THE INFLUENCE OF SELF-CONCEPT, COGNITIVE EMOTION REGULATION STRATEGIES ON DEPRESSION AND REDUCING DEPRESSION OF VOCATIONAL COLLEGE STUDENTS THROUGH INTEGRATIVE GROUP COUNSELING

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2024

อิทธิพลของอัตมโนทัศน์แห่งตน กลยุทธ์การกำกับอารมณ์ทางปัญญาต่อภาวะซึมเศร้า และการลดภาวะซึมเศร้าของนักศึกษาอาชีวศึกษาโดยการให้คำปรึกษากลุ่มแบบบูรณาการ

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ปริญญานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตร
การศึกษาดุษฎีบัณฑิต สาขาจิตวิทยาการศึกษาและการแนะแนว
คณะคณะศึกษาศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ
ปีการศึกษา 2567

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A Dissertation Submitted in Partial Fulfillment of the Requirements

for the Degree of DOCTOR OF EDUCATION

(Ed.D. (Educational Psychology and Guidance))

Faculty of Education, Srinakharinwirot University

2024

THE DISSERTATION TITLED

THE INFLUENCE OF SELF-CONCEPT, COGNITIVE EMOTION REGULATION STRATEGIES ON DEPRESSION AND REDUCING DEPRESSION OF VOCATIONAL COLLEGE STUDENTS THROUGH INTEGRATIVE GROUP COUNSELING

BY

XI WENBIAO

HAS BEEN APPROVED BY THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DOCTOR OF EDUCATION IN ED.D. (EDUCATIONAL PSYCHOLOGY AND GUIDANCE)
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Title	THE INFLUENCE OF SELF-CONCEPT, COGNITIVE EMOTION REGULATION STRATEGIES ON DEPRESSION AND REDUCING DEPRESSION OF VOCATIONAL COLLEGE STUDENTS THROUGH INTEGRATIVE GROUP COUNSELING
Author	XI WENBIAO
Degree	DOCTOR OF EDUCATION
Academic Year	2024
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This study aims to 1) explore the effects of self-concept and cognitive emotion regulation strategies on depression among vocational college students; 2) develop an integrative group counseling program to enhance self-concept and relatively adaptive cognitive emotion regulation strategies (RACERS) while reducing depression. A mixed-methods approach was adopted, consisting of two phases. Phase 1: A stratified random sampling method was used to select 400 students, who completed the Self-Rating Depression Scale (SDS) (the Cronbach's alpha coefficient is 0.826), Tennessee Self-Concept Scale (TSCS) (the Cronbach's alpha coefficient is 0.976), and Cognitive Emotion Regulation Questionnaire (CERQ) (the Cronbach's alpha coefficient is 0.967). For quantitative analysis, methods such as descriptive statistical analysis, Pearson correlation analysis, multiple regression analysis, and repeated measures multivariate analysis of variance (MANOVA) were employed. Results showed that depression was positively correlated with self-concept and relatively adaptive cognitive emotion regulation strategies ($p < 0.001$), and negatively correlated with relatively maladaptive cognitive emotion regulation strategies ($p < 0.001$). Relatively maladaptive cognitive emotion regulation strategies were the strongest positive predictor of depression ($\beta = 0.443$, $p < 0.001$). Phase 2: Twenty students were randomly assigned to an experimental group (n=10) and a control group (n=10). The experimental group received a 10-session integrative group counseling intervention. The results showed that in the experimental group, self-concept and relatively adaptive cognitive emotion regulation strategies significantly increased from pretest, post-test, and follow-up test ($p<0.001$), while relatively maladaptive cognitive emotion regulation strategies and depression levels significantly decreased ($p<0.001$). No significant changes were observed in the control group.

Keywords: Vocational college students, Depression, Self-concept, Cognitive emotion regulation strategies, Integrative group counseling

ACKNOWLEDGEMENTS

Here, with the sincerest gratitude, I wish to extend my sincere gratitude to my supervisor, Assoc. Prof. Dr. Patcharaporn Srisawat. From selecting the thesis topic, determining research methods, collecting and analyzing data, to revising the thesis repeatedly, Supervisor Patcharaporn Srisawat has always guided me with her profound knowledge, rigorous academic attitude, and keen academic insight. I also wish to convey my profound gratitude to my co-advisor Dr. Kanchit Saenubol. His unique academic insights and research ideas, as well as the valuable comments and suggestions he put forward, have significantly contributed to the final presentation of the research findings. I wish to convey my sincere gratitude to the Chair of the Committee, Assoc. Prof. Dr. Ujsara Prasertsin, along with Assoc. Prof. Dr. Skol Voracharoensri, and Assoc. Prof. Dr. Monthira Jarupeng. From their professional perspectives, their valuable suggestions and constructive comments have significantly enhanced the logic and content of my thesis. I would like to extend my sincerest gratitude to all the teaching faculty and staff of the Faculty of Education, Srinakharinwirot University (SWU), Thailand, for your consistent support and assistance. At the same time, I heartily thank Yuncheng Preschool Education College, where I work, for the numerous conveniences provided during my doctoral studies, which enabled me to focus on my studies and research with peace of mind. During this challenging academic journey, my wife has silently taken on household chores, offering me endless tolerance and support. I want to thank my wife for always standing by my side and being my strongest pillar of support. Finally, I seek to express my earnest gratitude to Ms. Liu Yuqi, Mr. Rao Chenxi, Ms. Mi Wenting and Ms. Sirawan Pichitchaisopa. During my academic journey, we have jointly explored academic challenges and shared bits of life. It has enabled me to gain the most precious friendship with my classmates.

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CHAPTER 1
INTRODUCTION

1. Research background

The World Health Organization (WHO) has defined health as: Health is not merely the absence of physical diseases but a state of complete physical, mental, and social well-being (Huang,2023). Mental health is a sound state in which people have reasonable cognition, stable emotions, appropriate behaviors, harmonious interpersonal relationships and the ability to adapt to changes during the process of growth and development (China Government Network, 2021). In this state, individuals experience a sense of security, maintain a positive self-condition, harmonize with society, and adapt to the external environment through socially accepted means.

According to incomplete statistics, about 450 million people worldwide have mental health problems. Depression ranks among the primary psychological disorders in contemporary society (Hua, 2020). According to the World Health Organization (2021), depression is a common mental disorder. About 280 million people worldwide have depression, and the number is increasing year by year. Depression is one of the main causes of disability worldwide and also one of the main reasons for the increase in the total burden of diseases globally. Depression differs from typical mood fluctuations or transient emotional reactions triggered by daily life challenges. When recurring and reaching moderate to severe levels, it significantly impairs an individual's health and may even lead to suicide, emerging as a global public health concern.

College students constitute a vital social demographic. They are in a critical transition from adolescence to adulthood, which represents one of the most stressful phases in the life course. (Ghrouz, Noohu, & Dilshad, 2019). The discomfort in the learning state transitioning from high school to university, confusion in interpersonal communication, uncertainty about future development, and choices between postgraduate entrance examinations and employment all bring tremendous psychological pressure to college students. Coupled with the immaturity of psychological

development, individuals are highly likely to experience various psychological problems (Bruffaerts, Mortier, & Kiekens, 2018). Among these, depression, anxiety, and confusion about career direction are particularly prominent. Especially depression has become a relatively common health issue among college students, and its high incidence cannot be ignored (Kim, Yu, & Kim, 2020). Depression refers to an emotional state of lacking pleasure that every individual will experience to some extent in his or her life course (Xu & Xie, 2021).

As a typical emotional state, depression shows a high frequency among the student group. Its characteristics include low mood, loss of motivation, slow thinking, and even possible physical discomfort symptoms such as fatigue and loss of appetite. More seriously, depression may lead to an individual's despair of life and even the risk of suicide (Six, 2022; Zhao, 2021; Huang, 2023).

In the work of college student management, researcher has found that the causes of depression have their own internal special rules and are affected by multiple factors. Taking the Department of Preschool Education of Yuncheng Preschool Education College where the researchers are located as an example, in 2023, the Department of Preschool Education enrolled 1,163 freshmen, and 17 students dropped out. Through interviews by researchers, it is known that 8 of them dropped out due to depression, accounting for 47% of the number of dropouts in that year. (Data source: Department of Preschool Education, Yuncheng Preschool Education College, 2025). After interviewing the above-mentioned students who dropped out due to depression, the researcher found that the main problems of these students lay in their overly low self-evaluation and the lack of a comprehensive and reasonable self-assessment. When facing setbacks and difficulties, their emotions fluctuated significantly, and they lacked rational emotional regulation methods and often thought about problems in improper cognitive ways. That is to say, their self-concept and cognitive regulation ability were weak, which made them particularly prone to depression when facing various pressures such as independent living, adapting to a new environment, academic studies, and interpersonal relationships.

Rogers (1959, as cited in Qian, 1994) believed that an individual's self-concept is the key to understanding the occurrence of psychological disorders. The research on the correlates of internalizing and externalizing behavioral problems by Compas, Phares, Banez, & Howell (1991) indicates that the self-concept is closely related to depression. Normal groups have a more positive self-concept than depressed groups, mainly manifested in aspects such as physical appearance, academic studies, behavior, and overall self. Research findings on how cognitive emotion regulation strategies influence adolescent problem gaming by Kökönyei et al. (2019) indicate that negative cognitive emotion regulation strategies mainly manifest as when individuals face setbacks, they overly blame themselves and attribute all problems to themselves; often extremely exaggerate the serious consequences of negative events; repeatedly ruminate and can't extricate themselves; are unwilling to face and solve problems; lack flexible and dialectical thinking. These manifestations would make it difficult for individuals to effectively cope with bad emotions but instead aggravate negative emotions. The research results on the influence of the psychological quality of freshmen in higher vocational colleges on school adaptation by Peng, Zhang, & Luo (2024) show that among college students, positive cognitive emotion regulation strategies exhibit a negative correlation with depression, whereas negative cognitive emotion regulation strategies show a significant positive correlation with depression.

Cognitive emotion regulation strategies, as the key strategies for individuals to actively adjust themselves to adapt to the environment, involve individuals regulating emotions through cognitive and behavioral strategies (such as enhancement, suppression, or acceptance) when facing insufficient resources or demands that exceed their own ability to cope with challenges (Lazarus, 1984). Fan (2024) explored the interconnections among the behavioral inhibition/activation system, cognitive emotion regulation strategies, and depression in senior high school students. The results show that the employment of emotion regulation strategies influences depressive development. Individuals who often utilize non-adaptive cognitive emotion regulation strategies, such as rumination, catastrophizing, and self-blame, are more likely to have a tendency to

develop depression. The empirical research results of Hou, Zhang, & Wang (2019) on the intervention of group psychological counseling on the mental health level of college students show that a low self-concept may lead individuals to use more immature cognitive emotion regulation strategies. Although they can play a certain role in a short period of time, helping individuals temporarily forget the pain or stabilize their emotions, they cannot fundamentally solve the problem. In the long run, it will definitely reduce the sense of self-control and self-concept, making individuals more prone to depression.

The majority of existing studies center on research relating college students' self-concept to depression, as well as cognitive emotion regulation strategies to depression. However, no researcher has conducted in-depth empirical research on exactly what kind of correlation exists among college students' self-concept, cognitive emotion regulation strategies, and depression. Especially, there are fewer related studies with vocational college students as the research object. Therefore, the researcher believes it is necessary to study and analyze the influence of vocational college students' self-concept and cognitive emotion regulation strategies on depression and provide a scientific basis for preventing and controlling the occurrence of depression among vocational college students. To effectively solve the problem of depression among vocational college students, it is necessary to fully clarify the factors and paths that affect the depression of vocational college students. Only in this way can psychological intervention be carried out more effectively and then avoid the overly serious negative impact of depression on college students (Qian, 2023).

It is worth emphasizing that vocational college students, a unique subgroup making up more than 50% of the college student population (China's Statistical Bulletin on the Development of Education, 2023), having a tendency towards depression is not an individual phenomenon. And for the current intervention and treatment of depression among vocational college students, group counseling has a more economic advantage and can provide assistance to a wider range of students. Chen (2021) conducted a study on the application of group counseling in the teaching of mental health education courses in higher vocational colleges and pointed out that group counseling is a

psychological treatment method that applies the principles of psychotherapy to a group of people who have common development problems and similar psychological distress at the same time. Members interact with each other and influence each other to achieve the therapeutic purpose. Yalom (2010) proposed that group counseling is a process in which members, through interaction, sharing, and feedback in a specific therapeutic environment, jointly explore psychological problems, promote self-awareness, improve interpersonal relationships, enhance psychological adaptability, and achieve personal growth.

Compared with individual counseling, in group counseling, participants form a small community sharing psychological problems. Through one activity, the instructor can serve multiple people at the same time, greatly reducing the input of human resources and time. The research of Zhang et al. (2024) on the improvement of interpersonal distress of medical students through self-esteem group psychological counseling indicates that depressed college students are depressed and self-enclosed. The activity forms such as group discussions, group counseling, and lectures can just make up for this shortcoming. In the atmosphere of group counseling, they form a close connection due to common psychological problems, open up to each other, share experiences, and provide real feedback. This kind of interaction can stimulate them to change wrong cognition and promote positive changes in behavior.

In integrative group counseling, researchers integrate multiple therapies such as psychoanalytic therapy, rational emotive behavior therapy, behaviorism therapy, person-centered therapy, and narrative therapy. Psychoanalytic therapy is dedicated to helping individuals unearth childhood traumas and turn the subconscious into consciousness. Rational emotive behavior therapy emphasizes the key role of rational emotive behavior. Behaviorism therapy achieves psychological transformation by changing the behavior of clients. Person-centered therapy attaches great importance to the relationship between counselors and clients and operates centered on clients. Narrative therapy promotes the growth and development of individuals by helping clients reinterpret and reconstruct their own stories. These different therapies complement each

other and work synergistically in integrative group counseling to provide more comprehensive and in-depth psychological support and help for clients.

To sum up, through the analysis of relevant literature, it can be seen that there is a significant negative correlation between self-concept, cognitive emotion regulation strategies and depression. However, relatively few studies have been conducted on the above issues from the perspective of integrative group counseling. As a result, the existing research results on the correlation between cognitive emotion regulation strategies and depression, and the correlation between self-concept and depression cannot be directly applied to guiding the integrative group counseling work for vocational college students, and the effectiveness of this integrative group counseling method cannot be truly exerted. Building on this, this study aims to explore the effects of self-concept and cognitive emotion regulation strategies on depression in vocational college students. Through integrative group counseling, the research intends to enhance self-concept and adaptive cognitive emotion regulation strategies, thereby reducing depression levels among this population.

2.Research questions

2.1 How do self-concept and cognitive emotion regulation strategies affect the depression of Chinese vocational college students?

2.2 How does the integrative group counseling reduce the depression of Chinese vocational college students?

2.3 Can the integrative group counseling effectively reduce the depression of Chinese vocational college students?

3. Research objectives

This study was divided into two phases, which were 1) correlation and multiple regression analysis and 2) the quasi-experiment

Phase 1: Correlation and Multiple Regression Analysis

1) To study the correlation among self-concept, cognitive emotion regulation strategies and depression of Chinese vocational college students.

2) To study the influences of self-concept and cognitive emotion regulation strategies on the depression of Chinese vocational college students and determine which the most influential predictor on depression is.

Phase 2: quasi-experiment

3) To develop an integrative group counseling that targets the most influential depression predictor identified in Phase 1 research, with the goal of reducing depression levels.

4) To examine the efficacy of an integrative group counseling designed to alleviate depression.

4.1) To compare self-concept, cognitive emotion regulation strategies, and depression scores between pre-and post-integrative group counseling, as well as conduct a follow-up test on the experimental group.

4.2) To compare self-concept, cognitive emotion regulation strategies, and depression scores between the experimental and control groups across pretest, post-test, and follow-up test phases.

4. Definition of terms

4.1 Self-concept

Self-concept denotes an individual's subjective experience of their own being. It involves a person's progressive self-understanding developed through personal experiences, introspection, and feedback from others. It represents a relatively stable comprehension of one's physiological status, psychological traits, social attributes, and other dimensions, formed through diverse channels like self-observation, analysis of external behaviors and contexts, and social comparison. In this paper, the Tennessee Self-Concept Scale (TSCS) translated by Chinese scholar Lin (1980) is adopted. This scale has been revised and tested in China and has excellent reliability and validity indicators.

4.2 Cognitive emotion regulation strategies

Cognitive emotion regulation strategies refer to the strategies employed by individuals when managing and modifying emotions. They engage in cognitive

management of emotional information, primarily referring to the cognitive efforts individuals exert when coping with internal or external life events that exceed their personal resource capacity.

Cognitive emotion regulation strategies regulate emotions from a cognitive perspective, which is closely related to human life and reflects the internal cognitive process of monitoring, evaluating, and modifying the occurrence, experience, and expression of emotional responses for individuals to achieve goals. In this paper, the Chinese version of the Cognitive Emotion Regulation Questionnaire (CERQ) revised by Chinese scholar Wei (2007) based on the Cognitive Emotion Regulation Questionnaire (CERQ-36) compiled by Garnefski is adopted. This scale has been revised and tested in China and has excellent psychometric properties. Most scales demonstrated a Cronbach's alpha coefficient exceeding 0.70, with certain subscales even surpassing 0.80. The CERQ scale also exhibited favorable factor validity and construct validity. This scale divides cognitive emotion regulation strategies into relatively adaptive cognitive emotion regulation strategies (RACERS) (including two factors: Positive refocusing and Positive reframing) and relatively maladaptive cognitive emotion regulation strategies (RMCERS) (including six factors: Focus on thought/rumination, Other-blame, Catastrophizing, Acceptance, Putting in to perspective and Self-blame).

4.3 Depression

Depression refers to an emotional state lacking pleasure. In this state, an individual is somewhat depressed and shows some characteristics of depression, yet does not meet the symptom criteria for depression in psychiatry. It is also known as sub-threshold depression. Essentially, subthreshold depression has milder manifestations than depression. People with subthreshold depression have fewer suicidal thoughts and feelings of guilt than those with depression. Numerous psychological studies on depression can be categorized as research on subthreshold depression. Thus, this study aims to investigate subthreshold depression among Chinese vocational college students. In this paper, the Self-Rating Depression Scale (SDS), compiled by American psychologist Zung (1965), is used to measure the depression of vocational college

students. This scale has been revised and tested in China and has good reliability and validity (Zhang & Liu,2003). According to the scoring standard of this scale, this study will select vocational college students with mild depression whose depression scores are between 50 and 59 as the research objects of integrative group counseling.

4.4 Chinese vocational college students

Chinese vocational college students refer to those studying at Yuncheng Preschool Education College in Shanxi Province. These students are from majors such as preschool education, art, and early education, including those in the first, second, and third grades.

4.5 Integrative group counseling

Integrative group counseling refers to a structured group counseling and guidance developed by the instructor based on the theories of psychoanalytic therapy, rational emotive behavior therapy, behaviorism therapy, person-centered therapy, and narrative therapy. Through multiple group activities, it helps group members perceive themselves, explore themselves, and transform themselves through new insights in a safe and stable small social environment. Ultimately, it helps individuals grow and develop, thereby achieving the purpose of treating mental illness. This project intends to alleviate depression among Chinese vocational college students by offering targeted interventions, promoting the clarification of self-concept, and enhancing the adaptability of cognitive emotion regulation strategies, in line with the mechanisms of self-concept and cognitive emotion regulation strategies.

5.Research scope

Phase 1: Exploring the influence of self-concept and cognitive emotion regulation strategies on depression

Stratified proportional sampling was used. The study participants included first-year, second-year, and third-year students from a vocational college, including those from the Department of Preschool Education, the Department of Art, and the Department of Early Education, totaling 3,000 individuals. Among them, there were 960 first-year students, 1,200 second-year students, and 840 third-year students. This study applied

the Taro-Yamane formula to calculate the total sample size. The expected margin of error (e) was set at 0.05. After calculation, the approximate total sample size was 353. Considering that some data might be invalid due to incompleteness, the final sample included 400 students, accounting for 13.3% of the total number of students.

Thus, proportional sampling is required for sample extraction: For first-year students, approximately (960 * 13.3%) =128 students should be sampled. For second-year students, approximately (1,200 * 13.3%) =160 students should be sampled. For third-year students, approximately (840 * 13.3%) =112 students should be sampled.

Phase 2: Reducing depression among Chinese vocational college students through the development of integrative group counseling

Part 1: Quasi-experimental samples:

According to the research objectives, the purposive sampling method was employed to select the research samples. Corey (2016) holds that for group counseling with therapeutic objectives; the number of people should generally not be overly large to ensure that each member can receive sufficient attention and support. The usually recommended number range is 6 to 10 people. Such a scale helps establish in-depth emotional connections among members, promotes mutual understanding and support, and also facilitates the leader to better understand the situation of each member and provide targeted guidance and help. However, considering that members may drop out during the group counseling process, 10 participants were initially and cautiously selected. To ensure equal sample sizes in both the experimental and control groups, 20 participants with moderate depression scores were selected from Phase 1 pretest data for this stage of the study.

Thereafter, the students were ranked in ascending order, followed by random assignment to two groups: a control group and an experimental group, each comprising 10 members. Integrative group counseling activities were conducted with the experimental group.

Part 2: Group interview examples: After the integrative group counseling, all ten students in the experimental group were interviewed.

6.Research variables

Phase 1

Quantitative research: (QUAN)

Independent variables: Self-concept, cognitive emotion regulation strategies

Dependent variable: Depression

Phase 2

Integrative quantitative and qualitative research: (QUAN + qual)

Independent variable: Integrative group counseling

Dependent variable: The influential variables, Depression

7.Research significance

7.1 Theoretical Significance

7.1.1 The results of this study contribute to the understanding of depression's influencing factors from two dimensions: self-concept and cognitive emotion regulation strategies.

7.1.2 This study facilitates the enhancement of mental health among Chinese vocational college students and offers theoretical guidance for integrative group counseling practices.

7.2 Practical Significance

7.2.1 The study results uncover the determinants of depression in Chinese vocational college students. providing guidance for educators, psychological counselors, and student administrators to formulate effective strategies for improving students' mental health, thereby alleviating depression among them.

7.2.2 The research findings have direct implications for educational practice, particularly in designing integrative group counseling interventions to enhance students' mental health.

CHAPTER 2
REVIEW OF THE LITERATURE

This chapter reviews the literature and research on self-concept, cognitive emotion regulation strategies, depression, and integrative group counseling to explore how self-concept and cognitive emotion regulation strategies influence depression, as well as existing data on alleviating depression through integrative group counseling. A literature synopsis is provided below:

1. Depression
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    1.2 Theoretical research on depression
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    2.2 The structure of self-concept
    2.3 Theories of self-concept
        2.3.1 The germination of self-concept theory

4.4 Design of integrative group counseling

4.4.1 Relationship establishment stage (usually completed in 1-2 activity times)

4.4.2 Group transition stage (usually completed in 1-2 activity times)

4.4.3 Working stage (usually completed in 3-4 activity times)

4.4.4 Ending stage (usually completed in 1-2 activity times)

4.5 Research on the application of group counseling in reducing depression

5.Conceptual framework of the study

5.1 Phase 1

5.2 Phase 2

6.Research hypotheses

1. Depression

1.1 Definition of depression

Depression originated from the Latin word "Deprimere", which was first used to describe a mood state in the 17th century (Belsky, 2022). The contemporary American psychologist Angold (1992) described depression as follows: 1) Depression involves a shift from normal mood states to persistent low mood, characterized by daily experiences of negative affect. 2) Depression manifests as unpleasantness, sadness, or psychological distress, often serving as a response to adverse circumstances or events.3) As a trait, depression refers to an individual's enduring inability to experience sustained and relatively stable pleasure.

