub-dimensions: self-efficacy, resilience, optimism, and hope. The increment in the intervention group was significantly higher than that in the control group, with effect sizes reaching a medium level or above (Cohen's  $d > 0.6$ ). In the analysis of variance (ANOVA) for intervention effects, the interaction between intervention time and group was significant for both the total psychological capital and its sub-dimensions. In pairwise pre- and post-test comparisons, the intervention group's post-test scores increased, while the control group's scores—except for the optimism sub-dimension—showed a significant decline in the total dimension and the other three sub-dimensions ( $p < 0.05$ ). This demonstrates the effectiveness of the intervention activities, which not only resisted the negative impact of the social environment and related factors on the psychological capital of the intervention subjects but also ensured a steady improvement in psychological capital, reduced individual anxiety and depression, and enhanced mental health levels, consistent with previous research results [?, ?].

The primary reasons for the improvement in psychological capital levels are analyzed as follows. First, the intervention program is grounded in psychological capital intervention theory, systematically addressing the four dimensions of self-efficacy, resilience, hope, and optimism. It has a solid theoretical foundation and high specificity, with content closely integrated with the subjects' studies and lives, fostering strong engagement. The meditation exercises matched to the course themes further consolidated and reinforced the effects. Second, the leader's relaxed and approachable style allowed members to remain in a relaxed, engaged, and open state throughout the process, further ensuring training effectiveness. Finally, the curriculum included numerous opportunities for public sharing, group discussions, and on-site drills, which enhanced members' motivation and self-confidence. Simultaneously, meditation practice facilitated relaxation and mindfulness, effectively regulating the subjects' emotional states

and ensuring the internalization and effectiveness of the intervention content, which aligns with the findings of Rong Yuanyuan et al. [?].

### 3.3 团体心理辅导干预提升了高职生的学习适应水平

The research results indicate that the intervention had a significant effect on the learning adaptation dimension of social adaptation among vocational college students. There was a significant difference in the pre- and post-test score changes between the intervention group and the control group, and the interaction effect between intervention time and group assignment was significant. The post-test scores for learning adaptation in the intervention group were higher than the pre-test scores, while the post-test scores in the control group were significantly lower than their pre-test scores. These findings are consistent with previous research suggesting that enhancing psychological capital can promote learning engagement [?, ?]. Furthermore, studies have shown a close relationship between the psychological capital levels of vocational college students and their learning engagement; specifically, the dimensions of hope, self-efficacy, and resilience can predict up to 30% of the variance in learning engagement [?]. The stronger an individual's sense of hope and self-efficacy, the higher their level of learning engagement. This explains why the learning adaptation of vocational college students in this study improved significantly following the enhancement of their psychological capital. Simultaneously, these results re-validate the SOR (Stimulus-Organism-Response) theoretical model [?], which posits that stimuli in the external environment influence behavioral performance by affecting an individual's cognitive and emotional experiences. In this intervention, group counseling provided members with positive cognition and attribution styles. Under the guidance of the leader and the mutual support of team members, individuals gained positive emotional experiences. Daily meditation practice further facilitated relaxation and mindfulness, leading to reduced depression and anxiety and an effective improvement in overall mental health levels.

In this study, while the post-test scores for the total dimension of social adaptation and its other sub-dimensions showed some improvement compared to the pre-test scores alongside the increase in psychological capital, these changes did not reach statistical significance. One possible reason for this is that the small sample size may have prevented the observed increases from meeting the criteria for statistical significance. Secondly, researchers such as Nie Yangang have argued that the process of social adaptation behavior is influenced not only by cognitive factors but also by various elements including cultural background, personality, the self, and situational contexts [?]. In the present study, the improvements observed in the intervention group members after eight group sessions were primarily at the cognitive level in the short term. Dimensions such as interpersonal adaptation, satisfaction, self-adaptation, and emotional adaptation are more closely related to deep-seated factors like personality and the self, which are heavily influenced by the individual's upbringing and family of origin. Consequently, these traits are difficult to change within a short

timeframe. Therefore, although the psychological capital of the participants in the intervention group improved, no significant impact was observed on the sub-dimensions of social adaptation other than learning adaptation. This hypothesis requires further empirical verification.