In psychiatry, depression is regarded as an affective disorder and is diagnosed according to common diagnostic criteria. Common diagnostic criteria include the International Classification of Diseases and Related Health Problems (ICD-10) compiled by the World Health Organization and the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) of the American Psychiatric Diagnosis Standard. Currently used in China is the Chinese Classification of Mental Disorders (CCMD-3), in which depression is diagnosed based on symptom criteria, severity criteria and course criteria. Common

criteria for depression include: 1) loss of interest and inability to experience pleasure; 2) Reduced energy or persistent fatigue; 3) Psychomotor retardation; 4) Negative self-evaluation and self-blame; 5) Impaired concentration or diminished cognitive processing ability; 6) Repeated thoughts of death or suicidal and self-harming behaviors; 7) Sleep disorders, such as insomnia, early awakening, or excessive sleep; 8) Decreased appetite or significant weight loss; 9) Decreased sexual desire. When a person shows four or more of these criteria for no reason or under the influence of certain environmental factors, with severely impaired social function (severity criteria), and the course lasts for more than 2 weeks (course criteria), it can be diagnosed as depression (Chinese Society of Psychiatry, 2001).

When psychological researchers conduct strict diagnostic classifications of depression, they often seek help from psychiatry. In comparison with the diagnostic criteria in psychiatry, Qian, Chen, & Zhang (1999) studied the characteristics of goal - setting and self - evaluation in the operational tasks of depressed individuals. They proposed that in psychological research, psychologists tend to focus more on depressive emotions. Even if a subject scores high on the self - rating depression scale, it only indicates that the subject is in a depressed state and cannot be used to confirm that he or she has depression. Chen (2024) studied the impact of self - compassion on depression. Individuals who met the clinical diagnostic criteria in psychiatry were defined as having depression, while those with high scores on the Self-Rating Depression Scale were classified as exhibiting depressive tendencies or emotional symptoms of depression. This classification formed the basis for subsequent intervention assignments. Geiselman & Bauer (2000) studied sub - threshold depression among the elderly. They proposed that in psychiatry, this type of depression, where a person is in a depressed state and has some depressive manifestations but fails to meet the symptom indicators of depression (having four or more out of nine manifestations and a disease course of at least two weeks), is called sub-threshold depression. Quantitatively, sub-threshold depression has milder manifestations than depression, or has only a few depressive manifestations; essentially, individuals with sub-threshold depression have

fewer suicidal thoughts, less guilt, and less sense of worthlessness than those with depression. Judd (1994) considered that sub-threshold depression refers to a psychological sub-healthy state in which there are two or more but less than five depressive manifestations for more than half of the day for over two weeks, accompanied by social dysfunction, yet still not meeting the diagnostic criteria for depression in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV).Yao (2023) proposed in the study of the impact of social comparison on emotion recognition in individuals with sub-threshold depression that the number of people with sub-threshold depression is far greater than that of those with depression, and the negative impact on individuals and society is no less than that of depression. Numerous psychological studies on depression can be categorized as research on subthreshold depression.

To sum up, this article focuses on the sub-threshold depression of Chinese vocational college students. It refers to an emotional state lacking pleasure in which an individual is in a depressed state and has some depressive manifestations but does not meet the indicators of depression symptom in psychiatry.

1.2 Theoretical research on depression

The research history of depression is similar to that of psychology. It began with philosophical speculation and gradually transitioned to empirical research. Generally speaking, there are mainly two types of etiological studies on depression. One is from the biological perspective, exploring the changes in brain morphology, physiological functions, neurotransmitters, endocrine, immune factors, etc. of depressed patients. The other is from the psychological perspective, examining how environmental and individual psychological factors contribute to the onset of depression.

1.2.1 Biological theories of depression

The doctrine regarding the biological causes of depression can be traced back to Hippocrates in ancient Greece. Hippocrates believed that depression was caused by the siltation of "black bile" and "mucus" which affected brain function. Since the 1960s, the theory on the biological causes of depression has gradually developed.

Most scholars hold that depression is caused by a lack of norepinephrine in the brain. In recent years, with the development of molecular biology and brain imaging technology, the biological causes of depression have been explored in depth gradually. Explorations have been carried out at the cellular and molecular levels, and in-depth studies on physiological functions have been conducted (Han, 2021).

Takebayashi, Kagaya, & Uchitomi (1998); Axelson, Doraiswamy, & Boyko (1992); Catalan, Gallart, & Castellanos (1998) discovered that compared with normal people, patients with depression exhibit abnormal cerebral blood flow and glucose metabolic rate. This finding is of significant theoretical and practical value for understanding the occurrence principle, diagnosis, and treatment of depression. Depression is related to the hyperfunction of the hypothalamic-pituitary-adrenal (HPA) axis. Whale (2001) found that the onset of depression is associated with neurotransmitters, especially the 5-HT neurotransmitter. Maes & Bosmans (1997) indicated that the level of leukocyte mediators (Interleukin, IL) is related to the degree and stage of depressive manifestations.

1.2.2 Psychoanalytic theory of depression

The psychoanalytic theory emphasizes the role of love and the loss of emotions in the formation of depression. This theory holds that depression is related to the superego in the personality structure. When the aggression of the superego is directed inward, people are prone to depression. Freud initially regarded depression as a reaction to loss. Later, Freud considered that depressed patients might be due to some other less obvious losses, such as the loss of status, the shattering of hope, or the damage to self-image. This theory posits that emotional loss often triggers a series of internal psychological alterations, giving rise to severe and irrational self-criticism and self-punishment, which ultimately contributes to the development of depression. With the evolution of this theory, the focus has shifted from the loss of external narcissistic satisfaction to the loss of internal security. For example, Rado (1928) emphasized the need for self-esteem and believed that depression is self-punishment for restoring self-esteem after losing the approval of others.

1.2.3 Behaviorist theory of depression

Behaviorist theory highlights the role of social reinforcement in the development of depression. Depression occurs when an individual fails to receive affirmative reinforcement in social interactions with others. According to this theory, due to certain characteristics of the individual (such as age, gender, attractiveness), a lack of skills, or environmental factors, the positive reinforcement for the individual diminishes, thereby reducing the frequency of their activities. The reduction in activity frequency further decreases the possibility of positive reinforcement, thus creating a vicious cycle and ultimately leading to the occurrence of depression (Coyne, 1976).

1.2.4 Person-Centered Therapy (PCT) of Depression

Person-Centered Therapy (PCT) holds that the formation of individual depression is caused by the obstruction of individual self-growth and self-potential. Person-centered psychologists believe that individuals have the potential for development and self-perfection. People should strive to reach a higher level of growth and realize their potential. Otherwise, people will experience an inexplicable sense of annoyance and meaninglessness. Maslow (2021) believes that everyone has an innate pursuit of becoming a self-actualized person. Maslow categorized human needs into five hierarchical levels—physiological needs, safety needs, love and belonging needs, esteem needs, and self-actualization needs—organized in a trapezoidal model. Higher-level needs emerge only when lower-level needs are fulfilled. Maslow believes that the need for respect consists of two aspects: respect from others and self-respect. Respect from others is the foundation, which may include reputation, status, prestige, or social achievements. When people feel self-respect, they will have self-confidence and a sense of value. Otherwise, they will have feelings of inferiority and depression.

1.2.5 Social cognitive theory of depression

The social cognitive theory of depression is represented by Beck and Abramson. Beck proposed the cognitive theory of depression and the cognitive therapy based on it in the 1960s, which aroused extensive research by psychological scientists. In the late 1980s, Beck revised his cognitive theory. Abramson, Metalsky, & Alloy (1989)

put forward the social cognitive theory of depression, which greatly advanced the research on the cognitive and social psychological factors of depression.

Beck (1963, as cited in Qian, 2020) conducted a comparative study on the thinking patterns of depressed patients and normal people. The results showed that cognitive factors are extremely important in depressive disorders. In 1967, Beck put forward the cognitive theory of emotional disorders. He believed that depression is the result of negative cognition. Similar environmental stimuli have different effects on different individuals. The reason why people develop depression is that they interpret their experiences negatively. In 1977, Beck established cognitive behavioral therapy for depression and gradually formed the cognitive theory model of depression. Beck believes that the so-called "cognition" generally refers to cognitive activities or cognitive processes, including beliefs and belief systems, thinking and imagination. Cognitive processes typically comprise three components: first, the process of information reception and evaluation; second, the process of problem-solving method generation; third, the process of result prediction and estimation.

Since the 1980s, Beck and Abramson have supplemented and modified the cognitive theory and proposed the social-cognitive theory model. This theoretical framework posits that depression etiology is governed by two interrelated factors. The first is cognitive vulnerability, defined as the individual's predisposition to depressive cognition, while the second is social stressors, including negative life events such as major disasters, daily hassles, and chronic maladjustment. Cognitive and stress factors interact to influence depression onset and progression—neither factor alone is sufficient to trigger depression. Specifically, individuals with negative cognitive styles are more likely to develop distorted self-concepts and pessimistic outlooks on the world and future when exposed to negative stress, thereby facilitating depressive symptoms. Abramson et al. (1989) also not all negative life events precipitate depression. The stressors contributing to depressive onset are primarily categorized into two domains: interpersonal relationships and self-achievement. Chinese traditional culture pays more attention to the harmony and concordance of interpersonal relationships. The longitudinal

research results of Li (2020) on the cognitive function and depressive mood of the elderly in the community show that there is a certain correlation between the deficiency of social relationship problem-solving ability and depression.

The revised cognitive theory takes social stress factors into account and points out the correlation between cognitive factors and social stress factors.

1.2.6 Attribution style theory of depression

The attribution theory of depression was developed by American psychologists Seligman, Abramson, and others from the perspective of attribution style as a cognitive theory of depression in the 1970s and 1980s. After this theory was proposed, it drew widespread attention in the field of psychology and has become a hot topic in depression research over the past two decades (Sun, 2023; Zhao, 2019; Sun, 2021).

Seligman (1975) first applied the results of the animal helplessness experiment to the explanation of human depression, thus giving rise to the initial learned helplessness theory. Its basic view is that when an individual discovers that no matter what efforts they make, they cannot control the events taking place in the environment. As a result, they will consider themselves helpless. Subsequently, depression will develop and the motivation to act will be lost.

Seligman & Abramson (1978) introduced the concept of attribution style in social psychology and revised the aforementioned theory. Abramson holds that attribution is to ascribe the results of behaviors or events to certain causes, and the attribution style is the way of attribution cognition that a person possesses and the resulting unique attribution tendency. The revised learned helplessness theory evaluates event attributions along three dimensions: internal-external, stable-unstable, and global-specific. It posits that depressive attribution style involves ascribing negative events to internal, stable, and global causes.

Abramson et al. (1989) revised the above theory. The revised theory emphasized the important role of hopelessness in the formation of depression. It is believed that hopelessness is the closest and sufficient cause of depression.

Hopelessness and depression are most likely to occur when individuals attribute negative life events to internal, stable, and global causes. Therefore, this theory is also called the hopelessness theory of depression. The cognition of hopelessness leads to a new concept—hopeless depression, which is manifested as sadness, self-abandonment, lack of vitality, indifference, sleep disorders, inattention, and so on. The hopelessness theory holds that when experiencing a negative event, people with depressive attribution styles are more likely to experience hopelessness than those with non-depressive attribution styles, thereby developing depression, especially hopeless depression.

Metalsky, Joiner, Hardin, & Abramson (1993) integrated the hopelessness theory and the self-esteem theory. Metalsky et al. (1993) believed that the combination of attribution style, low self-esteem, and failure can predict the occurrence of depression through the mediation of hopelessness. At the same time, depression, in turn, further strengthens the negative attribution style. Therefore, the attribution model of depression can be summarized as follows: The interplay between negative events (stressors) and negative attribution styles contributes to depressive onset. Hopelessness and low self-esteem act as mediating factors in this process. Conversely, depression exacerbates low self-esteem via hopelessness and reinforces negative attribution styles, creating a vicious cycle (as shown in Figure 1).

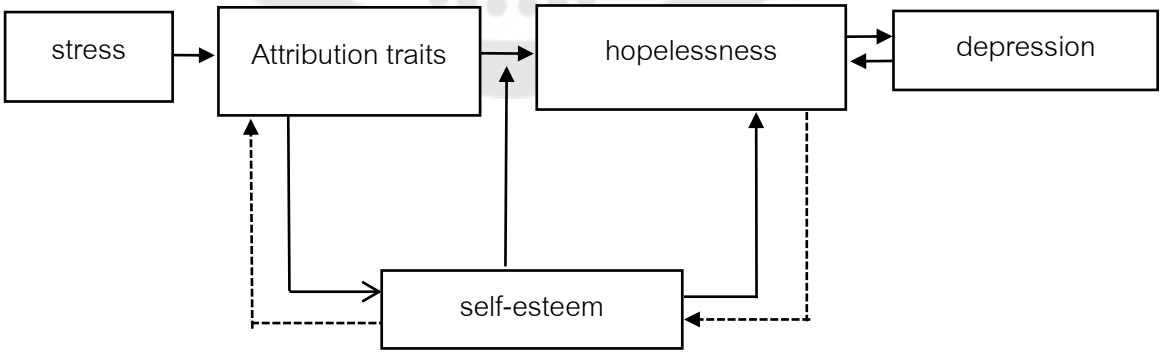


Figure 1 Attribution Style of Depression

1.3 Measurement of depression

1.3.1 Hamilton Depression Rating Scale

The Hamilton Depression Rating Scale (HAMD) was compiled by Hamilton in 1960 and is used to assess an individual's depressive manifestations and severity. There are three versions: 17 items, 21 items, and 24 items. People usually use the 17-item version to assess the severity of depression and the 21-item or 24-item version to assess the pathological manifestations of depression. The overall reliability of HAMD is acceptable. However, due to the influence of physical diseases, the validity of HAMD in the elderly group is not high. This scale is only applicable to adults, and the examiners must undergo professional training.

1.3.2 Beck Depression Inventory

The Beck Depression Inventory (BDI) was compiled by Beck in 1967 and is used to assess an individual's degree of depression in the recent week. The original version has 21 questions and uses a 0-3 scoring system. In 1974, Beck added a new 13-question version. In 1987, the domestic scale collaboration group revised this version and promoted it in China (Zheng & Zheng, 1987). The BDI scale is often used as an instrument to verify the compilation of new scales. It is suitable for adults of different ages. There are also versions for children and adolescents.

1.3.3 Center for Epidemiologic Studies Depression Scale

The Center for Epidemiologic Studies Depression Scale (CES-D) was compiled by Radloff in 1977. It is used to assess an individual's depressive manifestations within the recent week, mainly depressive mood and experience. To avoid overestimating the degree of depression due to reporting too many physical manifestations, this scale gives less attention to the physical manifestations of depression. CES-D has a total of 20 items, among which 4 items are reverse-scored and are scored on a 0-3 scale. Higher scores indicate a greater likelihood of depressive symptoms in individuals. This scale demonstrates high reliability and validity across diverse populations.

1.3.4 Self-Rating Depression Scale

The Self-Rating Depression Scale (SDS) was compiled by American psychologist Zung (1965) and is used to assess an individual's depressive state in the recent week. Wang & Chi (1984) translated the SDS into Chinese. This scale consists of 20 items and uses a 1-4 scoring system. Higher scores correspond to more severe depressive symptoms. The SDS can be used as an effective tool for evaluating an individual's subjective depressive feelings and their changes in treatment clinically. The scale is easy to operate and is not affected by factors such as gender and age. At present, it has been widely used in screening outpatients, assessing emotional states, and conducting surveys and scientific research (Yuan, 2021). The reliability and validity test of SDS shows that the split-half reliability coefficient of the Chinese version of the SDS scale is 0.92 (Zhang & Liu,2003).

This study will use the Self-Rating Depression Scale (SDS), a scale suitable for localized diagnosis of depression in China, to measure the depression of higher vocational students.

1.4 Related research on depression

In the aspect of depression research among college students, scholars like Liu et al. (2023) evaluated the mental health diagnoses and suicidal behaviors of 67,308 American college students through the American College Health Association National College Health Assessment (ACHA-NCHA) survey. The study found that depression is closely related to attempted suicide and mental health diagnoses. 25% of students have received psychotherapy. The improvement of social support can improve depression. The depression rate among college students is 13.4%, and over half have suicidal ideation and self-harm. Çelik, Ceylan, & Ünsal (2019) investigated depressive manifestations, sleep quality and some related factors in 445 college students. The study revealed that approximately 20% of students exhibited depressive symptoms. Students with academic difficulties, economic hardship, smoking or drinking behaviors, chronic illnesses, or interpersonal conflicts were more prone to depressive symptoms. Additionally, depressive severity increased with deteriorating sleep quality: students with

poor sleep quality had 3.28 times higher odds of developing depressive symptoms than those with normal sleep quality.

Ma et al. (2020) studied the current situation of depression of college students in multiple universities in different regions of China and their relationship with negative life events. Findings indicated that the prevalence of depression among college students ranged from 25% to 53%, is much higher than that of others. Song, Jia, & Zhou (2020) studied the current situation and influencing factors of depression among college students. The results showed that personality characteristics, self-concept level, family environment, and social support resources all have an impact on college students' depression. Judd (1994) conducted research on sub-threshold depression. Zhang, Cheng, & Wan (2020) studied the differences in the use of daily emotion regulation strategies among adolescents with different depressive manifestations. The results all showed that the depressive state of adolescents and early adulthood, although not meeting the diagnostic criteria for depression, is highly correlated with impaired social function, suicidal ideation, and sleep disorders. Therefore, investigating the risk factors for depressive states is of significant research importance. Chen, Qiao, & Pan (2022) used the Patient Health Questionnaire-9(PHQ-9) to conduct a sampling survey of Chinese college students on the Internet. A total of 16,410 questionnaires were administered and collected. Binary logistic regression analysis was used to explore the influencing factors of depression in Chinese college students. The results showed that 28.04% of college students were detected to have depression.

1.5 Related research on depression among vocational college students

Cao (2021) explored the relationship between life stressors and depression in higher vocational students. The results showed that life stressors are the key reason for depression among higher vocational students. Wang (2019) investigated the cognitive emotion regulation strategies and depression in higher vocational students. The results showed that cognitive emotion regulation strategies are important predictors of depression. Gao (2014) studied the relationship between emotional regulation self-efficacy, self-concept and depression of higher vocational students. The results showed

that self-concept and emotional regulation self-efficacy were significantly negatively correlated with depression, and emotional regulation self-efficacy played a partial mediating role between self-concept and depression. Teng (2011) studied the correlations between physical exercise, anxiety and depression levels of higher vocational students. The results showed that physical exercise has a significant impact on students' depression or anxiety levels, and the number of exercise days per week has the greatest impact on depression and anxiety. Wang & Lu (2006) studied the correlations among cognitive emotion regulation strategies, self-harmony and depression in higher vocational students. The results showed that self-flexibility, disharmony between self and experience, self-blame and help-seeking factors were related to depression. Jin, Shi, & Peng (2021) researched the etiology and prevention of depression in college students. Findings demonstrated that individuals with depression typically maintain negative appraisals of themselves, the world, and the future.

2. Self-concept

2.1 Definition of self-concept

The definition of self-concept was proposed by psychologist James from Harvard University in the United States as early as 1890. He systematically expounded the theory of self-concept in his work "The Principles of Psychology". Many psychologists have explored the connotation of self-concept from different perspectives based on his theory (British Macat Publishing House Team, 2020).

Many scholars at home and abroad have defined self-concept. For example, Higgins (1987) attributed self-concept to three parts: ideal self, ought self and actual self. Roger proposed that everyone's cognition and perspective are unique, and these different understandings are what we call an individual's position. Self-concept is the individual's perception and evaluation of himself/herself in the personal position, and it is the individual's perception of himself/herself. Huang (1997) believes that self-concept is a multi-dimensional and multi-level organized structure, and it is the individual's perception of all aspects of himself/herself. Li (2023) put forward the view that self-

concept is progressively shaped and developed during the socialization process. It refers to an individual's multifaceted and hierarchical cognition and evaluation of themselves and their relationship with the surrounding environment, encompassing all thoughts, emotions, and attitudes the individual holds about themselves. An individual's self-cognition is a complex and dynamic psychological structure. It constitutes a profound internal understanding and is crucial for shaping personal expectations, interpreting life experiences and maintaining individual identity (Zhang, 2022; Chen, 2024). A positive self-concept helps individuals maintain self-acceptance when encountering setbacks and avoid damage to self-esteem, while negative self-cognition may lead to negative emotions (such as inferiority complex) and affect individual well-being. However, an overly positive attitude can also breed arrogance, so a moderate balance is crucial (Mayanchi, 2020; Xiang, 2021; Hu, 2023). The depth and stability of an individual's understanding of self-cognition are closely related to the clarity of his/her self-awareness. If an individual can form a self-concept quickly and consistently, it indicates that they have a deeper understanding of themselves (Timo, 2021; Du, 2023). Self-concept, that is, the degree to which an individual is truly aware of all aspects of himself, includes the degree of fit between the ideal self and the actual self, self-evaluation and feedback from others (Piñero, 2024).

To sum up, in this article, self-concept denotes an individual's subjective experience of their own existence. It involves a person's progressively deepened understanding of themselves, shaped by personal experiences, introspection, and feedback from others. It is a relatively stable understanding and view of one's own physiological conditions, psychological characteristics, social attributes and so on that an individual acquires through various channels such as self-observation, analysis of external activities and situations, and social comparison.

2.2 The structure of self-concept

Self-concept is regarded as a complex psychological structure with multi-dimensional and multi-level characteristics. Campbell (1996) stated that the content of self-concept includes knowledge-based content and evaluative content. The knowledge-

based content mainly answers 'Who am I?' and includes an individual's overall views on various attributes like roles, goals, beliefs, etc. at physical, psychological and social levels. The evaluative content mainly answers 'How do I feel about myself?' and mainly includes self-esteem and self-belief.

James (2013) divided the self into "Subjective Self" (I) and "Objective Self" (me). "Subjective Self" is the self that one recognizes, the self that actively experiences and conducts activities. It is creative and even impulsive, being a more active and dynamic part. "Objective Self" is the part of the self that is noticed, thought about and perceived. It includes physical self (such as awareness of physical substances such as the body, appearance, and health status), social self (such as awareness of an individual's status, reputation and prestige in the group), and psychological self (such as awareness of psychological characteristics such as one's intelligence, interests, and personality). These varying levels of self-structure are interlinked and collectively influence an individual's cognition and comprehension of the self.

Rogers (1959, as cited in Xiao, 2019) proposed that the self-structure includes ideal self and real self. Ideal self is the appearance that an individual deeply desires to become in the heart, and is the perfect goal and ideal image that an individual pursues. It covers an individual's expectations of themselves in various aspects, such as personality, ability, achievement, and interpersonal relationship. Real self is an individual's perception and understanding of themselves based on the current actual situation, which reflects one's true abilities, personality, behavioral performance and social status. The gap and coordination degree between ideal self and real self-have an important influence on an individual's psychological state. When the gap between them is too large, it may cause negative emotions such as anxiety and depression in an individual. When an individual can strive to narrow the gap or achieve the balance and coordination between them, it is helpful to promote personal growth and mental health.

Higgins (1987) proposed the self-structure theory. He divided the self-structure into: Actual Self: It is the actual state that an individual actually perceives about themselves at present, that is, an individual's understanding of the characteristics they

actually have. Ideal Self: It is the characteristics that an individual hopes to become. It is an understanding of an ideal future state, including dreams, abilities, personality, etc. Ideal Self guides an individual to strive actively towards the goal. When a discrepancy exists between Actual Self and Ideal Self, it often causes negative emotions such as disappointment, shame and depression in an individual. Ought Self: It refers to the traits that an individual or others deem the individual should possess. For example, an individual believes that they should complete the tasks and responsibilities imposed from different aspects (such as parents, religion, etc.). It is a self-concept based on the level of responsibility and obligation. When Actual Self is inconsistent with Ought Self, it will cause emotions such as tension, anxiety and shame in an individual, which indicates that the individual believes that they have not fulfilled their responsibilities or obligations.

Shavelson & Bolus (1982) based on their understanding of self-concept, proposed a multi-dimensional hierarchical theoretical model of self-concept. This model is mainly based on the theories proposed by James and Cooley. This model posits that self-concept is the self-perception shaped by personal experiences and the interpretation of those experiences, with this perception deriving from an individual's interactions in relationships, self-awareness, and social context.

In this article, the researchers tend to believe that self-concept is a complex psychological structure with multi-dimensional and multi-level characteristics.

2.3 Theories of self-concept

2.3.1 The germination of self-concept theory

In 1890, James' "The Principles of Psychology" was published. In this work, James systematically expounded on the self-concept.

James (2013) proposed that the self appears in two forms. One is the "I", which often appears in the form of the subject, that is, the initiator of the action. The other is the "Me", which often appears in the form of the object, namely, the object of attention and notice.

James (2013) believed that the "I" is an individual's consciousness of what they are thinking or perceiving, and it is the individual's pure experience, so it is also

called the "Pure Self." The "Me" is an individual's idea of who they are and what kind of person they are, that is, various views of the individual about themselves. It is the content of individual experience, so it is also called the "Empirical Self". He proposed that the empirical self-comprises three elements: the material self, the social self, and the spiritual self. He divided the material self into physical self and extra-physical self. He contended that an individual's self-perception, in addition to their own body, also includes their possessions and the individuals related to them. Social self is how others view one and stems from the recognition of others. Various social statuses that an individual possesses and various social roles that an individual plays are important contents of social self. The evaluation of others on an individual is an important part of social self, but the most essential and core content of social self is how an individual views these evaluations and views of others on oneself. Spiritual self is an individual's psychological self. An individual's perception, thinking, emotion, feeling, attitude, interest, motivation, desire, etc. are all components of the spiritual self. It is an individual's subjective experience of oneself.

Li (2023) conducted a study on the relationship between social support and sense of life meaning of college students: the mediating effect of self-concept. The article notes that the three components of James' empirical self can be categorized into hierarchical levels based on their value. The physical self within the material self-occupies the lowest stratum, while the spiritual self-resides at the apex. Compared to the social self, the spiritual self-exerts a more profound influence on the individual.

James (2003, as cited in Wang, 2014) defined the self and expanded the psychology research on the self from a single physiological self to non-physiological aspects, triggering a series of subsequent theories and research by psychologists on non-physiological self. His division of the self-concept into different components also initiated the precedent of component analysis of the self-concept.

2.3.2 Self-concept from the perspective of social psychology

At the end of the 19th century and the beginning of the 20th century, the American social psychologist Cooley (2020) proposed that the self is established based

upon the reactions and evaluations of others in social interaction activities. It is not only a personal entity but also a product of society. He put forward the concept of 'Looking-Glass Self', pointing out that the self is established by referring to the views of others on oneself. He believed that individuals can obtain the cognition of the self by perceiving the perception of others on oneself, thereby forming the self-concept.

At the same time, Mead, another American social psychologist, developed Cooley's viewpoint. He emphasized the role of social experience in the formation of the self-concept and proposed the Symbolic Interaction Theory. Mead (2005) believed that the "I" is an individual's reaction to the attitudes of others, and the "Me" is composed of the attitudes of others. The "I" reacts to the "Me", thereby forming the self-concept. The acquisition of an individual's self-concept is a process of social interaction. An individual must interact with others and be aware of becoming the object of perception of others to form a general concept of oneself from the reactions of others to one's own behavior. In this process, an individual appropriately adjusts his/her own behavior by observing the reactions of others to oneself. Without the social experience formed in the interaction, the self cannot emerge. In Mead's self-concept, both the "I" and the "Me" are closely related to social experience, highlighting the significant role of others and society in the formation process of the self-concept. Additionally, he emphasized that the self is not passive. It actively interacts and reacts with others and society in the social environment, thereby forming the self. Mead emphasized the subjective initiative of the self, pointing out that the formation of the self is influenced by society and others, and at the same time, it will influence and change the environment and society.

2.3.3 Self-concept from the humanistic perspective

Rogers (1947, as cited in Yu, 2015) believed that an individual's self-concept develops during postnatal growth. An individual has no self-concept at birth. With the interaction of the individual with the postnatal environment, the individual begins to distinguish the environment from the self and gradually separate from it, thereby gradually forming their self-concept.

Rogers was consistent with James' viewpoint and also believed that the composition of the self-comprises two aspects: the "I" and the "Me". The "I" is the dynamic part of the self and the premise of the self's activities. Although the activities of the "I" are restricted by the "Me", it still has certain subjective initiative, enabling the individual to surpass the restrictions of the "Me", thus making the individual's behavior have certain freedom and creativity. The "Me" is both the noumenon and the object of self-awareness. It gradually develops and forms by accepting the organized attitudes of society towards the self. Rogers' understanding of the "I" and the "Me" integrated the concepts of the "I" and the "Me" of James and Mead, making the connotation of the self-concept richer.

Rogers (1947, as cited in Yu, 2015) another crucial aspect of his understanding of the self-concept is that he put forward the concept of the ideal self. The ideal self is defined in relation to the real self. He proposed that the real self represents an individual's awareness and perception of their actual state demonstrated through interactions with the environment—i.e., how the individual perceives themselves to be. The ideal self, conversely, is the self-image an individual constructs in their consciousness to fulfill internal needs and desired aspirations—i.e., who the individual hopes to become. Both the real self and ideal self-constitute consciously accessible components of the self. Through clinical research, Rogers found that the congruence or discrepancy between the real self and ideal self-impacts an individual's mental health. When an individual's real self and ideal self are consistent, the individual will feel harmonious, happy, and satisfied. If the disparity between the two is too great, it will cause unhappiness and dissatisfaction, thereby leading to mental illness.

2.3.4 Self-concept from the cognitive perspective

In the 1960s, cognitive psychology began to develop and flourish. The cognitive revolution further rekindled psychologists' interest in self-study. Markus (1986) explained the self-concept from a cognitive perspective. He believed that the way individuals form the self-concept is the same as that of other cognitive structures. The self should also be regarded as a cognitive structure or schema. This self-schema represents the generalization of the self that individuals have experienced in the past.

The information processing related to the self in an individual's mind is organized and guided by the self-schema. In the 1980s, Markus further proposed two concepts: possible selves and dynamic selves (Jia, Li, & Li, 2008). Possible selves are the self-conceptions that individuals feel they have potential in a certain aspect. They are the components related to future orientation in the self-awareness system. They include both the selves that one dreams of becoming (such as the happy self, the healthy self, and the successful self, etc.) and the selves that one is afraid of becoming (such as the miserable self, the lovelorn self, and the failed self, etc.). These possible selves have a powerful motivational effect and inspire individuals. The dynamic self is the self-concept of an individual at a specific moment (Jin, 2010). Markus (1986) believed that the self-concept is not a passive acceptance process but an actively changing dynamic structure. This dynamic self-concept of his is essentially consistent with the "I" of James, Mead, Rogers, and others.

2.4 Measurement of self-concept

Shavelson's multi-level model has guided the development of self-concept assessment methods (Shavelson et al. 1982). Under this theoretical background, many diversified self-concept measurement instruments have emerged. Each of them relies on different theoretical cornerstones and thus reveals different levels of self-awareness. Among them, the highly regarded Tennessee Self-Concept Scale revised by Fitts was translated into Chinese by Taiwan scholar Lin. This scale consists of a total of 70 questions, including 10 factors in two dimensions and integrative conditions of self-concept. Namely, in the structural dimension: self-identity, self-satisfaction, and self-action; in the content dimension: physical self, moral self, psychological self, family self, and social self; integrative condition: total self-score and self-criticism. Each item is scored from "1" (exactly the same) to "5" (completely different). The higher the score of the first nine factors, the more positive the self-concept. While the higher the score of self-criticisms, the more negative the self-concept (Wang, 2022).

The Tennessee Self-concept Scale (TSCS), developed by the American psychologist Fitts in 1965, Taiwanese scholar Lin (1980) revised it, this scale consists of

70 items and has relatively high reliability and validity indexes. It is widely applied in China. Not only is it highly regarded in the field of psychological research, but it is also used in actual psychological assessment and intervention. In this paper, this scale is employed to measure the self-concept of vocational college students in China.

2.5 Research on the correlation between self-concept and depression

Since the 1990s, a new trend has emerged in the research field of self-concept, namely, more and more emphasis has been placed on the problems that cause or accompany depression. It is well known that regarding the negative self-concept as an important influencing factor for predicting depression originates from Freud's observation of the low self-concept shown by depressive patients. Those scholars who inherited the psychoanalytic tradition placed the low self-concept at the center of depression. Accumulating research evidence indicates that low self-concept is strongly associated with depression, and it can even serve as a predictor for individual depressive episodes.

Cross-cultural research has validated that self-concept serves as a key indicator of mental health, with a demonstrated correlation between self-cognition and depression (Zghidi, 2021; Wang, 2020; Xu, 2021). Depression is a very common negative emotion. Mao (2021) conducted a study on the impact of mental health education on the mental health status of higher vocational nursing students and pointed out that about one-fourth of people have had depression at some point in their lives.

In previous literature, a large number of self-concept-related factors, such as self-evaluation, self-expectation, self-awareness, self-esteem and self-confidence, and their correlations with depression have been investigated. Recent studies have found that regardless of whether in the West (the United States) or the East (Japan), self-concept is the strongest predictor variable of emotional distress, especially self-esteem is the best predictor variable of depression. Researchers have found a strong negative correlation between self-concept level and depression level (Morales, 2022). Smith & Betz (2002) conducted a study on the relationship between depression and self-esteem of young people. The findings revealed that self-esteem, as a component of self-concept, is the most robust predictor of depressive manifestations.

Many researchers in China have conducted empirical studies on the correlation between self-concept and depression using college students as samples. Zou (2022) used the Self-Concept Scale (TSCS), Social Support Rating Scale (SSRS), and Beck Depression Inventory (BDI) to conduct a correlation study on the self-concept level, social support, and depression level of college students in a university in Guangdong Province. The findings indicated a significant negative correlation between self-concept and depression among college students. Tian (2018) took 117 sophomore students as subjects and used a combination of questionnaire survey and experiment to investigate the buffering effect of self-concept on the two adverse emotional reactions of depression and anxiety states after failure. The results demonstrated that, regardless of the context, participants in the high self-concept group exhibited significantly lower levels of depression and anxiety compared to those in the low self-concept group; after failure, self-concept did not immediately or directly buffer the depression and anxiety reactions of the subjects; after the experimental treatment, self-concept significantly buffered the two adverse emotional reactions. Xue (2024) used the Self-Rating Anxiety Scale (SAS), Self-Rating Depression Scale (SDS), and Self-Concept Scale (TSCS) to test college students. The results demonstrated notable variations in the levels of anxiety, depression, and self-concept among college students. Highly significant discrepancies in anxiety and depression levels were observed between the high self-concept and low self-concept groups. Self-concept was highly negatively correlated with anxiety and depression. A higher level of students' self-concept was associated with lower levels of anxiety and depression.

Huang (2012) conducted a study on the relationship between self-concept and depression, Hu et al. (2018) conducted a study on the career maturity of high school students and its relationship with self-concept and parenting style. The results all show that self-concept has a significant predictive effect on depression. The more negative the self-concept level of students, the more likely they are to feel depressive emotions. Zheng (2024) conducted a study on the relationship between optimism and depression in college students: the chain mediating role of negative cognitive bias and negative

emotions respectively. Zhang (2022) explored the impact of physical exercise on depression among college students, examining the serial mediating roles of self-concept and social support respectively. The results all show that self-identity, self-satisfaction and self-action are three factors of self-concept. The self-satisfaction and self-identity factors have a more significant predictive effect on depression. The influence of low self-identity on depression relates to an individual's distorted cognition; low self-satisfaction represents a negative emotional state that can adversely affect an individual. If it exists for a long time, it may lead to the formation of depression.

Feng (2020) conducted an empirical study on the relationship among self-concept, coping styles and depression of vocational college students. The results showed that higher vocational students with high self-awareness can maintain an appropriate level of self-concept and can control themselves appropriately, which contributes to the formation of a unified self for the individual and the formation of a life outlook and values suitable for themselves to adapt to various changes in society. Higher vocational students with low self-awareness cannot find a suitable path in life, and sometimes even encounter difficulties and do not know what the meaning of their existence is, thereby generating negative emotions such as depression. In severe cases, they may even have suicidal tendencies.

3.Cognitive emotion regulation strategies

3.1 Definition of cognitive emotion regulation strategies

Garnefski (2002) paid special attention to the conscious and self-regulatory cognitive components of emotion regulation. Thompson (1991) posited that cognitive emotion regulation entails the cognitive management of emotional information, primarily referring to the cognitive efforts individuals exert when confronting internal or external life events that exceed their coping resources. Regulating emotions from a cognitive perspective is closely related to human life and can help individuals regulate their emotions after experiencing stressful life events without being overwhelmed by emotions. Garnefski (2006) defined and elaborated on the cognitive emotion regulation strategies

based on existing theoretical or inferential research methods, including 9 dimensions, as follows:

1) Self-blame is defined as an individual attributing responsibility to themselves for experienced events. Accumulating research has indicated that self-blame is associated with the onset of depression and other disorders; 2) Other-blame refers to the idea that an individual blames others for the things they have experienced. For individuals who have experienced different types of stressful events, blaming others may lead to negative emotional experiences; 3) Acceptance means accepting the things that have happened and compromising to what has happened. Carver believes that acceptance, as a cognitive emotion regulation strategy, is positively correlated with the level of optimism and self-esteem, and negatively correlated with depression (Wei,2007); 4) Refocus on planning refers to thinking about what actions to take and how to deal with negative events. Carver believes that this cognitive emotion regulation strategy of planning is positively correlated with optimism and self-esteem, and negatively correlated with depression (Wei,2007); 5) Positive refocusing refers to thinking about pleasant and exciting things instead of what actually happened. Focusing on positive things can be regarded as a kind of "mental escape" or can be defined as turning to more positive things in order to think less about the actual things. This is a beneficial response in the short term. However, in the long term, it may impede adaptive cognitive emotion regulation; 6) Focus on thought/rumination refers to thinking about the feelings and sensations related to negative events. It is related to higher levels of depression; 7) Positive reappraisal refers to giving positive meanings to events based on an individual's growth experience. Studies have shown that the use of this cognitive emotion regulation strategy of "positive reappraisal" is positively correlated with optimism and self-esteem, and negatively correlated with depression; 8) Putting into perspective refers to reducing the severity of the event, or emphasizing the weakness of its impact compared to other events; 9) Catastrophizing refers to the idea of explicitly emphasizing the horror of the event. Generally, catastrophizing is positively correlated with depression.

The above strategies can be theoretically divided into two categories: more adaptive types of cognitive emotion regulation strategies (positive refocusing, positive reappraisal, putting into perspective, refocus on planning and acceptance) and less adaptive types of cognitive emotion regulation strategies (rumination, self-blame, other-blame and catastrophizing).

To sum up, in this article, Cognitive emotion regulation strategies denote the tactics individuals employ to manage and modify emotions. These strategies entail the cognitive processing of emotional information, primarily encompassing the cognitive efforts exerted when individuals confront internal or external life events that surpass their coping resources. By regulating emotions from a cognitive perspective, these strategies are deeply intertwined with human life, reflecting an internal cognitive process of monitoring, evaluating, and modifying the emergence, experience, and expression of emotional responses to achieve specific goals.

3.2 Theories of cognitive emotion regulation strategies

3.2.1 The situational theory of emotion regulation

Folkman & Lazarus (1984) based on the coping model related to emotion regulation, proposed the situational theory of emotion regulation. This theory includes two types of adjustment forms: emotion-centered and problem-centered. Yu, Fang, & Qin (2022) pointed out that the problem-centered adjustment mode refers to the strategy adopted by an individual to deal with problems in order to change the environment or eliminate their own tension. The emotion-centered adjustment mode refers to enabling the individual's emotional stress to decrease effectively and taking actions or related strategies, rather than focusing on solving the problem.

3.2.2 The structural theory of emotion regulation

Garnefski (2001) proposed the structural theory of emotion regulation. In his research, Garnefski (2001) emphasized the study of the cognitive part of emotion regulation and pointed out that this aspect contained nine components, such as positive adjustment, positive reappraisal, self-comforting, focusing on planning, acceptance, rumination, self-blame, blaming others, and catastrophizing. These cognitions are divided into two aspects: non-adaptive and adaptive. Rumination, self-blame, blaming

others, and catastrophizing are classified as non-adaptive, while positive adjustment, positive reappraisal, self-comforting, focusing on planning, and acceptance are classified as adaptive. Therefore, this theory mainly holds that cognition is composed of multiple components, and these different dimensional structures constitute an individual's cognitive system. When encountering stimuli from the external environment, an individual will use different components to cope.

3.2.3 The process theory of emotion regulation

Gross (2002) proposed the process theory of emotion regulation, which emphasizes the occurrence time of emotions. According to the occurrence period of emotion regulation, emotion regulation can be divided into two types: antecedent-focused and response-focused. Antecedent-focused regulation refers to the regulation before the emotion occurs. It focuses on the input of external stimuli and regulates emotions by processing, adjusting and changing the causes of emotion occurrence. Individuals can anticipate the occurrence of their own emotions and thus proactively process their emotions first. Cognitive reappraisal is the most commonly employed regulatory method. If the emotion has already occurred, individuals manage various aspects of themselves through self-processing and self-awareness experience to achieve the purpose of emotion regulation. Expression suppression is the most crucial regulatory form in response-focused regulation. Based on the research purpose, the researchers will adopt Garnefski's structural theory of emotion regulation.

3.3 Measurement of cognitive emotion regulation strategies

Gross (2003) compiled the "Emotion Regulation Questionnaire" (ERQ) based on the emotion regulation process model. This questionnaire divides cognitive changes into two dimensions: expressive suppression and cognitive reappraisal. Expressive suppression contains 4 items, and cognitive reappraisal contains 6 items. Practical applications have shown that this questionnaire has good reliability and validity.

Garnefski's Cognitive Emotion Regulation Questionnaire (CERQ) is specifically designed to measure an individual's feelings and thoughts following the experience of negative events. It is a self-report scale consisting of 36 items and is divided into 9

dimensions: Self-blame: Blaming oneself for the things experienced; Acceptance: Compromising to what has happened; Focus on thought/rumination: Thinking about the feelings and sensations related to negative events; Positive refocusing: Thinking about other pleasant things instead of what actually happened; Refocus on planning: Thinking about what actions to take in response to the event; Positive reappraisal: Considering the positive meaning of this event based on one's personal growth background; Putting into perspective: Reducing the severity of this event by comparing it with other events; Catastrophizing: Explicitly emphasizing the horror of the event; Other-blame: Blaming others for the things you have experienced. It uses a 5-point scoring method, scored from 1 to 5 respectively from "never" to "always". The score of each subscale is the sum of the 4 items of the corresponding dimension. The higher the score of the subscale, the more often the individual adopts this cognitive emotion regulation strategy. This scale was administered in the Netherlands and has good psychometric properties. The Cronbach's alpha coefficient for most subscales is more than 0.70, and even some subscales are more than 0.80. The CERQ scale also has good factor validity and construct validity.

This scale is applicable to normal individuals and clinical patients aged 12 and above. The measured individuals should be able to understand the meaning of each item. CERQ can measure both an individual's general cognitive style and the cognitive strategies adopted by an individual after experiencing specific events. Different versions have now been developed, including adult version, adolescent version, children version and a short version of 18 items. The existing versions in Dutch, English, French, etc. all show good psychometric characteristics (Ding,2021).

Wei (2007) revised the Chinese version of the Cognitive Emotion Regulation Questionnaire (CERQ) based on the Cognitive Emotion Regulation Questionnaire (CERQ-36; Garnefski, 2001). It is specifically designed to measure an individual's feelings and thoughts after experiencing negative events. It is a self-report scale consisting of 32 items and divided into 8 dimensions: Self-blame: Blaming oneself for the experienced events; Acceptance: Compromising to what has happened; Focus on thought/rumination:

Keep thinking about the feelings and sensations related to the negative events; Positive refocusing: Thinking about other pleasant things instead of the actual events; Positive planning: It contains two meanings of positive planning and re-evaluation of negative life events; Putting into perspective: Reducing the severity of this event by comparing it with other events; Catastrophizing: Clearly emphasizing the terribleness of the event; Other-blame: Blaming others for the events you have experienced. A 5-point scoring method is adopted, ranging from "never" to "always" and scored as 1-5 points respectively. This scale was revised and administered in China and has good psychometric properties. The Cronbach's α coefficient for most of the subscales exceeds 0.70, and for some subscales it even exceeds 0.80. The CERQ scale also has good factorial validity and construct validity.

The researcher in this paper employed the Cognitive Emotion Regulation Questionnaire (CERQ-36) as revised by Chinese scholar Wei to measure the cognitive emotion regulation strategies of Chinese vocational college students. At present, researcher is in contact with Professor Wei. After obtaining her consent, I will use this scale for thesis research.

This scale divides cognitive emotion regulation strategies into relatively adaptive cognitive emotion regulation strategies (including two factors: Positive refocusing and Positive reframing) and relatively maladaptive cognitive emotion regulation strategies (including six factors: Focus on thought/rumination, Other-blame, Catastrophizing, Acceptance, Putting in to perspective and Self-blame).

3.4 Research on the correlation between cognitive emotion regulation strategies and depression

3.4.1 Research on cognitive emotion regulation strategies predicting depression

The Cognitive Emotion Regulation Strategies (CERQ) have been proven to be related to emotions such as depression, anxiety, and anger. Cognitive emotion regulation strategies serve a pivotal role in the relationship between negative life events and depression. Since 2001, most cognitive emotion regulation studies by Garnefski et al. (2001) have paid special attention to depression. Despite different research methods,

self-blame, rumination, and catastrophizing strategies are always positively related to depression, while the positive reappraisal strategy is negatively related to depression. Garnefski (2006) took five special groups (early adolescents, late adolescents, adults, the elderly, and clinical patients) as subjects, compared their use of cognitive emotion regulation strategies and the correlation between these strategies and depression. The results showed that although there were significant differences in the specific strategies reported by these five types of subject groups, the negative cognitive emotion regulation strategies (self-blame, rumination, catastrophizing) of these five types of subjects had a significant positive correlation with depression, while the positive cognitive emotion regulation strategies (positive reappraisal, self-comfort) had a significant negative correlation with depression.

Jermann (2006, as cited in Wei, 2007) took 224 French non-clinical patients as subjects. He revised the French version of the Cognitive Emotion Regulation Questionnaire (CERQ) and examined the correlation between individual cognitive emotion regulation strategies and depression by using the French version of CERQ and the Beck Depression Scale. The findings indicated that self-blame and rumination were the two primary cognitive emotion regulation strategies predictive of depression. This further clarifies the association between the employment of cognitive emotion regulation strategies and depression.

Berking (2014) conducted a study on whether emotion regulation can predict depressive manifestations within five years and pointed out that emotional dysregulation represents a risk factor for the occurrence of depression. And individuals with emotional dysregulation tend to adopt negative strategies when facing negative events, and this further leads to depression. The factors of negative cognitive emotion regulation strategies have a strong correlation with depression. Individuals with depression often adopt negative strategies (Deffenbacher & Beck, 2000).

3.4.2 Research on the correlation between cognitive emotion regulation strategies and other psychological problems

Chen (2022) examined the relationship between cognitive emotion regulation strategies and internal and external psychological problems. The types of internal problems include those directed inward, such as emotional dysregulation, anxiety, or depression. Meanwhile, external problems are those directed outward, such as behavioral disorders, aggressive behavior, delinquent behavior, or withdrawal behavior. She compared the specific cognitive emotion regulation strategies of four groups of adolescents: those with internal psychological problems, those with external psychological problems, those with both internal and external psychological problems, and the control group. The findings revealed that adolescents experiencing internalizing psychological problems exhibited significantly higher scores on self-blame and rumination as cognitive emotion regulation strategies compared to those with externalizing problems or the control group.

Phillips, Henry, Hosie, & Milne (2003) conducted a study on the relationship between age, anger regulation and well-being. The results showed that cognitive emotion regulation can effectively reduce an individual's sense of anger and simultaneously increase the individual's sense of happiness. Adaptive regulation strategies help reduce the impact of negative events on an individual's life satisfaction and are conducive to promoting their social adaptation (Liu & Liu, 2007; Rubin et al., 1995).