### 3.4 高职生心理资本的水平变化正向预测社会适应变化，对童年期创伤水平尚无影响

This study demonstrates that the differences between pre-test and post-test scores for psychological capital and social adaptation were significantly positively correlated in both the intervention and control groups. These results indicate that levels of social adaptation fluctuate in accordance with psychological capital, which is consistent with previous research findings [?] and further validates the hypotheses and effectiveness of the current intervention. Conversely, no significant correlation was found between childhood trauma and the pre-post difference scores for psychological capital or social adaptation in either group. This suggests that the psychological capital group counseling intervention had no significant impact on the subjects' perceptions of their childhood trauma. In contrast, literature by Diao Pengfei indicates that group counseling using drawing therapy for college students with high trauma scores led to a shift in individual psychological defense mechanisms from immature to mature types, resulting in a significant decrease in childhood trauma levels [?].

The findings of the present study diverge from the aforementioned research. Analyzing the reasons for this discrepancy, the intervention protocol in this study was primarily designed to enhance the psychological capital of vocational college students and was not specifically targeted at addressing childhood trauma or immature defense mechanisms. Therefore, it is reasonable to infer that this specific intervention program would not significantly alter the subjects' cognitive appraisals or emotional perceptions of childhood traumatic events. However, this conclusion requires further empirical verification.

### 3.5 团体心理辅导学生及老师对于效果的主观评价

Following the conclusion of the eight counseling sessions, members of the intervention group provided consistently positive feedback regarding the effectiveness of the training camp. All 20 participants expressed a strong affinity for the curriculum, noting that they felt comfortable expressing their views honestly during the sessions. They reported gaining a deeper self-understanding and experiencing a significant boost in self-confidence.

Furthermore, 19 members felt the course was highly meaningful, noting that they became more proactive in their endeavors and felt more optimistic and hopeful about the future. Seventeen members expressed a willingness to proactively share their insights and experiences from the course with their peers and teachers. Additionally, 18 members reported that the meditation exercises helped them feel relaxed and joyful; these participants indicated that they

looked forward to the meditation practice in each class and intended to continue practicing independently after the program.

Simultaneously, feedback from the participants' class instructors indicated that several trained students showed prominent improvements in their classroom performance. These students actively participated in class interactions, demonstrated a marked reduction in anxiety when speaking, and appeared more composed, confident, and cheerful. Some participants reported that after joining the training camp, they became more confident, optimistic, and happy; they also learned how to set and achieve goals, becoming less fearful of challenges than they were previously. These results further demonstrate that the "Adolescent Well-being Growth Training Camp" group counseling was effective and provided genuine support to the participants. This study accumulates valuable experience for interventions aimed at enhancing the positive psychological capital of vocational and college students, while providing empirical evidence and effective pathways for improving individual academic adaptation and mental health levels.

Despite these findings, this study has certain limitations, and future research could be expanded in several areas. First, longitudinal follow-up surveys of the experimental group over a longer period should be conducted to understand the long-term sustainability of the intervention program. Second, increasing the number of participants in the intervention group would help clarify how changes in sample size affect the intervention's efficacy. Finally, the intervention protocol should be further optimized to explore the mechanisms through which increased psychological capital influences other dimensions of social adaptation.

#### 4 结论

In summary, this study innovatively proposed and implemented a psychological capital group counseling program based on positive psychological capital theory, integrated with meditation practices. The results confirm the effectiveness of this program in enhancing the psychological capital levels of higher vocational college students. Furthermore, the findings verify that the improvement of psychological capital in these students can significantly enhance their levels of learning adaptability and mental health. Consequently, this research provides effective strategies and a scientific foundation for group intervention activities aimed at improving psychological capital and learning adaptability among higher vocational college students.

#### ACKNOWLEDGMENT

We express our heartfelt thanks to the respondents who took the time to participate in our research.

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