Xi (2017) conducted a study on the relationship between cognitive-emotional regulation strategies and depression and anxiety among high school students. The results showed that self-blame, rumination, and catastrophizing were significantly positively correlated with individuals' depression and anxiety, while positive adjustment was significantly negatively correlated with depression and anxiety. Domaradzka & Fajkowska (2018) conducted a study on cognitive-emotional regulation strategies in anxiety and depression understood as types of personality. The results indicated that cognitive-emotional regulation strategies have the predictive ability for various mental

health problems. Compared with adaptive cognitive emotional regulation strategies, non-adaptive cognitive-emotional regulation strategies are more closely related to psychological symptoms. Yuan et al. (2021) conducted a study on the influence of non-adaptive cognitive emotion regulation strategies on the psychological vulnerability of postgraduate students. The results showed that non-adaptive cognitive emotion regulation strategies will have a direct negative impact on an individual's psychological vulnerability. Gao (2016) conducted a study on the influence of cognitive emotion regulation strategies on the susceptibility to stress-induced insomnia. The results showed that an individual's sleep situation is closely related to the cognitive emotion regulation strategies they adopt. Positive cognitive emotion regulation strategies can indirectly enhance an individual's sleep quality (Vanden, Kivela, La, & Antypa, 2018).

4.Group counseling

4.1 Concept of group counseling

Group counseling is an activity that provides psychological help and guidance to group members in a group situation. It is a process of helping others. Through the interpersonal interaction of group members, they observe and learn new attitudes and behaviors from each other in the process of participating in activities. By experiencing specific communication situations, they gain a further understanding and knowledge of themselves and can better accept themselves and develop better communication skills and adaptability (Mitchell & Black, 2007). He (2009) believes that group counseling is carried out through several or more than ten group activities. In these activities, members experience together, exchange thoughts and gains, inspire each other, support and encourage one another. It promotes students to master the skills of knowing themselves and others, improve interpersonal relationships, and promote the healthy growth of personality. Fan (2022) believes that group counseling, also known as group coaching, is a psychological intervention method relative to one-on-one psychotherapy. The purpose is to help group members perceive themselves, explore themselves and ultimately change themselves through new insights in a safe and stable small social

situation, and ultimately help individuals grow and develop, so as to achieve the purpose of treating mental illness. Group counseling is both an effective psychological treatment and an effective educational activity. Yalom & Leszcz (2022) believe that group counseling is a process of jointly exploring certain psychological problems, promoting self-awareness, improving interpersonal relationships, enhancing psychological adaptability, and achieving personal growth and change in a specific therapeutic environment through interaction, sharing and feedback among members. Rogers (1970, as cited in Wang ,2006) believes that group counseling provides members with a real interpersonal interaction environment. He emphasizes the importance of sincerity, empathy and unconditional positive regard. He believes that creating such an atmosphere in group counseling can make members feel accepted and respected, so that they dare to open themselves up. Members can be inspired by the experiences and coping styles of other members to enhance their sense of self-worth and problem-solving ability.

Integrative group counseling is a kind of psychological treatment intervention method. It combines elements of various psychological counseling theories to meet the different needs of individuals in the group environment. Different from traditional group counseling, integrative group counseling draws on techniques and theories under different psychological frameworks (Wu, 2018). The overall objective of integrative group counseling is to carry out individualized intervention for the diverse needs of group members by combining multiple treatment orientations and strategies to achieve the best treatment effect and the overall treatment effect. At the same time, through group interaction and discussion, it promotes mutual learning and reference among members and forms a positive psychological atmosphere and a multiplier effect of the treatment effect. This approach acknowledges that group members may exhibit diverse responses to different treatment modalities, thereby providing a flexible and adaptive treatment framework (Delucia-Waack et al., 2014).

To sum up, in this article, integrative group counseling is defined as a structured form of group counseling and guidance designed by the facilitator, drawing on

psychoanalytic therapy (PT) theories., rational emotive behavior therapy (REBT), behaviorism therapy (BT), person-centered therapy (PCT), and narrative therapy. Through multiple group activities, it helps group members perceive themselves, explore themselves, and change themselves through new insights in a safe and stable small social situation, and finally helps individuals grow and develop, so as to achieve the purpose of treating mental illness. Integrative group counseling aims to reduce the depression of Chinese vocational college students by providing targeted support and cultivating the clarity of self-concept and the adaptability of cognitive emotion regulation strategies in accordance with the rules of self-concept and cognitive emotion regulation strategies.

4.2 Advantages of group counseling

Compared with individual counseling, group counseling holds its unique significance. On the one hand, it can provide more information and concepts, thereby enhancing the efficiency of counseling. On the other hand, group counseling offers a more real-life-like environment for the change and growth of members.

Yalom (1972, as cited in Yu, 2019) believes that the therapeutic effect of group counseling is mainly manifested in 11 aspects: 1) Regain the lost confidence and abandoned hope of group members. 2) Deepen the interpersonal interaction and emotional empathy of group members. 3) Facilitate the transmission of information among members. 4) Take actions beneficial to others. 5) Repair the troubles caused by the original family. 6) Improve people's communication ability. 7) Learn others' behaviors in group interaction. 8) Master the interaction strategies between people. 9) Be conducive to strengthening the core cohesion within the group. 10) Be conducive to relieving negative emotions. 11) Enhance the sense of existence in the attention of group members.

Corey (2012) proposed that the functions of group counseling are mainly manifested in eight aspects: 1) Strengthen communication and recognition within the group. 2) Enhance one's ability to believe in oneself. 3) Enhance individuals' search for personal value and the meaning of life. 4) Learn to tolerate, correctly view the differences

between people, and learn to understand and respect each other. 5) Learn to choose appropriate strategies to deal with difficulties according to the situation and calmly accept different results. 6) Be able to put oneself in others' shoes and observe the core needs of others. 7) Learn how to better pay attention to and care for others. 8) Be able to transfer the learning and gains in group counseling to study and life.

Zhang (2022) summarized the unique role of group counseling in the following aspects: 1) Group counseling can save a great deal of time and energy and is an efficient counseling approach. 2) In group counseling, members can get the experience of “being the same as others”, and this experience can help group members get rid of the sense of shame. 3) Diverse resources and viewpoints can be obtained in group counseling. 4) Mutual identification among group members enables them to obtain a sense of belonging and being accepted. 5) Group counseling provides a safe practice place for members. 6) Group counseling offers members the opportunity to receive feedback. 7) Indirect learning in the group is beneficial to the growth of group members. 8) Group counseling better replicates real life. 9) In group counseling, group members make commitments to many people, thereby strengthening the motivation for behavioral change.

4.3 Psychological counseling theories and techniques applied in integrative group counseling

4.3.1 Person-Centered Therapy (PCT)

Concept

Person-centered therapy is based on the philosophical foundation of humanism. Rogers' basic assumption is: Human nature is fundamentally good, people are completely trustworthy, and people all have the ability to self-actualize and grow, and have great potential to understand themselves and resolve their own issues without direct counselor intervention; within a specialized counseling relationship, growth can be achieved through self-guidance. This perspective highlights the autonomy of clients in the therapeutic process (Lin,2020). From the very beginning, Rogers (1961, as cited in Gao, 2004) regarded the counselor's attitude and personality as well as the quality of the counseling relationship as the primary determinants of the counseling outcome, and

insisted on regarding the counselor's theory and skills as secondary factors. He believes that visitors have the ability to self-heal, which is different from many theories where the counselor's theory and skills are regarded as the most powerful factors in counseling.

Techniques

The main treatment techniques are (Rogers, as cited in Li, 2004):

The technique of honest communication. Patients can communicate equally with counselors, express their inner thoughts more easily and freely, and get better healing.

The technique of unconditional positive regard. This technique is to express unconditional positive regard and respect for the client. It is the highest value for a highly skilled counselor.

Purpose

The purposes of the person-centered therapy mainly include the following aspects (Rogers, as cited in Li, 2004):

Enhance self-awareness: Guide individuals to have a deeper understanding of their feelings, thoughts and needs, and enhance self-awareness and self-understanding.

Help individuals regain autonomy: Enable individuals to get rid of the shackles and evaluations from the outside world and regain the dominance and decision-making ability of their own lives.

In conclusion, the purpose of the person-centered therapy is to help visitors achieve self-growth and potential exploration by promoting their self-actualization, enhancing self-understanding and acceptance, improving psychological imbalance and enhancing independence.

4.3.2 Rational Emotive Behavior Therapy (REBT)

Concept

The American psychologist Ellis founded and gradually developed Rational Emotive Behavior Therapy (abbreviated as REBT) in the 1950s. Rational Emotive Behavior Therapy emphasizes cognitive reconstruction. Its basic viewpoint is that all

wrong ways of thinking or unreasonable beliefs are the causes of psychological disorders and behavioral problems (Li, 2017).

The theoretical basis of Rational Emotive Behavior Therapy is based on his basic view of human nature. His view of human nature includes the following seven aspects: 1) People are born with rational and irrational qualities. 2) Humans are capable of both rational and irrational thought processes. When engaging in rational thinking and behavior, individuals tend to experience happiness, competitiveness, and productivity. 3) Humans are capable of both rational and irrational thought processes. When engaging in rational thinking and behavior, individuals tend to experience happiness, competitiveness, and productivity. 4) Humans possess biological and sociological predispositions toward both rational and irrational thinking. Inevitably, everyone harbors at least some irrational thoughts and beliefs. 5) As linguistic beings, humans rely on language to facilitate thinking. Repeated internalization of irrational beliefs through self-talk can perpetuate unresolved emotional distress. 6) The persistence of emotional distress is the result of the persistence of those internalized languages. Ellis once pointed out that "those words that we constantly say to ourselves will become our thoughts and emotions". 7) People have the ability to change their own concepts, emotions, and behaviors, and can reorganize perception and thinking to eliminate or change self-deprecating thoughts and emotions (Ellis, as cited in Li, 2021).

In conclusion, A. Ellis posited a neutral perspective on human nature (encompassing both rational and irrational tendencies) and an optimistic stance (arguing that human cognitions, emotions, and behaviors are malleable). He also emphasized that individuals possess inherent capacities for self-talk, self-evaluation, and self-sustenance.

Techniques

Although Rational Emotive Behavior Therapy is a highly cognitive-oriented treatment method, it also emphasizes the integration of cognition, emotion, and behavior. The application of these techniques depends on the client's situation at that time (Ellis, as cited in Guo, 2015).

Cognitive techniques. In the cognitive aspect of Rational Emotive Behavior Therapy, it teaches clients how to understand and modify their irrational thoughts, emphasizing the process of thinking, questioning, explaining, analyzing, illustrating, and guiding. Cognitive restructuring is often employed to correct the unreasonable thoughts that give rise to their emotional distress. Common cognitive skills include debating with unreasonable beliefs, cognitive homework, reading therapy, and other technical trainings.

Emotional techniques (Rational Emotional Imagery Technique). Sometimes the emotional distress of the client is the trouble he brings upon himself. For example, he often instills unreasonable beliefs into himself and exaggerates various failure situations in his mind, thereby generating inappropriate emotional experiences and behavioral responses. The Rational Emotional Imagery Technique is a method to help the client stop spreading unreasonable beliefs. Its specific steps can be divided into the following three steps: First, make the client imagine entering the situation that has produced inappropriate emotional responses or that he feels most unbearable, and let him experience a strong negative emotional response. Then, help the client change this inappropriate emotional experience and enable him to experience a moderate emotional response. This is often done by changing the client's incorrect understanding of his own emotional experience. Finally, stop imagining. The client is then asked to describe what he was thinking, what changes have taken place in his emotions, how they have changed, what concepts have been altered, and what concepts have been learned. The counselor should promptly reinforce the client's positive changes in emotions and concepts to consolidate the new emotional responses he has obtained. The above process is carried out by imagining an unwanted situation.

Behavioral techniques. In addition to cognitive and emotional methods, Rational Emotive Behavior Therapy also accepts the viewpoints of many sociological theories and applies some behavioral techniques in treatment. However, these techniques are not only aimed at the surface symptoms of the client. The purpose is to further remove unreasonable beliefs and establish behaviors based on reasonable

concepts and emotional stability. The self-management is one of the commonly used methods. Based on the principle of operant conditioning, the client is required to use self-reward and self-punishment methods to change their bad behavior patterns. Another method is called "Stay Here", which encourages the client to stay in an unwanted situation to counteract evasive behaviors and extremely bad thoughts. These methods can be implemented in the form of homework, aiming to give the client the opportunity to take risks and make new attempts. By following the principle of behavioral learning, bad behavior habits can be improved and the client's unreasonable beliefs can be completely changed. In addition, the behavioral techniques in Rational Emotive Behavior Therapy also include relaxation training, self-confidence training, social skills training, systematic desensitization, and so on.

Purpose

The purposes of Rational Emotive Behavior Therapy mainly include the following aspects (Ellis, as cited in Guo ,2015):

Help individuals recognize the unreasonable beliefs about self-concept and cognitive emotion regulation strategies. Make individuals aware of those unreasonable and extreme thinking patterns that lead to depression and bad behaviors.

Change unreasonable beliefs. Through a series of methods and techniques, prompt individuals to challenge and replace these unreasonable beliefs with more reasonable, flexible and adaptable beliefs.

Reduce negative emotions. Reduce depression by changing beliefs, so that individuals can face various situations in life more calmly and positively.

Improve behavioral performance. Promote healthier and more effective behavioral patterns, and improve the individual's self-regulation ability and cognitive emotion regulation ability in interpersonal relationships, work, study, etc.

Cultivate psychological resilience. Help individuals be able to face setbacks and difficulties with a stronger and more optimistic attitude, and enhance the psychological ability to resist pressure.

In conclusion, the purpose of Rational Emotive Behavior Therapy is to reduce emotional distress and abnormal behaviors and promote personal growth and development by altering individuals' cognition, thinking patterns and beliefs, enabling individuals to live a healthier and more fulfilling life.

4.3.3 Cognitive Behavioral Therapy (CBT)

Concept

Cognitive Behavioral Therapy (CBT) is rooted in the theoretical frameworks of cognitive psychology and behaviorism. Its central premise holds that human emotions and behaviors are not directly caused by events per se but rather hinge on an individual's cognitive interpretation and appraisal of those events. Negative thought patterns (such as irrational beliefs and automatic thoughts) can lead to negative emotions and maladaptive behaviors. By identifying and correcting these cognitive biases, and combining them with behavioral training, it is possible to effectively improve emotional states and behavioral patterns. This therapy emphasizes the dynamic interplay among an individual's thoughts, emotions, and behaviors. The treatment process focuses on present-day issues, prioritizes a structured and goal-oriented approach, and relies on collaboration between the counselor and the client to help the client master skills for coping with problems. Compared with other therapies, CBT places greater emphasis on the practical application of cognitive restructuring and behavioral change, as well as the client's initiative and participation in the treatment process (Zhang, 2016).

Techniques

The main treatment techniques are (Beck, as cited in Zhai, 2001):

Cognitive Restructuring Techniques: Guide clients to identify automatic thoughts (such as catastrophizing, overgeneralization, etc.). Through Socratic questioning (e.g., "What evidence supports this thought?"), help them challenge irrational beliefs and replace negative cognitions with more objective and rational thinking.

Behavioral Experiment Techniques: Design specific behavioral experiments to verify whether the client's cognitive hypotheses hold true. For example, for individuals with social anxiety, arrange practical social scenarios to modify their negative expectations of social outcomes through firsthand experience.

Relaxation Training Techniques: Teach methods such as progressive muscle relaxation, deep breathing, and meditation to help clients regulate their physiological arousal levels when facing stressful situations, thereby alleviating negative emotions like anxiety and tension.

Problem-Solving Techniques: Break down complex problems into specific steps, guiding clients to analyze the causes of problems, propose multiple solutions, evaluate the feasibility and effectiveness of each solution, and ultimately select and implement the optimal approach.

Self-Monitoring Techniques: Require clients to record their thoughts, emotions, and behaviors in specific situations to help them identify the connections among cognition, emotion, and behavior, providing a basis for subsequent interventions.

Purpose

The purposes of Cognitive Behavioral Therapy (CBT) mainly include the following aspects (Beck, as cited in Zhai, 2001):

Modifying Cognitive Biases: Identify and alter clients' irrational beliefs and negative automatic thoughts, helping them establish more rational and flexible cognitive patterns to reduce the occurrence of negative emotions.

Improving Emotional States: Through dual interventions in cognition and behavior, alleviate negative emotions such as anxiety, depression, and anger, and enhance emotional stability and mental health.

Shaping Adaptive Behaviors: Through behavioral training and practice, help clients establish new behavioral habits to replace original maladaptive behaviors, thereby enhancing their ability to cope with life challenges.

Enhancing Problem-Solving Skills: Teach systematic problem-solving strategies to enable clients to independently analyze and address real-world issues, reducing the risk of future psychological distress recurrence.

Enhancing Self-Efficacy: Through tangible cognitive and behavioral changes, help clients experience their own capabilities and progress, thereby improving self-efficacy and self-confidence to facilitate long-term self-growth and development.

In summary, Cognitive Behavioral Therapy (CBT) aims to help clients break the cycle of negative thinking and behavior through the integration of cognitive adjustment and behavioral training, master scientific psychological regulation methods, and achieve comprehensive improvement in mental health and social functioning.

4.3.4 Narrative Therapy (NT)

Concept

Narrative therapy is a widely concerned postmodern psychotherapy method. It departs from the traditional treatment paradigm of pathologizing individuals. Through techniques like "storytelling," "problem externalization," and "thick description," it facilitates healing by enabling individuals to reconstruct their life narratives. This approach not only fosters clients' psychological growth but also prompts counselors to reinterpret their roles through new insights. As a widely applied modern psychotherapeutic modality, narrative therapy is characterized by high practicability, notable efficacy, and substantial promotional value (Guo,2020).

Techniques

The main treatment techniques are (Li,2016):

Arrangement and interpretation. Narrative therapy mainly asks the client to tell his own life story first, and then, with the guidance of the psychological counselor, enriches the story content. Psychologists believe that telling stories can change oneself. Because we can find new perspectives, generate new attitudes, and thereby generate new strengths in re-narrating our own stories. In essence, a compelling narrative can elicit insight or render previously indistinct emotions and vitality tangible.

Externalization of problems. Another hallmark of narrative therapy is "externalization"—the process of dissociating problems from individuals to reclaim labeled identities, thereby distinguishing problems as separate entities from people. When problems are perceived as integrated with the self, change becomes immensely challenging. Through externalization, problems are disentangled from the person, allowing their inherent nature to be rediscovered and acknowledged, which in turn fosters the capacity and energy to resolve their own issues.

Thickening narratives. Human experiences typically involve fluctuations, with upper-level experiences often being successful ones that shape positive self-identity, and lower-level experiences mostly comprising frustrating events that form negative self-identity. Narrative therapy posits that clients often compress their successful experiences into "thin slices" or even disregard them. By restoring these thin slices and deepening awareness at the conscious level—transforming thin narratives into thick ones—individuals can construct a positive and robust self-concept.

Purpose

The purposes of narrative therapy mainly include the following aspects (Li,2016):

Rewrite life stories: Help the client re-examine and tell their life experiences, discover the positive elements that have been ignored or hidden, and thus change the view and understanding of their own experiences.

Excavate unique results: Guide the client to pay attention to those unique experiences that are different from the main problem narration to prove that they have the ability to cope with difficulties instead of being bound by problems.

Enhance self-identity: Free the client from the shackles of problems, re-build a positive self-identity, and enhance the sense of self-worth and self-confidence.

Cultivate the ability to deal with problems: By re-telling the story, let the client find new ways to deal with the problem and improve the ability to solve the problem.

Promote social support: Encourage the client to share their new stories with others and obtain more social support and understanding.

In conclusion, the purposes of narrative therapy are multifaceted, aiming to help individuals re-construct stories, enhance self-awareness and emotional resonance, and achieve the integrative growth and development of individuals.

4.4 Design of integrative group counseling

Combining the relevant theories of "Group Counseling strategies and Skills" by Jacobs, Schimmel, Masson, & Harvill (2015) and "Group Psychological Counseling" by

Fan (2022), according to the specific implementation methods of integrative group counseling activities, I will divide this integrative group counseling into four stages:

4.4.1 Relationship establishment stage (usually completed in 1-2 activity times)

The most important psychological need of group members in this stage is to obtain a sense of security. The main task of the instructor is to assist the members to get familiar with each other as soon as possible, enhance mutual understanding, clarify the group goals, establish group norms, and establish a safe and trusting relationship.

4.4.2 Group transition stage (usually completed in 1-2 activity times)

The most important psychological need of group members in this stage is to be truly accepted and have a sense of belonging. The tasks that the group instructor must handle are: creating an environment conducive to building trust; dealing with the anxiety and expectations of the members, clarifying the negative emotions and conflicts of the group members; understanding and pointing out the true meaning of the members' conflicts; in the face of the challenges of the members, setting an example of non-defensive behavior, reducing the members' dependence on the instructor, and encouraging the members to express their feelings and reactions towards the group.

4.4.3 Working stage (usually completed in 3-4 activity times)

At this stage, the main need of group members is to use the group to solve their own problems. The main task of the group instructor is to assist group members in solving problems. The instructor should not only demonstrate but also be good at using the resources of the group. In a group atmosphere full of trust, understanding, and sincerity, encourage members to explore personal attitudes, feelings, and behaviors, and deepen their self-awareness; Turn insights into actions, further enhance mutual support and help among members, and encourage members to try new behaviors.

4.4.4 Ending stage (usually completed in 1-2 activity times)

At this stage, group members need to summarize their group activities for a period of time and say goodbye to the group. The main task of the instructor is to enable members to face the fact of upcoming separation, give them psychological support, and assist members in sorting out and summarizing what they have learned in the group,

affirm growth, inspire confidence, apply what they have learned to daily life, and continue the changes and growth.

4.5 Research on the application of group counseling in reducing depression

Depression has a high incidence rate among college students, and group counseling has obvious advantages. He, Liu, & Li (2015) explored the impact of mindfulness group counseling on depression in college students. The results showed that mindfulness group counseling can improve the mindfulness level of college students and effectively alleviate their depressive symptoms. Geng & Liang (2018) conducted a study on the influence of anxiety and attribution style of college students on depression. The results showed that after group training for patients with depression, the text descriptions, depression degree, attribution style and self-concept of the students in the experimental group before and after the training were significantly improved, and the scores measured before and after the experimental group and the control group were significantly different. Zhang, Zheng, & Hu (2022) investigated the therapeutic effects of group psychological counseling supplemented by physical exercise on depressive symptoms in college students. The results indicated that group psychological counseling with physical exercise effectively improved college students' depressive symptoms and, to some extent, enhanced their mental health levels. Zhang, Cheng, & Wan (2023) investigated the efficacy of cognitive reappraisal-based group psychological counseling in ameliorating depression among vocational college students. The results showed that group counseling has a significant effect on improving the depression status of vocational college students and is generally applicable among vocational college students. Zhou (2023) took college students as research subjects, conducted a study on the relationship among depression, negative life events, and cognitive emotion regulation strategies, as well as the effectiveness of group counseling in reducing depression. The results showed that for the group counseling trained with "cognitive emotion regulation strategies", the depression score levels of the experimental group decreased significantly compared to before the experiment, indicating that group counseling is an effective form and method to alleviate and reduce the depression tendency of college

students and improve their mental health level. Nie et al. (2025) explored the intervention effects of cognitive-behavioral group counseling (CBGC) on anxiety and depressive symptoms in pulmonary nodule patients in southern Anhui. The results showed that CBGC not only effectively reduced anxiety and depression levels, improved sleep quality and quality of life in pulmonary nodule patients with anxiety and depressive symptoms, but also enhanced their overall mental health levels with sustained effects.

5.Conceptual framework of the study

5.1 Phase 1

In the conceptual framework of the first stage of the study, the researcher analyzed how self-concept (Li,2023) and cognitive emotion regulation strategies (Garnefski,2006) affect depression (Yao,2023).

5.2 Phase 2

The objective of Phase 2 is, based on the research findings of Phase 1, to design and develop integrative group counseling activities for influential variables that can reduce depression, so as to reduce depression.

The researcher integratively uses the integrative group counseling intervention based on the theories of Person-Centered Therapy (PCT), Rational Emotive Behavior Therapy (REBT), Cognitive Behavioral Therapy (CBT), Narrative Therapy (NT) as the framework.

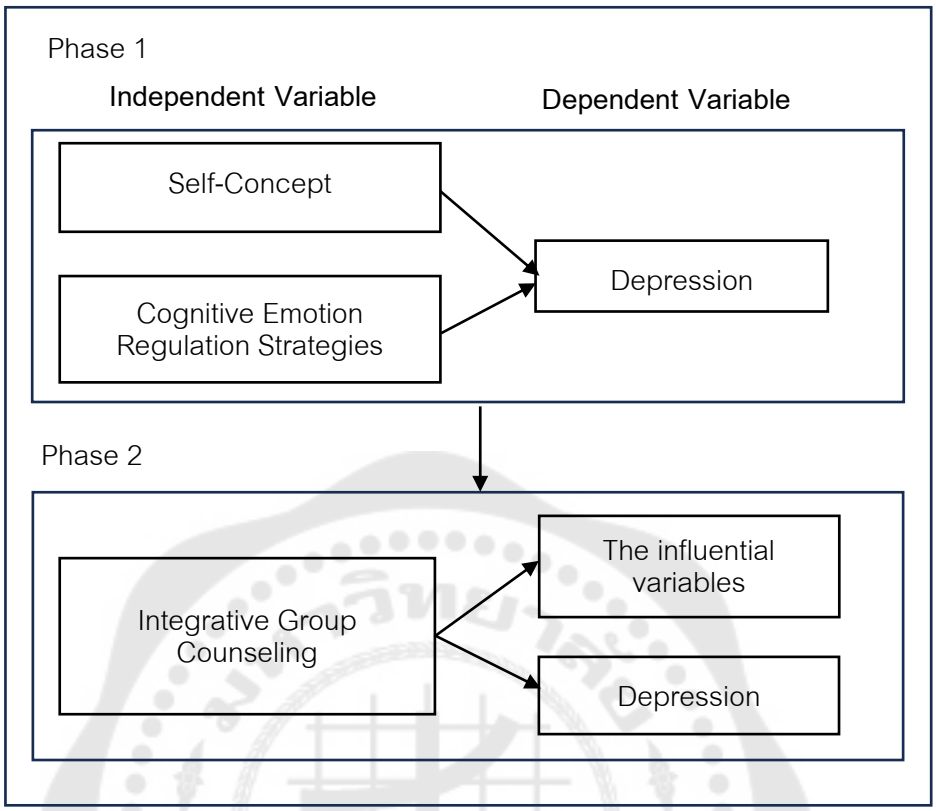


Figure 2 Conceptual Framework of Phase 1 and Phase 2

6.Research hypotheses

This study through the integrative group counseling, focuses on how self-concept and cognitive emotion regulation strategies affect the depression of Chinese vocational college students. In addition, another focus of this study is whether the intervention of the integrative group counseling effectively reduce depression.

6.1 Self-concept and cognitive emotion regulation strategies influence depression among Chinese vocational college students, such that self-concept and relatively adaptive cognitive emotion regulation strategies are negatively associated with depression, while relatively maladaptive cognitive emotion regulation strategies are positively associated with depression.

6.2 After participating in the integrative group counseling, the depression scores of the experimental group in the post-test and follow-up test stages were significantly lower than those in the pretest stage.

CHAPTER 3
METHODOLOGY

1. Phase 1: exploring the influence of self-concept and cognitive emotion regulation strategies on depression

1.1 Population and sample

The stratified proportional sampling method was adopted. The research subjects included students from the Preschool Education Department, Art Department, and Early Education Department of a vocational college, with a total of 3,000 students from the first, second, and third grades. Among them, there were 960 first-year students, 1,200 second-year students, and 840 third-year students.

To determine the overall sample size, this study used the Taro Yamane formula and set the expected error range (e) at 0.05. After calculation, the approximate overall sample size was 353. Considering that some data may be invalid due to incompleteness, the final sample size was determined to be 400 students, accounting for 13.3% of the total number of students.

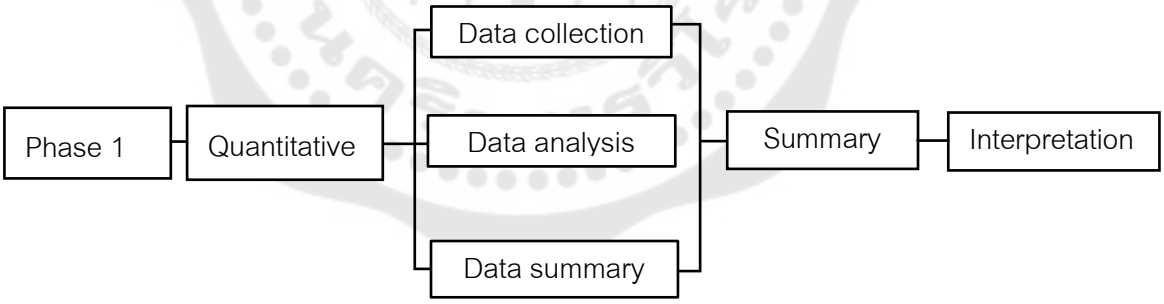


Figure 3 Research Design

1.2 Research instruments

1.2.1 Self-Rating Depression Scale (SDS)

In this study, the Self-Rating Depression Scale (SDS) compiled by American psychologist Zung (1965) was used for testing. This scale consists of 20 items. Each item is equivalent to a related manifestation and is scored on a 1-4 scale. That is, 1 point

for no or rarely occurring, 2 points for a small part of the time, 3 points for a considerable amount of time, and 4 points for most of the time. All reverse-scoring items were adjusted before statistical analysis. The sum of the scores of the 20 items is the total crude score. After multiplying the total crude score by 1.25, the integer part is taken as the standard score. A standard score below 50 indicates no depression; 50-59 points indicate mild depression; 60-69 points indicate moderate depression; 70 points and above indicate severe depression. The higher the total score, the more severe the degree of depression. SDS can effectively reflect the related manifestation and their severity and changes of the depression state, and its score is not affected by factors such as age, gender, and economic status.

SDS was translated into Chinese in 1985 in China. The reliability and validity test of SDS shows that the split-half reliability coefficient of the Chinese version of the SDS scale is 0.92 (Gao &Sun,2007). The Cronbach's alpha for the self-rating depression scale in this study was 0.826.

Table 1 Some items of SDS

	1	2	3	4
Questions	None or rarely occur	A small portion of time	A considerable amount of time	Most of the time
1. I feel gloomy and depressed				
*2. I think the morning is the best time of the day				
3. I burst into tears or feel like crying				

*For reverse scoring

1.2.2 Tennessee Self-Concept Scale (TSCS)

The Tennessee Self-Concept Scale (TSCS) was compiled by American psychologist Fitts from Tennessee in 1965 and revised by Taiwan's Lin in its third edition in 1978. The TSCS comprises a total of 70 questions, grouped into 10 factors across two dimensions and the integrative situation of self-concept. These are the structural dimension (self-identity, self-satisfaction, and self-action), the content dimension (physical self, moral self, psychological self, family self, social self), and the integrative situation (total self-score and self-criticism). Each item is scored on a 1-5 scale, ranging from 'completely the same' to 'completely different'. A higher score in the first nine factors indicates a more positive self-concept, whereas a higher score in self-criticism indicates a more negative self-concept. The Cronbach's alpha for the Tennessee Self-Concept Scale in this study was 0.976.

Table 2 Some items of TSCS

	1	2	3	4	5
Questions	Completely the same	Most of the same	Partially the same or partially different	Most different	Completely different
1. My physical health.					
2. I like to keep my appearance clean and tidy regularly.					
3.I behave properly and follow the rules.					

1.2.3 Cognitive Emotion Regulation Questionnaire (CERQ)

This study employed the Cognitive Emotion Regulation Questionnaire (Chinese version) revised by Chinese scholar Wei (2007) based on the Cognitive Emotion Regulation Questionnaire (CERQ) compiled by Garnefski. This scale is specifically designed to measure an individual's thoughts after experiencing negative events and consists of 32 items and 8 dimensions: Self-blame, Acceptance, Rumination, Positive Reappraisal, Positive Planning (including two layers of meanings: positive planning and re-evaluation of negative life events), Self-Comfort, Catastrophizing, and Other-Blame. They are divided into relatively adaptive cognitive emotion regulation strategies (including two factors: Positive refocusing and Positive reframing) and relatively maladaptive cognitive emotion regulation strategies (including six factors: self-blame, acceptance, focus on thought/rumination, putting in to perspective, catastrophizing and other-blame). The scale used a 5-point scoring system, where "never" to "always" were rated as 1 to 5 points, respectively. The scale was administered in the Netherlands and demonstrated good psychometric properties, with most Cronbach's alpha coefficients exceeding 0.70, and some subscales even exceeding 0.80. The CERQ scale also showed good factor validity and structural validity. In this study, the Cronbach's alpha for the subscales of the Cognitive Emotion Regulation Scale were 0.967.

Table 3 Some items of CERQ

Questions	1	2	3	4	5
	Never	Sometimes	Usually	Often	Always
1. I think I should be blamed for this matter.					
2. I think I have to accept what happened.					
3.I often think about how I feel about what I have experienced.					

1.3 Instrument Development and Quality Examination

This research placed meticulous emphasis on the development and validation of research tools through a comprehensive procedure, encompassing the following detailed phases:

1) Literature Synthesis: A systematic review of extant literature was undertaken to identify validated scales from prior studies measuring self-concept, cognitive emotion regulation strategies, and depression. This phase ensured that the instruments employed in the research were firmly rooted in theoretical frameworks and real-world applications.

2) Instrument Development: based on the literature review, research instruments were carefully designed. Drawing from scales used in prior studies, the instruments were developed to assess the characteristics of variables involved in this study, ensuring the clarity and comprehensiveness of measurement items.

3) Consultation with Advisors: all initial drafts of the research instruments were comprehensively reviewed by the primary advisor and co-advisor. Their guidance played a crucial role in optimizing the instruments and ensuring alignment with research objectives.

4) Revisions were implemented based on advisors' recommendations to improve the clarity, validity, and reliability of the instruments. The revision process primarily focused on refining item phrasing and ensuring the instruments adhered to psychometric standards.

5) Expert Validation: Before finalizing the instruments, they underwent evaluation by five experts specializing in educational psychology and counseling. These experts appraised the content validity of the instruments to ensure items accurately represented the target constructs. The Item Objective Congruence (IOC) method was utilized to measure the alignment between items and operational definitions, thereby enhancing the instruments' validity.

6) Refinement and Validation: Discrepancies or issues identified during the expert validation phase were addressed through iterative instrument refinements. This

cyclical process sought to optimize the instruments for the study's purposes, ultimately ensuring their validity and reliability in measuring the target variables.

Through these meticulous procedures, the research instruments were systematically developed, refined, and validated to ensure their efficacy in accurately measuring the study's target variables.

The criteria for expert evaluations were defined as follows:

Score +1: Confirm that the sentence/phrase/question clearly reflects the construct measured by the instrument.

Score 0: Uncertain whether the sentence/phrase/question reflects the construct measured by the instrument.

Score -1: Confirm that the sentence/phrase/question does not reflect the construct measured by the instrument.

Following the submission of completed IOC forms by all experts, Item-Objective Congruence (IOC) scores were computed to assess the alignment between each sentence, phrase, or question and its operational definition. A minimum IOC score of 0.5 was required for all components of each instrument to meet validity criteria (Choochom, 2002). The results of the Item-Objective Congruence (IOC) test for the measurement instruments in this study are as follows:

1.3.1 Self-Rating Depression Scale (SDS)

The scale consists of 20 items and undergoes Item-Objective Congruence (IOC) testing using the expert evaluation method. After summarizing the scores of the five experts, the mean IOC score of all items is 0.867, meeting the validity standard of $\geq$0.5. This indicates good consistency between the scale items and measurement objectives.

1.3.2 Tennessee Self-Concept Scale (TSCS)

The scale consists of 70 items and undergoes Item-Objective Congruence (IOC) testing using the expert evaluation method. After summarizing the scores of the five experts, the mean IOC score of all items is 0.929, meeting the validity standard of

≥0.5. This indicates good consistency between the scale items and measurement objectives

1.3.3 Cognitive Emotion Regulation Questionnaire (CERQ)

The scale consists of 32 items and undergoes Item-Objective Congruence (IOC) testing using the expert evaluation method. After summarizing the scores of the five experts, the mean IOC score of all items is 0.927, meeting the validity standard of ≥0.5. This indicates good consistency between the scale items and measurement objectives.

1.4 Data collection

1.4.1 Collection steps

After obtaining ethical approval for human subjects, the researchers explained the test rules to first-year, second-year and third-year students studying at a vocational college in Shanxi Province, China, detailing the protocols for questionnaire distribution to participants and outlining the timeline for data collection, along with any encountered challenges that might be encountered.

After obtaining permission to collect data, the researchers personally carried out the data collection process and adopted a combination of stratified proportional sampling and random selection.

The main testers were uniformly trained before the test. Instructions, test time, and possible questionnaire-related problems were explained. In the classroom, the students who formed the research sample completed the relevant questionnaires online by scanning the QR code. After the test was completed, the test data were exported and sorted out.

The first step: stratified proportional sampling

The stratified proportional sampling method was adopted. The research subjects were students of a vocational college, including students from the Preschool Education Department, the Art Department, and the Early Education Department, with a total of 3,000 people. Among them, there were 960 first-year students, 1,200 second-year students, and 840 third-year students.

To determine the overall sample size, the Taro Yamane formula was used in this study, and the expected error range (e) was set at 0.05. After calculation, the approximate overall sample size was 353 people. Considering that some data might be invalid due to incomplete data, the final sample was determined to be 400 students, accounting for 13.3% of the total number of students.

The second step: proportional sampling

Samples need to be drawn proportionally: For first-year students, approximately (960 * 13.3%) = 128 students should be drawn. For second-year students, approximately (1200 * 13.3%) = 160 students should be drawn. For third-year students, approximately (840 * 13.3%) = 112 students should be drawn.

Specifically, for first-year students, the final sample size was determined based on their respective proportions: 64 students from the Preschool Education Department, 43 students from the Art Department, and 21 students from the Early Education Department. Similarly, for second-year students, the results of proportional sampling were: 80 students from the Preschool Education Department, 53 students from the Art Department, and 27 students from the Early Education Department. For third-year students, the results of proportional sampling were: 56 students from the Preschool Education Department, 37 students from the Art Department, and 19 students from the Early Education Department.

Table 4 Random Sampling Chart of Vocational College Students

Student	Department	Population	Sample
First-year	Preschool Education	480	64
	Art	320	43
	Early Education	160	21
Sub-total		960	128
Second-year	Preschool Education	600	80
	Art	400	53
	Early Education	200	27

Table 4 (continued)

Student	Department	Population	Sample
Sub-total		1200	160
	Preschool Education	420	56
Third-year	Art	280	37
	Early Education	140	19
Sub-total		840	112
Total		3000	400

1.4.2 Data complete

1) Each questionnaire was comprehensively checked to ensure its completeness.

2) The data was encoded according to the predetermined standards, and the scores of the questionnaires were carefully checked.

3) Statistical methods were employed to analyze the collected data.

1.4.3 Data analysis

Export the scale data collected on the online platform to the statistical software SPSS 26.0. Consider the scales with a response time of less than 600 seconds (the shortest time to carefully read and complete the survey according to the pilot test) as invalid scales and remove them. The statistical significance level for all analyses is $p < 0.05$. In this stage, descriptive, correlational and multiple regression analyses are used for data analysis to fully understand the correlations among self-concept, cognitive emotional regulation strategies and depression.

1) Sample demographic data (n, %). Demographic variables of the data should be determined (such as gender, place of origin, grade, type of student source, etc.).

2) Descriptive analysis of variables (M±SD). Input the standardized measurement data into the statistical software SPSS 26.0 for analysis. Descriptive statistical analysis involves calculating the mean and standard deviation.

3) Pearson correlation analysis was conducted to examine the preliminary relationship between independent variables (self-concept, cognitive emotional regulation strategies) and the dependent variable (depression level). This helps to explore the relationships between each dimension of self - concept, cognitive - emotional regulation strategies and depression. Emphasis is placed on the interpretation of the correlation coefficient, both its statistical and practical significance, in order to distinguish the strength of the observed associations.

4) Multiple regression equations of variables. The method of multiple regression analysis is used to analyze the comprehensive influence of each dimension of self- concept and cognitive emotional regulation strategies on depression. In this process, each dimension of self-concept and cognitive emotional regulation strategies is clearly defined as predictors, and depression as the dependent variable. Through data statistics, the contribution rate of each dimension of self-concept and cognitive emotional regulation strategies to depression is analyzed.

5) Finally, a comprehensive analysis of the results of correlation analysis and multiple regression analysis is conducted, and ultimately an in-depth analysis of the relationships among self-concept, cognitive emotional regulation strategies and depression is carried out.

2 Phase 2: reducing depression among Chinese vocational college students through developing integrative group counseling

2.1 Research design

This stage adopted a quasi-experimental design, which was divided into an experimental group and a control group. Before the experiment, both groups underwent a pretest. The experimental group received integrative group counseling, while the control group did not receive any intervention. After the integrative group counseling, post-tests were conducted on both the experimental and control groups, a follow-up test was administered two weeks after the counseling ended. Subsequently, the pretest, post-test, and follow-up test results of the experimental and control groups were compared (Winer, Brown, & Michels, 1991).

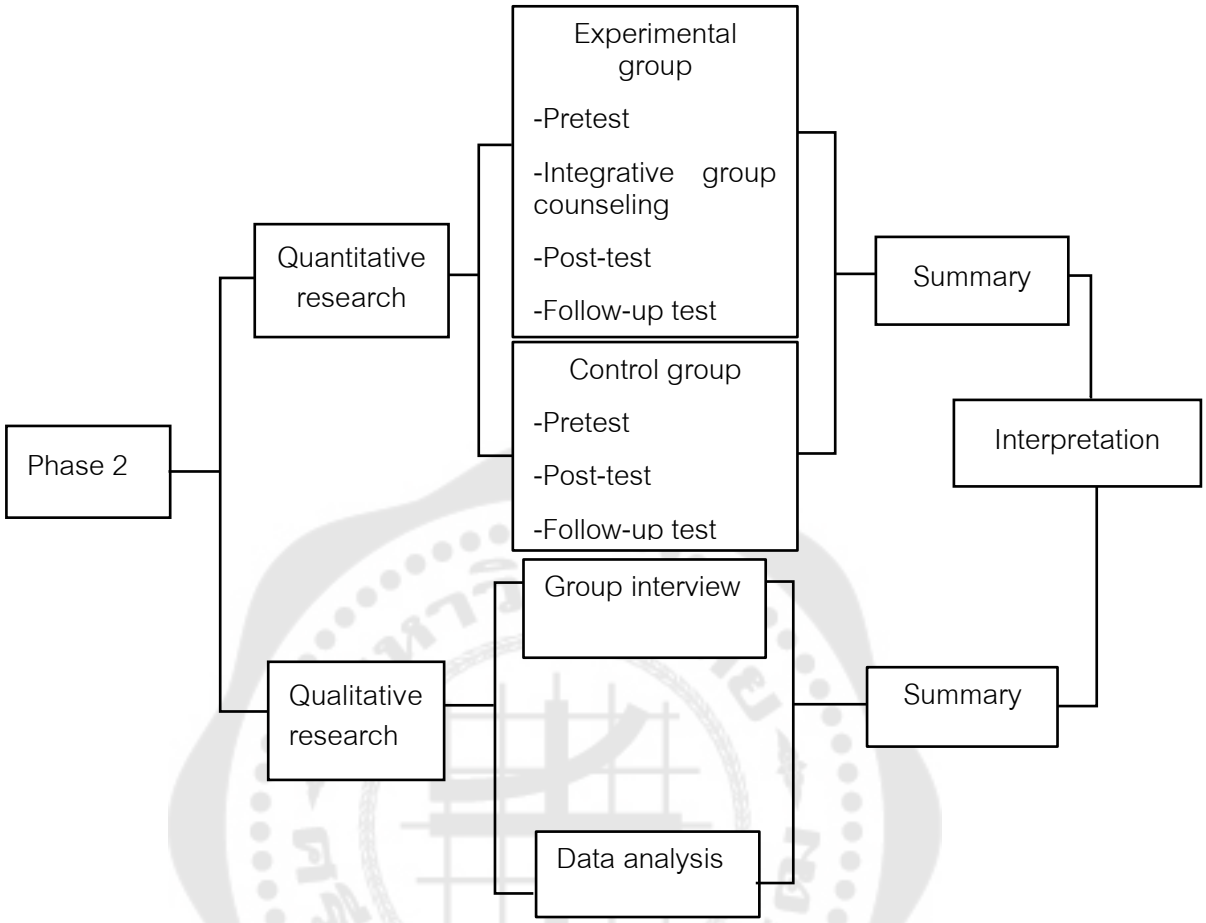


Figure 4 Research Design

E	O_1	X	O_2	O_3
C	O_1	-	O_2	O_3

Figure 5 Quasi-experimental design, using the control group and pretest-posttest, including repeated measurements

E represents the experimental group and C represents the control group.

O represents pretest: O1, post-test: O2, follow-up test: O3

X represents treatment

Integrative group counseling was carried out as an intervention for the experimental group. The control group received no intervention.

2.2 Population and sample

2.2.1 The first step: quasi-experimental samples

According to the research objective, the purposive sampling method was used to select the research samples. Corey (2016) believes that for group counseling with therapeutic objectives, the number of people should generally not be too large to ensure that each member can receive sufficient attention and support. The usually recommended number range is 6 to 10 people. Such a scale helps to establish in-depth emotional connections among members, promotes mutual understanding and support, and also facilitates the leader to better understand the situation of each member and provide targeted guidance and help. However, considering that members may drop out during the group counseling process, 10 participants were initially and cautiously selected. Since both the experimental group and the control group need to have the same number of participants, the pretest data from the first stage should be used to select 20 individuals with moderate levels of depression scores to participate in this phase of the study.

Then, these students were sorted from low to high according to their depression scores. Subsequently, they were randomly assigned to two groups: one was the control group and the other was the experimental group, with 10 members in each group. Integrative group counseling activities were only carried out within the experimental group.

2.2.2 The second step: focus group interview samples

After the end of the integrative group counseling, all ten students in the experimental group were interviewed.

Combining quantitative and qualitative methods:

This study integratively explores the influence of self-concept and cognitive emotion regulation strategies on the depression of vocational college students and the intervention effect of integrative group counseling by combining quantitative and

qualitative methods. Quantitative methods (such as questionnaires and statistical analysis) are used to collect and analyze a large amount of data to quantify the correlations between self-concept, cognitive emotion regulation strategies and depression. While qualitative methods (such as focus group interviews) are used to deeply understand the personal experiences, feelings and attitudes of students to provide richer and deeper insights. By combining these two methods, this study can understand the complexity of depression of vocational college students more integratively and provide strong support for formulating effective intervention measures.

2.3 Research instruments

2.3.1 Pretest, post-test and follow-up test instruments

The Tennessee Self-Concept Scale (TSCS), the Cognitive Emotion Regulation Questionnaire (CERQ), and the Self-Rating Depression Scale (SDS) which were employed in the first stage were all utilized as pretest, post-test and follow-up test instruments in the second stage.

2.3.2 Instrument for integrative group counseling

Two weeks following the group interventions, semi-structured interviews were administered to explore group members' subjective perceptions of the series of group counseling activities.

3. Integrative group counseling

3.1 Objectives of integrative group counseling

Help members alleviate depression through integrative group counseling techniques.

Help members raise the level of self-concept, enhance their understanding and knowledge of themselves, discover their own advantages, accept themselves, and boost self-confidence.

Assist members in organizing past experiences, exploring past successful experiences, and bolstering confidence in success.

Help members learn to enhance the level of cognitive emotion regulation strategies and be capable of reasonably regulating cognitive emotions when

encountering setbacks and difficulties. Integrative group counseling attempts to alleviate the depression tendency of vocational college students by changing members' self-concept, cognitive emotion regulation strategies, and harmonious interpersonal relationships in the team.

3.2 Group name and nature

Group Name: "Stay Away from Depression and Know Yourself"

Group Counseling Training Camp Group Nature: Closed, Structured, and Developmental Group

3.3 Number of integrative group counseling

Integrative group counseling :10 times, 2 hours each time

Qualitative Interview:3 times, 1.5 hours each time

3.4 Implementation of integrative group counseling

Over the years, integrative group counseling has become increasingly important in mental health education courses and is a more effective teaching approach in psychological education. By drawing on theories related to depression tendencies and integrating relevant technologies of group counseling, a complete integrative group counseling has been designed.

Integrative group counseling is to use various psychological theories and techniques to guide group members to participate in interactions together, so that they can get to know themselves and establish close and friendly bonds with members in the interaction process. Integrative group counseling needs to attach importance not only to related technologies and operations but also to the leading role of leaders. At the end of each group activity, the gains of this activity should be reviewed and sorted out, and positive feedback should be given to members to consolidate their positive performance. Finally, through the ending link of assigning homework, the impetus for positive change of members is extended and applied to real life. Based on this, each integrative group counseling activity lasts 2 hours, twice a week for five weeks, generally categorized into the initiation stage, growth stage (transition process, norming process, working process), and closure stage.

Table 5 Process of Integrative Group Counseling

Stages	Objectives	Activities	Theories-Techniques
1. The group initiation stage	1.Eliminate the strangeness among members and establish initial trust. 2.Create a relaxed and safe group atmosphere to foster enthusiasm for participation. 3.Clarify group goals and initially establish group norms.	1.Name Repeat Fun: Members form a circle and introduce themselves one by one, repeating the previous person's "name + action." Those who make mistakes will give a performance. 2.Quick Acquaintance Challenge: Through gamified design, this activity helps members remember each other's characteristics and reduce tension.	1.Client-Centered Therapy - Understanding, Trust, Unconditional Acceptance Techniques 2.Behaviorism Theory - Relaxation Training, Positive Reinforcement Techniques
2. The group growth stage	1.Deeply explore the self-concept to promote self-awareness and acceptance. Learn and master cognitive-emotional regulation strategies to enhance emotional management skills. 2.Strengthen the group cohesion and deepen emotional connections and mutual support among members.	1. Self-Portrait Drawing and Sharing 2. Ideal Business Card Design and Sharing 3. Growth Timeline Creation and Discussion 4. Strengths Praise Session 5. Values Auction Activity 6. Dream Puzzle Assembly 7. Emotion Face Mask Display and Sharing 8. Emotion Diary Sharing 9. Negative-to-Positive Transformation Activity 10. Gratitude Practice	1.Person-Centered Therapy Theory – Empathetic Understanding, Nonverbal Communication Techniques 2.Narrative Therapy Theory – Story Reconstruction, Life Review Techniques 3.Rational Emotive Behavior Therapy (REBT) – Emotional Labeling, Cognitive Restructuring Techniques 4.Cognitive Behavioral Theory (CBT) – Self-Monitoring, Group Feedback, Role-

Table 5 (continued)

Stages	Objectives	Activities	Theories-Techniques
		11. Relaxation Techniques Learning and Practice 12. Problem-Solving Role-Play 13. Emotion Management Case Competition 14. Future Emotional Planning and Monitoring	Playing, Value Clarification, Goal Visualization, Problem-Solving Techniques
3. The group closure stage	1.Help members process separation emotions and accept the end of the group. 2.Systematically summarize group gains to consolidate self-growth and emotional management achievements. 3.Facilitate the transfer of group experience and inspire members' motivation for continuous self-improvement.	1. Growth Puzzle Filling and Drawing 2. Gratitude Transmission Activity 3. Depositing Commitment Letters and Growth Cards into the Growth Pact Box	1. Narrative Therapy Theory – Life Review Technique 2. Person-Centered Theory – Empathetic Response, Unconditional Positive Regard Technique

3.5 Data collection

For the pretest, post-test and follow-up test measurements, both the experimental group and the control group used the scale used in Phase 1. Then, the pretest, post-test, and follow-up test results of the experimental group and the control

group were compared. This process aims to evaluate the changes in depression levels caused by the integrative group counseling intervention.

After the end of the integrative group counseling intervention, semi-structured interviews were conducted with the members of the experimental group, enabling them to share their experiences, gains and thoughts during the integrative group counseling, and discuss how to maintain a positive state in future life. Participants were encouraged to voice their opinions on the group counseling activities. The instructor recorded the interview content in detail and gave encouragement and summaries in a timely manner after each student spoke.

3.6 Data analysis

3.6.1 Quantitative analysis

To explore the impact of integrative group counseling on students' depression and gain meaningful insights, repeated measures are used to detect significant differences in depression levels between the experimental group and the control group, as well as the changes in the depression level of the experimental group before and after the integrative group counseling intervention. This helps to understand the effectiveness of the integrative group counseling intervention.

The main focus of the analysis at this stage is to compare the pretest, post-test and follow-up test scores of self-concept, cognitive emotional regulation strategies, and depression level within the experimental group. By comparing the experimental group before and after the integrative group counseling intervention, we can evaluate the effect of the intervention and gain valuable insights into the influence of self-concept and cognitive emotional regulation strategies on the depression level.

1) Demographic characteristics of the control and experimental groups (n%).

2) Descriptive statistical analyses of variables in the experimental and control groups (pretest, post-test, and follow-up test period, M±SD).

3) Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) revealed significant differences in multiple variables between the experimental and

control groups. Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) helps to detect statistically significant changes in self - concept, cognitive emotional regulation strategies, and depression levels between the experimental group and the control group after the integrative group counseling intervention, further illustrating the effectiveness of the integrative group counseling intervention. This analysis is helpful for comprehensively evaluating the impact of the integrative group counseling intervention on depression levels and improving the validity and reliability of the research results.

4) Simple effects analysis of repeated measures for depression.

5) Simple effects analysis of repeated measures for self-concept.

6) Simple effects analysis of repeated measures for cognitive emotion regulation strategies.

The application of various statistical techniques not only makes the analysis more comprehensive, but also enables a profound explanation of the subtle influence of integrative group counseling interventions on students' depression.

3.6.2 Qualitative analysis

After the end of the integrative group counseling plan, semi-structured interviews were conducted with the members of the experimental group. Following the interviews, qualitative analysis was performed on the data collected from them.

The first step of the analysis is to conduct a detailed transcription of the interview content. This process can accurately capture the expressions of the participants. Subsequently, a content analysis framework was employed to systematically analyze the interview transcripts. This methodology facilitated the identification of recurring themes and subtleties in participants' narratives.

Subsequently, thematic coding was employed to identify and categorize the central themes derived from the qualitative dataset. By organizing the interview content into common themes, we refined the participants' views on depression and the integrative group counseling project into structured viewpoints. Thematic analysis provides a framework for qualitative research and can present the different viewpoints shared by the participants in a comprehensive and clear manner.

When presenting the results of the qualitative research, the focus lies in summarizing the key themes and the participants' views related to changes in depression levels, objective setting and the effectiveness of the integrative group counseling. The qualitative insights of the participants were combined with quantitative assessment to facilitate a thorough assessment of the effect of integrative group counseling on depressive manifestations.

In summary, qualitative analysis not only deepens the comprehension of participants' experiences but also illuminates the intricate and nuanced differences in the efficacy of integrative group counseling interventions for reducing depression. The results of qualitative analysis provide valuable information for the future improvement and refinement of the integrative group counseling project and exert a continuous influence on the regulation of participants' future depression.

4.Ethical considerations for human subjects

Ethics Committee Approval: All research activities will comply with the review and approval of the relevant ethics committee to ensure compliance with ethical standards and guidelines for human research.

We will adhere to ethical principles, obtain informed consent from the subjects, and ensure their privacy and data security. All research activities will meet the review and approval requirements of the relevant ethics committee.

CHAPTER 4
RESULTS

The research project " The influence of self-concept, cognitive emotion regulation strategies on depression and reducing depression of vocational college students through integrative group counseling " is divided into two phases. The purpose of Phase 1 is to study and explore the influence of Self-concept (X11) and Cognitive emotion regulation strategies (X20) on the Depression (Y) of Chinese vocational college students. Phase 2 is to develop and design a integrative group counseling program to reduce the level of Depression (Y). In addition, it aims to test the difference in the level of Depression (Y) between the experimental group that receives the integrative group counseling program and the control group that does not receive the integrative group counseling program.

Table 6 The symbols used in data analysis

Symbol	Meaning
n	Number of sample
M	Mean
S.D.	Standard Deviation
b	Raw Scores Linear Regression
S.E.	StandardizedError
β	Standard Scores Linear Regression
R^2	Square Multiple Correlation Coefficient
R^2_{adj}	Adjust Square Multiple Correlation Coefficient
df	Degree of Freedom
F	F-value
t	t-value

Table 6 (continued)

p	p-value
B	Linear regression of raw scores
VIF	variance inflation factor
SS	Type III Sum of Squares
MS	Mean Square
M.D.	Mean Difference
X_1	Physical self
X_2	Moral-ethical self
X_3	Psychological self
X_4	Family self
X_5	Social self
X_6	Self-criticism
X_7	Self-identity
X_8	Self-satisfaction
X_9	Self-action
X_{10}	Total Score of Self-concept
X_{11}	Self-concept
X_{12}	Self-blame
X_{13}	Acceptance
X_{14}	Focus on thought/rumination
X_{15}	Positive refocusing
X_{16}	Positive reframing
X_{17}	Putting in to perspective
X_{18}	Catastrophizing
X_{19}	Other-blame
X_{20}	Cognitive emotion regulation strategies

Table 6 (continued)

X_{21}	RACERS-Relatively adaptive cognitive emotion regulation strategies
X_{22}	RMCERS-Relatively maladaptive cognitive emotion regulation strategies
Y	Depression

Note: The term "relatively adaptive cognitive emotion regulation strategies" is relatively long, so it is abbreviated as RACERS(X21), the term "relatively maladaptive cognitive emotion regulation strategies" is abbreviated as RMCERS(X22).

1. Results of Phase 1: Quantitative Analysis

Data collected were analyzed using SPSS computer software. The research results can be divided into the following five parts:

1.1 Demographic Characteristics of the Sample

1.2 Descriptive Analysis of Variables

1.3 Correlation Analysis of Variables

1.4 Regression Equation of Variables

1.5 Summary of the Results of Phase 1

1.1 Demographic Characteristics of the Sample

The research subjects are students from the first, second, and third grades of the Department of Preschool Education, the Department of Art, and the Department of Early Childhood Education at a certain higher vocational college. A total of 420 questionnaires were distributed. After sorting out the recovered questionnaires, those with short answers or obvious patterns were deleted. Finally, 400 valid questionnaires were obtained, with an effective response rate of 95.24%. The basic demographic information of the sample is shown in Table 7.

Table 7 The Quantity and Percentage of General Data of Chinese Students (n = 400)

General data of Chinese students	Frequency(n)	Percentage (%)
1.Gender		
male	106	26.5
female	294	73.5
total	400	100.0
2.Place of Residence		
City	121	30.3
Township	142	35.5
Rural Area	137	34.3
total	400	100.0
3.Level of Education		
Freshman year	136	34.0
Sophomore year	125	31.3
Junior year	139	34.8
total	400	100.0

Among the 400 students who participated in the survey, there are 106 males, accounting for 26.5%; and 294 females, accounting for 73.5%. There are 121 students living in cities, accounting for 30.3%; 142 students living in townships, accounting for 35.5%; and 137 students living in rural areas, accounting for 34.3%. There are 136 freshmen, accounting for 34.0%; 125 sophomores, accounting for 31.3%; and 139 juniors, accounting for 34.8%.

1.2. Descriptive Analysis of Variables

Descriptive statistics of the impacts of Chinese vocational college students' Self-concept (X11) and Cognitive emotion regulation strategies (X20) on Depression (Y).

The researchers analyzed the means and standard deviations of the impacts of Self-concept (X11) and Cognitive emotion regulation strategies (X20) on the Depression (Y) of Chinese vocational college students in Table 8.

Table 8 Means and Standard Deviations of the Influences of Self-Concept (X11) and Cognitive Emotion Regulation Strategies (X20) on the Depression (Y) of Chinese vocational college students (n=400)

Variable	Component	Mean	S.D.	Levels
Self-concept(X11)	Physical self(X1)	3.18	1.17	Moderate
	Moral-ethical self(X2)	3.08	0.71	Moderate
	Psychological self (X3)	3.47	1.04	Moderate
	Family self(X4)	3.49	1.08	Moderate
	Social self(X5)	3.44	1.27	Moderate
	Self-criticism(X6)	2.72	1.06	Low
	Self-identity(X7)	3.65	1.14	High
	Self-satisfaction(X8)	3.65	1.14	High
	Self-action(X9)	3.39	1.26	Moderate
	Total Score of Self-concept(X10)	3.26	0.50	Moderate
RACERS(X21)	Positive refocusing(X15)	4.02	0.94	High
	Positive reframing(X16)	3.75	1.03	High
RMCERS(X22)	Self-blame(X12)	3.07	1.20	Moderate
	Acceptance(X13)	2.62	0.44	Low
	Focus on thought/rumination(X14)	2.46	1.22	Low
	Putting in to perspective(X17)	3.47	0.44	Moderate
	Catastrophizing(X18)	2.18	0.95	Low
	Other-blame(X19)	2.37	1.22	Low
Depression(Y)		2.42	0.62	Moderate

As shown in Table 8, the basic situation of the Self-concept (X11) of Chinese vocational college students is as follows: Physical self(X1)(M= 3.18,SD=1.17),Moral-ethical self(X2)(M=3.08,SD=0.71), Psychological self(X3) (M=3.47, SD=1.04), Family self (X4) (M=3.49, SD=1.08), Social self (X5) (M=3.44, SD=1.27), Self-action (X9) (M=3.39, SD=1.26) and the Total Score of Self-concept (X10) (M=3.26, SD= 0.50) are at a moderate level; Self-criticism (X6) (M=2.72, SD=1.06) is at a relatively low level; Self-identity (X7) (M=3.65, SD=1.14) and Self-satisfaction (X8) (M=3.65, SD=1.14) are at a relatively high level.

The situation of the Cognitive emotion regulation strategies (X20) is as follows: Self-blame (X12) (M=3.07, SD=1.20) and Perspective (X17) (M=3.47, SD=0.44) are at a moderate level; Acceptance(X13) (M=2.62, SD=0.44), Focus on thought/rumination(X14) (M=2.46,SD=1.22), Catastrophizing (X18) (M=2.18, SD=0.95) and Other-blame (X19) (M = 2.37, SD=1.22) are at a relatively low level; Positive refocusing (X15) (M=4.02, SD=0.94) and Positive reframing (X16) (M=3.75, SD=1.03) are at a relatively high level. Depression (Y) (M=2.42, SD=0.62) is at a moderate level.

1.3 Correlation Analysis of Variables

The researchers studied the relationships among the Self-concept (X11), Cognitive emotion regulation strategies (X20) of Chinese vocational college students and Depression (Y) through the Pearson product-moment correlation coefficient. The results are shown in Table 9.

Table 9 Correlation Analysis of the Relationships among the Self-concept (X11), Cognitive Emotion Regulation Strategies (X20) of Chinese vocational college students and Depression (Y)

Variable	Depression (Y)	Self-concept (X11)	RACERS (X21)	RMCERS (X22)
Depression(Y)	1			
Self-concept(X11)	-0.402***	1		
RACERS(X21)	-0.600***	0.594***	1	
RMCERS(X22)	0.647***	-0.507***	-0.713***	1

Note: *** p <.001.

Table 9 analyzes the relationships between Chinese vocational college students' self-concept (X11), two types of cognitive emotion regulation strategies (X20) (relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies), and depression (Y). The results in Table 9 show significant correlations among variables. Depression is significantly negatively correlated with self-concept ($r = -0.402$, $p < 0.001$) and with relatively adaptive cognitive emotion regulation strategies ($r = -0.600$, $p < 0.001$); it is significantly positively correlated with relatively maladaptive cognitive emotion regulation strategies ($r = 0.647$, $p < 0.001$). Self-concept is significantly positively correlated with relatively adaptive cognitive emotion regulation strategies ($r = 0.594$, $p < 0.001$) and significantly negatively correlated with relatively maladaptive cognitive emotion regulation strategies ($r = -0.507$, $p < 0.001$). Relatively adaptive cognitive emotion regulation strategies are significantly negatively correlated with relatively maladaptive cognitive emotion regulation strategies ($r = -0.713$, $p < 0.001$). This result suggests that individuals with more positive self-concepts tend to employ relatively adaptive cognitive emotion regulation strategies, thereby helping to alleviate depression.

1.4 Regression Equations of Variables

Before analyzing the relationships between Chinese vocational college students' self-concept (X11), two types of cognitive emotion regulation strategies (X20)(relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies), and depression (Y), the researchers validated the influence of self-concept (X11) and the two types of cognitive emotion regulation strategies (X20) on depression (Y) among Chinese vocational college students through tolerance and variance inflation factor (VIF). The results are shown in Table 10.

Table 10 The Relationships among the Self-concept (X11), Cognitive Emotion Regulation Strategies (X20) and Depression (Y) of Chinese vocational college students (n=400)

Variable	Tolerance	Variance Inflation Factor (VIF)
Self-concept(X11)	0.633	1.579
RACERS(X21)	0.419	2.384
RMCERS(X22)	0.481	2.079

Table 10 shows that the tolerance values for Chinese vocational college students' self-concept (X11) and the two types of cognitive emotion regulation strategies (X20) [relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies] range from 0.419 to 0.633, all greater than 0.1, and the variance inflation factors (VIF) range from 1.579 to 2.384, all below 10. This indicates that in the study of Chinese vocational college students, there is no collinearity between self-concept (X11) and the two categories of cognitive emotion regulation strategies (X20). Therefore, the researchers performed multiple regression analysis, and the results are shown in Table 11.

Table 11 Multiple Regression Analysis of the Influence of the Self-concept (X11) and Cognitive Emotion Regulation Strategies (X20) of Chinese vocational college students on Depression (Y) (n=400)

Variable	b	SE	β	t
constant	36.018	6.693	-	5.381***
Self-concept(X11)	-0.022	0.017	-0.062	-1.294**
RACERS(X21)	-0.335	0.070	-0.276	-4.822***
RMCERS(X22)	0.447	0.054	0.443	8.303***

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

Multiple regression analysis was conducted to examine the effects of Chinese vocational college students' self-concept (X11) and two subtypes of cognitive emotion regulation strategies (X20)—relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies—on depression (Y). The model was statistically significant at the 0.05 level ($F = 111.222$, $df = 3, 396$, $p < 0.001$).

A multiple regression analysis was conducted to determine the predictive effects of Chinese vocational college students' self-concept (X11) and two types of cognitive emotion regulation strategies (X20) (relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies) on depression (Y), with an emphasis on identifying the most influential predictor variables among these factors. Table 11 presents the results of the multiple regression analysis based on self-concept and the two types of cognitive emotion regulation strategies for predicting depression.

The findings indicated that the model's constant term was 36.018, representing the predicted depression score when all predictor variables equaled zero. The intercept was statistically significant, yielding a t-value of 5.381 ($p<0.001$), which confirmed that

the baseline depression level deviated significantly from zero. This result underscores the importance of accounting for pre-existing depressive manifestations in the model.

In terms of the predictor variables, the unstandardized coefficient for self-concept (X11) was -0.022, and the standardized coefficient (β) was -0.062. The negative effect of self-concept (X11) on depression was not statistically significant (t= -1.294, p=0.007). This indicates that for every one-unit increase in self-concept (X11), depression was predicted to decrease by 0.022 units.

The unstandardized coefficient for the relatively adaptive cognitive emotion regulation strategies was -0.335, and the standardized coefficient (β) was -0.276. The negative effect of these strategies on depression was statistically significant (t = -4.822, p = 0.001). Specifically, for every one-unit increase in the relatively adaptive cognitive emotion regulation strategies, depression was predicted to decrease by 0.335 units.

The unstandardized coefficient for the relatively maladaptive cognitive emotion regulation strategies was 0.447, and the standardized coefficient (β) was 0.443. These strategies had a significant positive effect on depression (t = 8.303, p = 0.00 1). That is, for every one-unit increase in the relatively maladaptive cognitive emotion regulation strategies, depression was predicted to increase by 0.447 units.

Therefore, the researchers developed an equation to model the effects of self-concept and cognitive emotion regulation strategies on depression among Chinese vocational college students.

The equation for predicting the raw score of depression is:

$$Y_{Depression}=36.018-0.022X_{Self\text{-}Concept}-0.335X_{RACERS}+0.447X_{RMCERS}$$

The equation for predicting the standardized score of depression is:

$$ZY_{Depression}=-0.062Z_{Self\text{-}Concept}-0.276Z_{RACERS}+0.443Z_{RMCERS}$$

In summary, the regression analysis shows that relatively maladaptive cognitive emotion regulation strategies are the strongest and most significant positive predictors of depression. The higher their level, the significantly higher the level of depression. relatively Adaptive cognitive emotion regulation strategies are significant negative predictors. The higher their level, the significantly lower the level of depression. Self-

concept is a significant negative predictor, and the higher its level, the significantly lower the level of depression. This conclusion emphasizes the importance of paying attention to self-concept and cognitive emotion regulation strategies. Improving the level of self-concept, adjusting relatively maladaptive cognitive emotion regulation strategies, and enhancing relatively adaptive cognitive emotion regulation strategies can directly reduce the level of depression. An integrated approach is needed in the intervention process, with improving self-concept and regulating cognitive emotion regulation strategies as key strategies.

Based on the above research results, Table 12 summarizes the overall findings of the regression model predicting depression levels with self-concept, relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies as predictor variables.

Table 12 Regression Model

Model	R	R^2	R^2_{adj}	Standard Error of the Estimate	F	p
1	0.676a	0.457	0.453	9.20507	111.222***	0.001[b]

Note: ***p<0.001.

a Predictors:(Constant), self-concept, relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies

b Dependent Variable: depression

As shown in Table 12, the model has an R value of 0.676, indicating a strong correlation between the predictor variables (self-concept, relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies) and depression. This reflects a high degree of linear association between the combination of independent variables and the dependent variable (depression). The R^2

value of 0.457 means the model can explain approximately 45.7% of the variance in depression, suggesting the model has moderate explanatory power.

The adjusted R^2 value is 0.453, slightly lower than the R^2 value. This adjustment takes into account the number of predictor variables in the model. By considering the sample size relative to the number of predictor variables, the R^2 value is optimized, thus providing a more precise assessment of the model's explanatory power. The adjusted value indicates that the model's explanation of depression variance is reasonable. The standard error of the estimate is 9.20507, reflecting the average deviation of observed data points from the regression line. A smaller standard error signifies a closer fit between the model and empirical data. The current standard error suggests that the model fit is at a certain level, but there is still room for improvement.

The F-statistic is 111.222 with a significance level (p) = 0.001, indicating that the overall regression model is statistically significant. This result confirms that self-concept, relatively adaptive cognitive emotion regulation strategies, and relatively maladaptive cognitive emotion regulation strategies are significant predictors of depression, eliminating the possibility that these findings were due to chance.

In summary, the regression model indicates that self-concept, relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies collectively explain a substantial portion of the variance in depression. The overall model exhibits favorable fit for predicting the dependent variable(depression), enabling effective prediction of changes in the dependent variable through these independent variables.

1.5 Summary of the Results of Phase 1

In the analysis of this study, the results show that depression is significantly correlated with self-concept ($r = -0.402$, $p < 0.001$), relatively adaptive cognitive emotion regulation strategies ($r = -0.600$, $p < 0.001$), and relatively maladaptive cognitive emotion regulation strategies ($r = 0.647$, $p < 0.001$). This indicates that higher levels of self-concept are associated with lower levels of depression; greater use of relatively adaptive cognitive emotion regulation strategies is also linked to reduced depression; conversely,

more frequent use of relatively maladaptive cognitive emotion regulation strategies is associated with increased depression. Among the three predictor variables, the absolute value of the correlation between relatively maladaptive cognitive emotion regulation strategies and depression is the largest, meaning their association with depression is the closest.

Further analysis using a multiple regression model highlights the importance of relatively maladaptive cognitive emotion regulation strategies as the most influential predictor of depression. Regression analysis results show that the standardized coefficient (β) of relatively maladaptive cognitive emotion regulation strategies is 0.443 ($t=8.303$, $p<0.001$), which is more prominent than that of self-concept ($\beta=-0.062$, $t=-1.294$, $p<0.01$) and relatively adaptive cognitive emotion regulation strategies ($\beta=-0.276$, $t=-4.822$, $p<0.001$).These results indicate that relatively maladaptive cognitive emotion regulation strategies have the most significant impact on depression levels, While self-concept and relatively adaptive cognitive emotion regulation strategies do play a role in predicting depression, their effects are still weaker than those of relatively maladaptive cognitive emotion regulation strategies.

The model summary indicates that the regression model explains 45.7% of the variance in depression ($R^2 = 0.457$, adjusted $R^2 = 0.453$), and the model is statistically significant ($F = 111.222$, $p < 0.001$). These results suggest that while self-concept, relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies collectively explain a substantial portion of depression variance, relatively maladaptive cognitive emotion regulation strategies are the most impactful predictor among these variables.

In summary, the findings of this study show that self-concept, relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies are all significantly correlated with depression. However, among these three factors, relatively maladaptive cognitive emotion regulation strategies are the most significant predictor of depression. This result implies that interventions aimed at reducing the use of relatively maladaptive cognitive emotion regulation strategies may

be particularly effective in lowering depression levels. Based on this conclusion, future research could consider developing targeted intervention programs specifically designed to modify individuals' cognitive emotion regulation strategies and thereby reduce depression.

2. Results of Phase 2: Quantitative and Qualitative Analysis of the Integrative Group Counseling Intervention Program

The results from Phase 1 showed that self-concept, relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies were all significantly correlated with depression. Among these three factors, relatively maladaptive cognitive emotion regulation strategies were the most significant predictor of depression. Based on these results, the structural equation is as follows:

$$ZY_{Depression}=-0.062Z_{Self\text{-}Concept}-0.276Z_{RACERS}+0.443Z_{RMCERS}$$

In Phase 2, an intervention program was designed to improve self-concept, enhance relatively adaptive cognitive emotion regulation strategies, and reduce relatively maladaptive cognitive emotion regulation strategies, specifically targeting the latter, which was the strongest predictor of depression identified in Phase 1. The program adopted frameworks from humanistic therapy, cognitive-behavioral therapy (CBT), positive psychotherapy, rational emotive behavior therapy (REBT), and narrative therapy, to evaluate whether integrative group counseling can improve participants' self-concept, enhance relatively adaptive cognitive emotion regulation strategies, reduce relatively maladaptive cognitive emotion regulation strategies, and lower their depression levels, researchers administered self-concept, cognitive emotion regulation strategies, and depression scales to participants in the experimental and control groups at pretest, post-test, and follow-up test stages. The following chapters will present the quantitative and qualitative analysis results, which are specifically divided into eight sections.

2.1 Demographic Characteristics of the Control and Experimental Groups

2.2 Descriptive Statistical Analysis of Variables at Each Stage (Pretest, Post-test and Follow-up test) in the Experimental and Control Groups

2.3 Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) on Variable Differences in Pretest, Post-test and Follow-up test periods

2.4 Simple Effects Analysis of Repeated Measures on Depression

2.5 Simple Effects Analysis of Repeated Measures on Self-Concept

2.6 Simple Effects Analysis of Repeated Measures on Cognitive Emotion Regulation Strategies

2.7 Qualitative Insights from Semi-Structured Interviews on Enhancing Cognitive Emotion Regulation Strategies and Reducing Depression

2.8 Summary of the Results of Phase 2

2.1 Demographic Characteristics of the Control and Experimental Groups

Select the 20 individuals with moderate levels of depression from Phase 1 to participate in this phase of the study. They were randomly assigned to two groups: a control group and an experimental group, with 10 members in each group. Integrative group counseling interventions were implemented in the experimental group. Demographic variables of the experimental group participants are presented in Table 13.

Table 13 Demographic Characteristics of Experimental Group Participants (n=10)

General Data of Chinese Students	Frequency (n)	Percentage (%)
1. Gender		
Male	3	30
Female	7	70
Total	10	100.0
2. Place of Residence		
Urban	3	30
Township	3	30
Rural	4	40
Total	10	100.0

Table 13 (continued)

General Data of Chinese Students	Frequency (n)	Percentage (%)
3. Level of Education		
Freshman year	10	100
Total	10	100.0

Among the 10 students in the experimental group, there are 3 males, accounting for 30%; and 7 females, accounting for 70%. In terms of residence, 3 students live in urban areas, accounting for 30%; 3 live in townships, accounting for 30%; and 4 live in rural areas, accounting for 40%. All are first-year college students.

The demographic variables of the control group subjects are shown in Table 14.

Table 14 Demographic Characteristics of Control Group Subjects (n=10)

General Data of Chinese Students	Frequency (n)	Percentage (%)
1. Gender		
Male	4	40
Female	6	60
Total	10	100.0
2. Place of Residence		
Urban	3	30
Township	4	40
Rural	3	30
Total	10	100.0
3. Level of Education		
Freshman year	10	100
Total	10	100.0

Among the 10 students in the control group, there are 4 males, accounting for 40%; and 6 females, accounting for 60%. In terms of residence, 3 students live in urban areas, accounting for 30%; 4 live in townships, accounting for 40%; and 3 live in rural areas, accounting for 30%. All are first-year college students.

2.2 Descriptive Statistical Analysis of Variables at Each Stage (Pretest, Post-test and Follow-up test) in the Experimental and Control Groups

Participants in both the experimental group and control group completed the Depression (Y) Scale before the test, after the test, and during the follow-up period. Table 15 presents the descriptive statistical results of each variable across different stages for the experimental group.

Table 15 Descriptive Statistical Analysis of Each Factor at Each Stage for the Experimental Group

Variable	Pretest			Post-test			Follow-up test		
	M	S.D.	Levels	M	S.D.	Levels	M	S.D.	Levels
Self-concept(X11)	2.33	0.04	Low	3.03	0.08	Moderate	3.00	0.07	Moderate
RACERS(X21)	2.59	0.16	Moderate	4.76	0.19	High	4.72	0.25	High
RMCERS (X22)	3.04	0.08	Moderate	1.29	0.09	Low	1.33	0.11	Low
Depression(Y)	3.23	0.11	Moderate	2.54	0.06	Low	2.58	0.07	Low

The results in Table 15 show that the average scores of the experimental group participants' self-concept in the pretest, post-test and follow-up test periods were 2.33 (Standard Deviation = 0.04), 3.03 (Standard Deviation = 0.08), and 3.00 (Standard Deviation = 0.07), respectively. The average scores of relatively adaptive cognitive emotion regulation strategies in the pretest, post-test and follow-up test periods were 2.59 (Standard Deviation = 0.16), 4.76 (Standard Deviation = 0.19), and 4.72 (Standard Deviation = 0.25), respectively. The average scores of relatively maladaptive cognitive

emotion regulation strategies in the pretest, post-test and follow-up test periods were 3.04 (Standard Deviation = 0.08), 1.29 (Standard Deviation = 0.09), and 1.33 (Standard Deviation = 0.11), respectively. The average scores of depression in the pretest, post-test and follow-up test periods were 3.23 (Standard Deviation = 0.11), 2.54 (Standard Deviation = 0.06), and 2.58 (Standard Deviation = 0.07), respectively.

The results of the descriptive statistical analysis of each factor at each stage for the control group are shown in Table 16.

Table 16 Descriptive Statistical Analysis of Each Factor at Each Stage for the Control Group

Variable	Pretest			Post-test			Follow-up test		
	M	S.D.	Levels	M	S.D.	Levels	M	S.D.	Levels
Self-concept(X11)	2.54	0.11	Low	2.54	0.11	Low	2.50	0.12	Low
RACERS(X21)	2.59	0.15	Low	2.52	0.15	Low	2.57	0.11	Low
RMCERS(X22)	3.03	0.07	Moderate	3.03	0.06	Moderate	3.08	0.07	Moderate
Depression(Y)	3.17	0.10	Moderate	3.19	0.10	Moderate	3.18	0.11	Moderate

The results in Table 16 show that the average scores of the control group participants' self-concept in the pretest, post-test and follow-up test periods were 2.54 (Standard Deviation = 0.11), 2.54 (Standard Deviation = 0.11), and 2.50 (Standard Deviation = 0.12), respectively. The average scores of relatively adaptive cognitive emotion regulation strategies in the pretest, post-test and follow-up test periods were 2.59 (Standard Deviation = 0.15), 2.52 (Standard Deviation = 0.15), and 2.57 (Standard Deviation = 0.11), respectively. The average scores of relatively maladaptive cognitive emotion regulation strategies in the pretest, post-test and follow-up test periods were 3.03 (Standard Deviation = 0.07), 3.03 (Standard Deviation = 0.06), and 3.08 (Standard

Deviation = 0.07), respectively. The average scores of depression in the pretest, post-test and follow-up test periods were 3.17 (Standard Deviation = 0.10), 3.19 (Standard Deviation = 0.10), and 3.18 (Standard Deviation = 0.11), respectively.

2.3 Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) on Variable Differences in Pretest, Post-test and Follow-up test periods

In this section, Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) was used to evaluate the differences over time between the experimental group and the control group in the integrative group counseling intervention (aimed at enhancing relatively adaptive cognitive emotion regulation strategies, reducing relatively maladaptive cognitive emotion regulation strategies, and decreasing depression). Before conducting the Repeated Measures Multivariate Analysis of Variance (RM-MANOVA), appropriate tests (including Box's M test, etc.) were used to assess the normality and covariance matrix homogeneity of the data in the experimental and control groups. The results showed that the data met the assumptions required for Repeated Measures Multivariate Analysis of Variance (RM-MANOVA). Additionally, no significant differences were observed in the pretest data between the experimental group and the control group, and these findings supported the validity of the subsequent Repeated Measures Multivariate Analysis of Variance (RM-MANOVA). Based on the SPSS output results of the Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) in Table 17, the following detailed analysis can be performed:

The multivariate test results reveal the statistical significance of the overall model. Notably, the test statistics for the intercept term—including Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root—all exhibit extremely significant levels ($p < 0.001$). These findings suggest that the overall model demonstrates strong explanatory power for the variations in dependent variables, effectively capturing the core characteristics of the dataset.

The results in Table 17 show that all statistics for the intercept term (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root) are highly significant ($p < 0.001$), with an effect size η^2 of 0.998, indicating that the overall model effectively

explains the variability of the dependent variables and has an excellent fit. The time effect yielded statistically significant results ($p < 0.001$), indicating notable differences among the pretest, post-test, and follow-up test phases. The partial eta squared value ($\eta^2 = 0.345$) further validates the magnitude of the time effect, demonstrating that fluctuations across distinct time points are pivotal in accounting for the variance in dependent variables. The group effect is significant ($p < 0.001$, $\eta^2 = 0.727$), indicating substantial differences in dependent variables between the experimental group and the control group. Combined with the research background, this validates the effectiveness of integrative group counseling in improving depression levels, enhancing self-concept, and optimizing cognitive emotion regulation strategies among vocational college students.

Table 17 Significant Results of Effects on Pretest, Post-test, and Follow-up test Related Factors in the Experimental Group and Control Group

	Effect	Value	F	df (hypothesis)	df (error)	p	η^2
Intercept	Pillai's Trace	0.998	7307.866***	4.000	54.000	0.001	0.998
	Wilks'Lambda	0.002	7307.866***	4.000	54.000	0.001	0.998
	Hotelling's Trace	541.323	7307.866***	4.000	54.000	0.001	0.998
	Roy's Largest	541.323	7307.866***	4.000	54.000	0.001	0.998
Stage	Pillai's Trace	0.345	7.114***	4.000	54.000	0.001	0.345
	Wilks'Lambda	0.655	7.114***	4.000	54.000	0.001	0.345
	Hotelling's Trace	0.527	7.114***	4.000	54.000	0.001	0.345
	Roy's Largest	0.527	7.114***	4.000	54.000	0.001	0.345
Group	Pillai's Trace	0.727	35.903***	4.000	54.000	0.001	0.727
	Wilks'Lambda	0.273	35.903***	4.000	54.000	0.001	0.727
	Hotelling's Trace	2.660	35.903***	4.000	54.000	0.001	0.727
	Roy's Largest	2.660	35.903***	4.000	54.000	0.001	0.727

Note ***p<0.001.

This study used independent samples t-tests to compare self-concept, relatively adaptive cognitive emotion regulation strategies, relatively maladaptive cognitive emotion regulation strategies, and depress between the experimental group and the control group at pretest. The results are shown in Table 18.

Table 18 Independent Samples t-tests for Self-Concept, Relatively adaptive cognitive emotion regulation strategies, Relatively maladaptive cognitive emotion regulation strategies, and Depression at Each Stage (M±SD)

Stage	Variable	Experimental Group (n=10)	Control Group (n=10)	t	p
Pretest	Self-concept (X11)	2.33±0.04	2.34±0.03	-0.751	0.462
	RACERS (21)	2.59±0.16	2.59±0.15	-0.014	0.989
	RMCERS(X22)	3.04±0.08	3.03±0.07	0.291	0.775
	Depression(Y)	3.23±0.11	3.17±0.10	1.375	0.186
Post-test	Self-concept(X11)	3.03±0.08	2.34±0.03	26.387***	0.001
	RACERS(X21)	4.76±0.19	2.52±0.15	29.688***	0.001
	RMCERS(X22)	1.29±0.09	3.03±0.06	-49.633***	0.001
	Depression(Y)	2.54±0.06	3.19±0.10	-17.020***	0.001
Follow-up test	Self-concept(X11)	3.00±0.07	2.34±0.02	26.789***	0.001
	RACERS(X21)	4.72±0.25	2.57±0.11	24.507***	0.001
	RMCERS(X22)	1.33±0.11	3.08±0.07	-42.670***	0.001
	Depression(Y)	2.58±0.07	3.18±0.11	-14.576***	0.001

Note: ***p<0.001.

Table 18 shows that at the pretest stage, there were no statistically significant differences between the experimental group and the control group in the four variables of self-concept, relatively adaptive cognitive emotion regulation strategies and relatively

maladaptive cognitive emotion regulation strategies, and depression. Therefore, covariance could be ignored. At the post-test and follow-up stages, significant statistical differences were detected between the experimental group and the control group across the four variables. The experimental group had significantly lower levels of depression and relatively maladaptive cognitive emotion regulation strategies than the control group, while their self-concept and relatively adaptive cognitive emotion regulation strategies were significantly higher than those of the control group.

Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) was used to test the differences over time in group program participation for depression and various variables influencing depression between the experimental group and the control group.

Table 19 Analysis of Significant Results of Within-Subject Effects for Factors Related to Pretest, Post-test, and Follow-Up test Periods in the Experimental Group and Control Group

Component	SS	df	MS	F	p
Self-concept(X11)					
Period	1.559	1.118	1.395	1117.46***	0.001
Period Group	1.568	1.118	1.402	1123.643***	0.001
Error	0.025	20.123	0.001		
Mauchly's test results: W= 0.211 X^2=26.449 df=2 p=0.559					
RACERS(X21)					
Period	14.651	2	7.326	303.436***	0.001
Period Group	16.104	2	8.052	333.514***	0.001
Error	0.869	36	0.024		
Mauchly's test results: W= 0.897 X^2=1.846 df=2 p=0.397					

Table 19 (continued)

Component	SS	df	MS	F	p
RMCERS(X22)					
Period	9.654	1.297	7.445	1069.320***	0.001
Period Group	10.326	1.297	7.963	1143.757***	0.001
Error	0.163	23.340	0.007		
Mauchly's test results: W= 0.458 X^2=13.920 df=2 p=0.648					
Depression(Y)					
Period	1.443	1.110	1.300	142.804***	0.001
Period Group	1.581	1.110	1.424	156.465***	0.001
Error	0.182	19.976	0.009		
Mauchly's test results: W= 0.198 X^2=27.543 df=2 p=0.555					

Note: ***p<0.001.

As presented in Table 19, Mauchly's sphericity test results showed that all factors had p-values exceeding 0.05, indicating that the sphericity assumption was satisfied. The within-subject effects test further revealed a statistically significant time effect ($p<0.05$). Results from the Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) demonstrated significant variations in both the experimental and control groups across the pretest, post-test, and follow-up test periods. Additionally, a significant interaction effect was found between time periods and groups. Therefore, further simple effects analysis is necessary.

2.4 Simple Effects Analysis of Repeated Measures on Depression

Table 20 presents the comparison of depression levels between the experimental and control groups across the three time periods. The effectiveness of the intervention in the experimental group was confirmed by examining significant differences among the pretest, post-test and follow-up test periods.

Table 20 Comparison of Depression Differences Between Groups at Pretest, Post-test and Follow-up test Periods

Variable	Group	Period	M.D.	S.E.	t	p
Depression (Y)	Experimental Group	Post-test-Pretest	-0.69	0.04	-17.495***	0.001
		Follow-up test-Pretest	-0.66	0.04	-16.193***	0.001
		Follow-up test-post-test	0.04	0.04	1.210	0.242
	Control Group	Post-test-Pretest	0.02	0.05	0.435	0.669
		Follow-up test-Pretest	0.01	0.05	0.209	0.837
		Follow-up test-post-test	-0.01	0.05	-0.209	0.837

Note: ***p<0.001.

As presented in Table 20, the control group exhibited no significant variations in depression levels across the three periods. In the experimental group, however, significant differences were found in depression levels between the post-test and pretest, and between the follow-up test and pretest ($p<0.05$), with depression levels in the post-test and follow-up stages being significantly lower than those in the pretest stage. There was no significant difference in depression levels between the follow-up and post-test stages in both groups ($p>0.05$). These results indicate that the integrative group counseling had a certain effect.

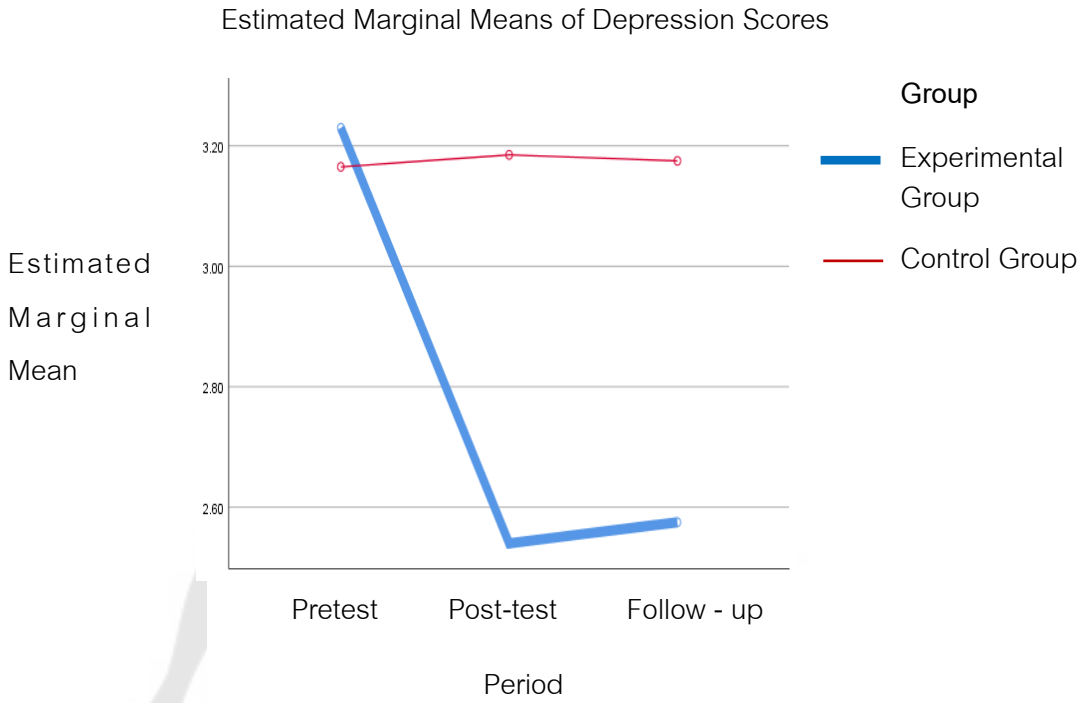


Figure 6 Profile Plot of Estimated Marginal Means of Depression

2.5 Simple Effects Analysis of Repeated Measures on Self-Concept

Table 21 shows the comparison of self - concept in the experimental group and the control group across three periods. By comparing whether there are significant differences among the pretest, post-test, and follow-up test stages, the effectiveness of the intervention in the experimental group was confirmed.

Table 21 Comparison of Differences in Self - Concept among Different Groups in the Pretest, Post-test, and Follow-up test Periods

Variable	Group	Period	M.D.	S.E.	t	p
Self-concept (X11)	Experimental Group	Post-test-Pretest	0.70	0.03	25.026***	0.001
		Follow-up test-Pretest	0.67	0.03	24.860***	0.001
		Follow-up test-post-test	-0.03	0.03	-0.735	0.472
	Control Group	Post-test-Pretest	0.01	0.05	0.103	0.859
		Follow-up test-Pretest	-0.04	0.05	-0.172	0.865
		Follow-up test-post-test	-0.05	0.05	-0.176	0.862

Note: ***p<0.001.

The data in Table 21 indicate that there were no significant differences in self-concept levels across the three periods in the control group. In the experimental group, however, significant differences were observed in self-concept levels between the post-test and pretest, and between the follow-up test and pretest ($p<0.05$), with self-concept levels in the post-test and follow-up stages being significantly higher than those in the pretest stage. No significant differences in self-concept levels were found between the follow-up and post-test stages in both groups ($p>0.05$). These results suggest that the integrative group counseling had a certain effect in enhancing self-concept levels.

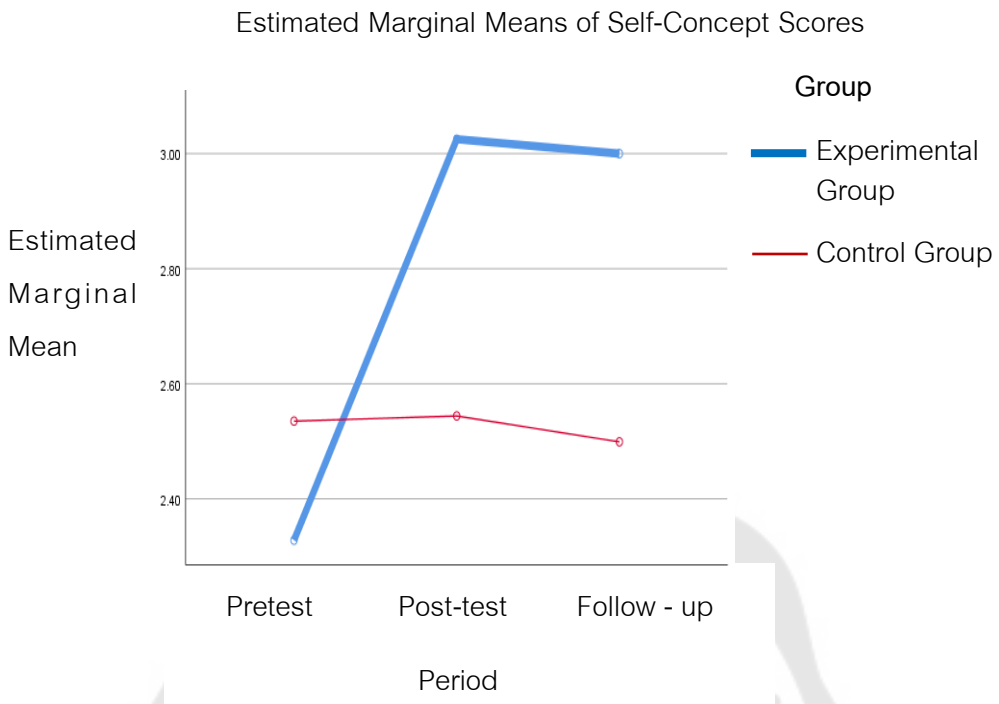


Figure 7 Profile Plot of Estimated Marginal Means of Self-Concept

2.6 Simple Effects Analysis of Repeated Measures on Cognitive Emotion Regulation Strategies

Table 22 presents the comparison of relatively adaptive cognitive emotion regulation strategies between the experimental and control groups across three periods. Significant differences among the pretest, post-test, and follow-up test stages were examined to confirm the effectiveness of the intervention in the experimental group.

Table 23 shows the comparison of relatively maladaptive cognitive emotion regulation strategies between the experimental and control groups across three periods. Similarly, differences among the pretest, post-test, and follow-up test stages were analyzed to validate the intervention's efficacy in the experimental group.

Table 22 Comparison of Differences in Relatively Adaptive Cognitive Emotion Regulation Strategies Among Different Groups at Pretest, Post-test, and Follow-up test Periods

Variable	Group	Period	M.D.	S.E.	t	p
RACERS (X21)	Experimental Group	Post-test-Pretest	2.17	0.09	27.369***	0.001
		Follow-up test-Pretest	2.13	0.09	22.197***	0.001
		Follow-up test-post-test	-0.04	0.09	-0.408	0.688
	Control Group	Post-test-Pretest	-0.08	0.06	-1.161	0.261
		Follow-up test-Pretest	-0.02	0.06	-0.413	0.684
		Follow-up test-post-test	0.05	0.06	0.905	0.378

Note: ***p<0.001.

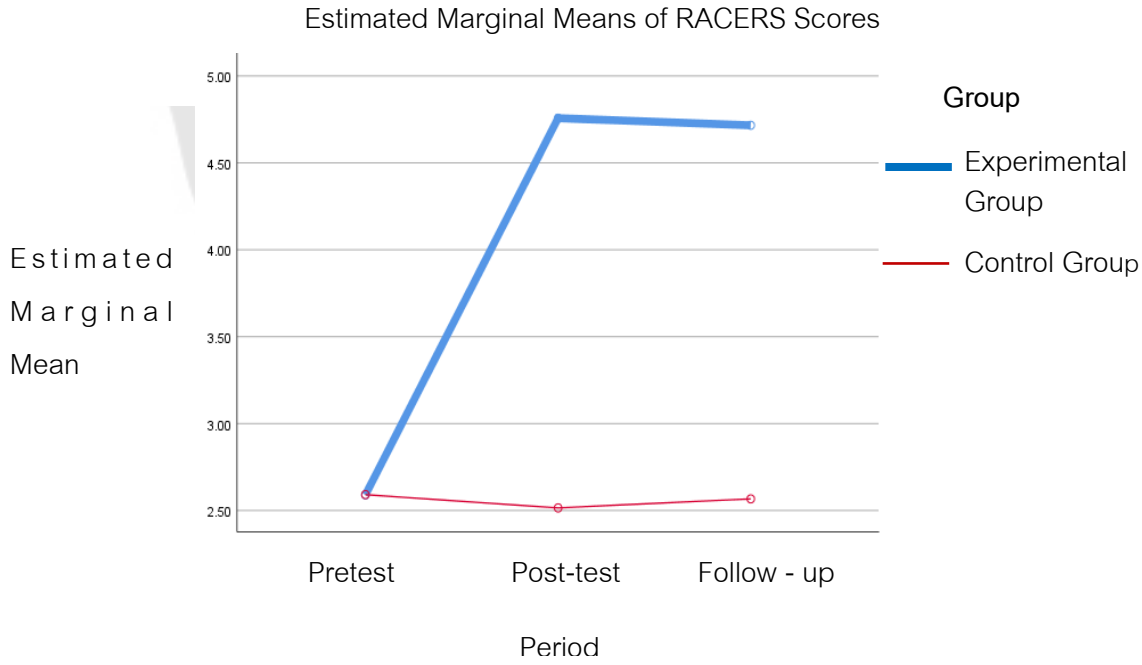


Figure 8 Profile Plot of Estimated Marginal Means of Relatively Adaptive Cognitive Emotion Regulation Strategies

Table 23 Comparison of Differences in Relatively Maladaptive Cognitive Emotion Regulation Strategies Among Different Groups at Pretest, Post-test, and Follow-up test Periods

Variable	Group	Period	M.D.	S.E.	t	p
RMCERS (X22)	Experimental Group	Post-test-Pretest	-1.75	0.04	-44.292***	0.001
		Follow-up test-Pretest	-1.71	0.04	-39.757***	0.001
		Follow-up test-post-test	0.04	0.04	0.879	0.391
	Control Group	Post-test-Pretest	0.01	0.03	0.171	0.866
		Follow-up test-Pretest	0.06	0.03	1.718	0.103
		Follow-up test-post-test	0.05	0.03	1.709	0.105

Note: ***p<0.001.

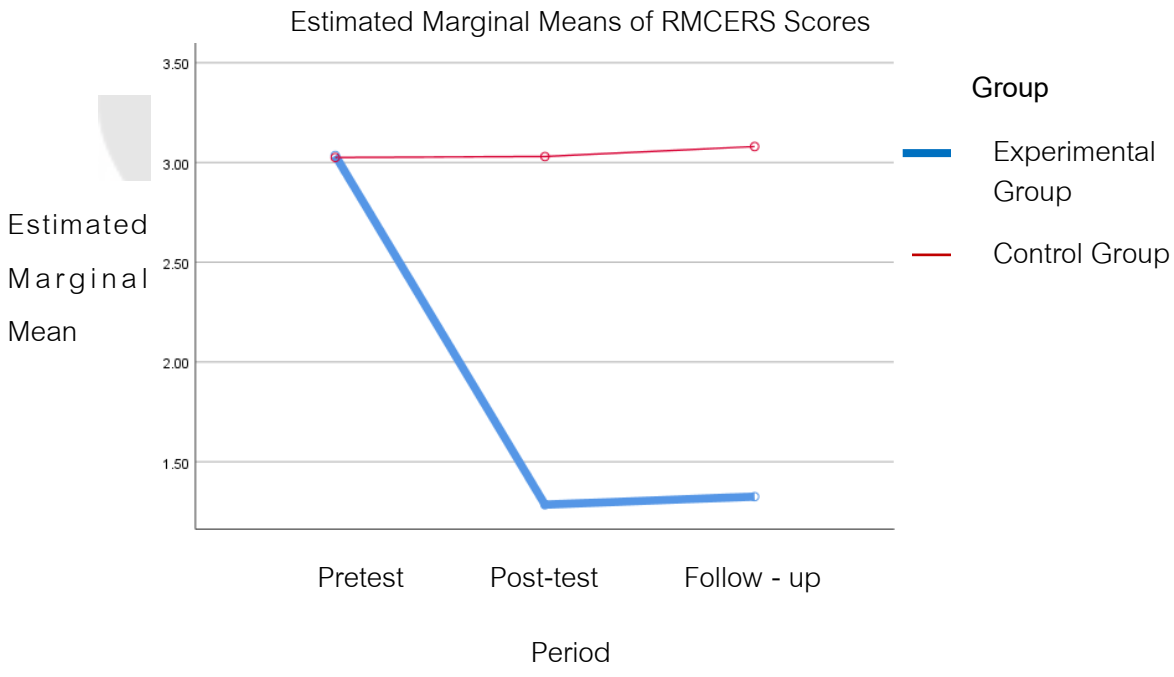


Figure 9 Profile Plot of Estimated Marginal Means of Relatively Maladaptive Cognitive Emotion Regulation Strategies

The data in Tables 22 and 23 show that there were no significant differences in relatively adaptive cognitive emotion regulation strategies or relatively maladaptive

cognitive emotion regulation strategies across the three periods in the control group. In the experimental group, however, significant differences were found in both relatively adaptive cognitive emotion regulation strategies and relatively maladaptive cognitive emotion regulation strategies between the post-test and pretest, and between the follow-up and pretest ($p<0.05$). Specifically, relatively adaptive cognitive emotion regulation strategies in the post-test and follow-up test stages were significantly higher than those in the pretest stage, while relatively maladaptive cognitive emotion regulation strategies were significantly lower than those in the pretest stage. There were no significant differences in both types of strategies between the follow-up and post-test stages in both groups ($p>0.05$). These results indicate that the integrative group counseling had a certain effect in promoting relatively adaptive cognitive emotion regulation strategies and reducing relatively maladaptive cognitive emotion regulation strategies

During the pretest, post-test, and follow-up test periods, comparisons between the experimental and control groups in terms of depression, self-concept, and cognitive emotion regulation strategies (relatively adaptive and relatively maladaptive cognitive emotion regulation strategies) are shown in Figures 6, 7, 8, and 9, respectively. These charts highlight the performance differences between the two groups over time, facilitating an in-depth understanding of the intervention's impact on enhancing self-concept, cognitive emotion regulation strategies, and reducing depression.

2.7 Qualitative Insights from Semi-Structured Interviews on Enhancing Cognitive Emotion Regulation Strategies and Reducing Depression

In this qualitative research, the research team recruited 10 participants from the experimental group who had taken part in integrative group counseling for semi-structured interviews, aiming to deeply explore the changes in students' cognitive emotion regulation strategies and their impact on depression levels. The core of the interview focused on the differences in the use of relatively adaptive and relatively maladaptive cognitive emotion regulation strategies by students before and after participating in group counseling, as well as how these strategies affect their daily emotion management and changes in depressive states. To deeply tap into participants'

experiences and perspectives on emotion regulation and depression relief, the study adopted thematic analysis, a qualitative research method, to reveal the complex psychological mechanisms hidden in the interview texts through systematic data coding and pattern recognition.

First, during the interview process, students in the experimental group were guided to recall their use of emotion regulation strategies and feelings of depression before and after participating in group counseling. For example, researchers encouraged students to reflect on which cognitive emotion regulation strategies they commonly used in the past when facing life events such as academic pressure and interpersonal conflicts, and how these strategies affected their emotional states and depressive tendencies. At the same time, students were guided to compare significant changes in their emotion regulation patterns and depressive experiences after participating in group counseling.

Second, to further verify the intervention effects of group counseling on students' emotion regulation strategies and depression levels, researchers inquired in detail about which relatively maladaptive cognitive emotion regulation strategies (such as catastrophizing, self-blame, and rumination) were most likely to trigger negative emotions and exacerbate depressive feelings before students participated in counseling. They also asked whether the frequency of using these strategies decreased after group counseling, and how relatively adaptive cognitive emotion regulation strategies (such as positive refocusing, positive reframing, rational analysis) improved their emotional states and alleviated depressive manifestations.

After the interview recordings were transcribed verbatim, they entered a rigorous qualitative analysis process. First step: The interview texts were comprehensively read through and preliminarily organized to gain familiarity with the overall dataset. Second step: Through repeated reading, key sentences and paragraphs related to the enhancement of relatively adaptive cognitive emotion regulation strategies, the reduction of relatively maladaptive cognitive emotion regulation strategies, and changes in depression levels were identified and marked. For example: "Viewing failure

through positive reappraisal" was coded as "application of relatively adaptive cognitive emotion regulation strategies." "Reducing the frequency of self-blame" was coded as "weakening of relatively maladaptive cognitive emotion regulation strategies." "Decreased number of depressive episodes" was coded as "depression relief." Third step: The coded content was systematically categorized to extract common themes, such as "the transformation pathway from relatively maladaptive to relatively adaptive cognitive emotion regulation strategies" and "the mechanism by which relatively adaptive cognitive emotion regulation strategies alleviate depression." Final step: Through cross-checking and repeated verification, the extracted themes were ensured to accurately reflect the core content of the data. Necessary integration and refinement of themes were conducted to enhance the logical consistency and persuasiveness of the conclusions.

This analysis process, through the structured sorting and in-depth interpretation of interview data, not only clearly presents the dynamic evolution process of students' cognitive emotion regulation strategies but also deeply analyzes the specific ways in which relatively adaptive cognitive emotion regulation strategies reduce depression levels. Through the coding, classification, and theme extraction of textual information, the study successfully reveals the practical effects of integrative group counseling in optimizing students' emotion regulation abilities and alleviating depressive manifestations, providing detailed qualitative evidence for subsequent mental health interventions.

Theme 1: Cognitive Emotion Regulation Strategies

1. Which cognitive emotion regulation strategies did you typically use to cope with negative emotions in life before participating in the integrative group counseling? How did you perceive the effectiveness of these strategies?

Students generally reported relying on relatively maladaptive cognitive emotion regulation strategies before group counseling, lacking confidence in their emotional management abilities, and often falling into negative emotional cycles.

Student 2: Before participating in the integrative group counseling, I commonly used " catastrophizing " and "self-blame" strategies to cope with negative emotions. For example, if I made a small mistake in a study report, I would immediately feel that my

career was over and even doubt my life's value. When facing stress, I also habitually " focus on thought/rumination," repeatedly dwelling on the details of failure in my mind, becoming more anxious, and eventually unable to do anything. These strategies not only failed to solve problems but also plunged me deeper into negative emotions. I knew this was wrong, but I had no idea how to change.

Student 6: In the past, when encountering interpersonal conflicts, I always resorted to "avoidance" and "ignoring positive aspects." Even if a friend took the initiative to make amends, I would suspect they had ulterior motives and continue to wallow in hurt feelings. When facing life setbacks, I often used "catastrophizing" thinking, imagining that a single exam failure meant all future efforts would be in vain. These strategies made me increasingly withdrawn, more depressed, and feeling completely unable to control my life.

Student 8: Before the counseling, I often used "self-blame" and "rumination" to deal with negative emotions. For instance, if I failed to complete a fitness plan, I would constantly blame myself for "lacking self-discipline," then I spent several consecutive days overwhelmed by chagrin, completely losing motivation to start over. I knew these methods only made me feel worse, but I couldn't find other ways out and could only let negative emotions consume me.

2. What changes have you observed in the use of cognitive emotion regulation strategies after participating in group counseling? In which scenarios are these changes most evident?

Participants reported significant shifts in cognitive emotion regulation strategies after the integrative group counseling, with reduced use of relatively maladaptive cognitive emotion regulation strategies and a notable increase in relatively adaptive cognitive emotion regulation strategies, accompanied by improved emotional management abilities.

Student 2: I now use "positive reappraisal" and "rational analysis" to cope with negative emotions. For example, after failing an exam, instead of blaming myself relentlessly, I analyze the reasons for the failure and view it as an opportunity to gain experience. In interpersonal relationships, I have started using the "perspective-taking" strategy, trying to consider conflicts from the other person's viewpoint. These changes are particularly evident during high-stress situations—now I can handle problems more calmly without being controlled by emotions.

Student 6: The biggest change after the counseling is that I have reduced "avoidance" and "catastrophizing" thinking. When facing conflicts with friends, I take the initiative to communicate and use "positive envisioning" to focus on problem-solving. When encountering setbacks in life, I learn to accept the current situation through the "acceptance" strategy and then develop improvement plans using the "problem-solving" strategy. These shifts have made me much more composed in dealing with family conflicts and academic pressure.

Student 8: I now frequently use "cognitive restructuring" and " positive reframing " strategies. For instance, if my fitness plan is interrupted, I tell myself, "Resting is for better progress," and then readjust the plan. When facing anxiety, I first stabilize my emotions through "mindful breathing" and then use "rational analysis" to find solutions. These changes are most evident when I deal with unexpected situations—I can now face various challenges in life with greater composure.

3. Which activities or techniques in the group counseling were most helpful for you to master relatively adaptive cognitive emotion regulation strategies? Please provide specific examples.

Participants believed that various activities and techniques in group counseling significantly contributed to enhancing relatively adaptive cognitive emotion regulation strategies, with different techniques playing key roles in different scenarios.

Student 2: Role-playing activities in "cognitive-behavioral training" were extremely helpful. In a simulated scenario of conflict with a colleague, the counselor guided me to use the "rational expression" strategy: first stating facts, then expressing feelings, and finally presenting needs. This training enabled me to communicate effectively in real work situations and reduced emotional reactions. The "cognitive journal" exercise also benefited me greatly—by recording emotional and thought processes, I could promptly identify negative thinking patterns and adjust them through "cognitive restructuring."

Student 6: The "mindfulness meditation" practice taught me to become aware of present emotions. When negative emotions arose, instead of falling into rumination as before, I would calm down through mindful breathing and then choose appropriate regulation strategies. The "positive reappraisal" workshop was also impressive: through group discussions, I learned to view problems from different perspectives. For example, after being criticized by a teacher, I no longer saw it as a personal attack but as an opportunity for growth.

Student 8: The “cognitive restructuring “technique has completely transformed my thinking pattern. When developing study plans, I first set specific and measurable goals, then replaced negative thoughts like "I definitely can't do it" with "cognitive restructuring." The "emotional story-sharing" activity was also rewarding—after hearing others' experiences of using "perspective-taking" to solve interpersonal problems, I began to try it, which effectively improved my relationship with family members.

4. How do you think mastering relatively adaptive cognitive emotion regulation strategies will impact your future learning, work, and life?

Students believed that mastering relatively adaptive cognitive emotion regulation strategies would have far-reaching effects on their future, not only enhancing emotional management capabilities but also strengthening resilience to challenges and improving overall quality of life.

Student 1: These strategies have given me the confidence to face life’s challenges. Whether dealing with work pressure, academic difficulties, or interpersonal conflicts in the future, I can use "rational analysis" and "positive reappraisal" to maintain an optimistic mindset and proactively seek solutions. This ability will make me more efficient at work, more focused in study, and more composed in life.

Student 3: Mastering relatively adaptive cognitive emotion regulation strategies has filled me with confidence in the future. At work, I can use "cognitive restructuring" to overcome fear of difficulties and "problem-solving" strategies to tackle challenges; in life, I can use "perspective-taking" to understand others during conflicts. These capabilities will not only help me achieve personal goals but also keep me in a good psychological state and enable me to enjoy the beauty of life.

Student 5: These strategies will become "essential tools" in my future life. When facing academic pressure, I will use "SMART goal-setting" to create plans and "positive reappraisal" to maintain motivation; when dealing with life setbacks, I can use the "acceptance" strategy to adjust my mindset and "cognitive restructuring" to rebuild confidence. This will help me always maintain a positive attitude toward life on my future journey.

In summary, in the semi-structured interviews themed on cognitive emotion regulation strategies, terms such as " relatively adaptive cognitive emotion regulation strategies" " relatively maladaptive cognitive emotion regulation strategies" "cognitive restructuring" "positive reappraisal" "group counseling" and "emotional management"

were frequently mentioned. Analysis showed that after participating in integrative group counseling, students significantly reduced the use of relatively maladaptive cognitive emotion regulation strategies and instead skillfully applied various adaptive strategies. Techniques like cognitive restructuring, positive reappraisal, and rational analysis helped them face challenges with a more positive mindset, effectively improving their emotional management abilities. This transformation not only improved their mental health but also promoted comprehensive development in learning, work, and interpersonal relationships, laying a solid psychological foundation for their future lives.

Theme Two: Depression

1. Could you describe the main depressive emotions you felt in daily life before participating in group counseling? In which aspects did these emotions mainly manifest (e.g., social interaction, learning, life interests, etc.)?

Before joining group counseling, students' depressive emotions were primarily characterized by avoidance of social activities, lack of learning motivation, and loss of interest in life. They often fell into self-negation, felt despair about the future, and their persistent low mood impaired daily functioning, making it difficult to maintain normal study and social life.

Student 2: Before participating in group counseling, the depressive emotions in my daily life were like a heavy shackle. In social situations, I always deliberately avoided friends' invitations, fearing to expose my negative emotions and worrying that I could not fit into the group and be rejected. In learning, I completely lost motivation. Even facing important exams and assignments, I could not muster any enthusiasm and often procrastinated until the last minute to perfunctorily complete them. Once-loved painting and music no longer brought me pleasure—I felt that life had lost its color, and I was plunged into deep helplessness and despair.

Student 5: My depressive emotions were mainly reflected in a lack of enthusiasm for everything. At school, I was reluctant to participate in any club activities and even found it difficult to communicate normally with classmates, always feeling out of place. My academic performance plummeted because I had no intention of delving into knowledge, and my mind was filled with negative thoughts like "effort is meaningless." After returning home, I often stayed alone in my room, doing nothing. Even basic daily routines became slovenly and casual, and I felt completely confused about the future.

Student 7: Before joining group counseling, I had long been troubled by depressive emotions. In social interactions, I feared making eye contact with others, always keeping my head down when speaking, and worrying that others would see my vulnerability. In learning, I was extremely unconfident in my abilities. Even if I achieved small accomplishments, I attributed them to luck and felt that I might be "knocked back to square one" at any moment. I no longer had interest in once-enjoyed sports and traveling. Every day was spent in a daze, feeling like a walking corpse and unable to find the purpose or meaning of life.

2. After participating in group counseling, do you think your depressive emotions have changed? If so, in what specific ways?

Following their participation in integrative group counseling, students indicated notable alleviation of depressive manifestations, particularly in aspects such as social initiative, learning motivation, and enthusiasm for life. Many began to actively engage in social activities, rediscover interest and motivation in learning, and gradually regain a positive attitude toward life. They learned to accept themselves, reduce self-negation, and face life's challenges with a more optimistic mindset.

Student 2: I've experienced significant changes. Now, instead of resisting social interactions as before, I take the initiative to contact friends and participate in gatherings, and I can feel joy during conversations. In my studies, I've re-established a study plan and can complete tasks step by step every day—the long-lost sense of accomplishment has returned. I've also picked up the paintbrush again and started enjoying the pleasure of painting. Life has become fulfilling and meaningful, and my depressive feelings have basically vanished.

Student 3: After the counseling, my depressive emotions improved dramatically. I no longer shut myself in my room all the time; instead, I often discuss problems with classmates and participate in extracurricular activities. In my studies, I've developed a strong interest in knowledge, and when facing difficult problems, I no longer give up easily but actively seek solutions. I've started paying attention to the beautiful things in life, such as the sunrise and sunset every day. This love for life has made me more cheerful overall, and I'm no longer the negative and pessimistic person I used to be.

Student 5: After the counseling ended, I clearly felt my depressive emotions fading. I took the initiative to join the school's volunteer club, where I found my own value by helping others and met many like-minded friends. In my studies, I've established good study

habits, my grades have steadily improved, and my self-confidence has grown accordingly. Now, I'm full of expectations for the future, no longer as confused and desperate as before—life is full of hope.

3. Which group counseling activities or techniques do you consider to have been most effective in alleviating depressive feelings? Why?

Students identified several techniques in group counseling as particularly effective for reducing depressive manifestations, such as emotional recording and analysis based on cognitive behavioral therapy (CBT), mindfulness meditation, and positive self-talk training. They believed these techniques helped them shift negative thought patterns and learn to accept their emotions, thereby alleviating depression.

Student 2: The emotional recording and analysis activities were extremely helpful in reducing my depressive feelings. By documenting daily emotional changes and the events triggering them, I gradually identified irrationalities in my thinking. For example, I used to magnify small setbacks into insurmountable obstacles. With the counselor's guidance, I learned to analyze problems rationally and adjust my mindset. Mindfulness meditation also benefited me greatly—it taught me to focus on the present moment rather than dwell on past pain or worry about the future. This inner peace significantly alleviated my depression.

Student 3: Positive self-talk training left a deep impression on me. I used to belittle myself internally, but after participating in the counseling, I began practicing self-encouragement with positive language. Whenever negative thoughts arose, I would tell myself, "I can do this" or "I have my own strengths." This self-affirmation gradually restored my confidence and reduced my depressive emotions. Additionally, the group sharing activities made me realize I was not alone—seeing other classmates strive to overcome depression gave me great encouragement and strength.

Student 5: The ABC model in Rational Emotive Behavior Therapy (REBT) has been of great help to me. It helped me understand that it is not events themselves that cause depression, but rather my perceptions and evaluations of them. I learned to identify my negative beliefs and replace them with more positive and reasonable ones. For instance, when I failed an exam, I no longer viewed myself as "completely worthless" but saw it as an opportunity to identify problems and improve. This shift in thinking allowed me to face life with a more positive attitude, naturally reducing my depressive manifestations.

4. In your view, how might group counseling exert a long-term influence on the management of depressive emotions in your future daily life?

Students perceive that group counseling will exert a substantial long-term influence on the management of their depressive emotions. They anticipate that techniques acquired, such as emotional recording and analysis, mindfulness meditation, and positive self-talk, will help them maintain a positive mindset, enhance psychological resilience, and better cope with stress and setbacks in future life, thereby preventing the recurrence of depressive feelings.

Student 1: I perceive that group counseling will exert a substantial long-term influence on my capacity to regulate depressive emotions. The skills I've learned, such as emotional recording and positive self-talk, have equipped me with effective tools to cope with negative feelings. In future life, no matter what difficulties or setbacks I encounter, I can use these techniques to adjust my mindset, stay positive and optimistic, and no longer easily fall into the quagmire of depression. In the long run, this will lead to a healthier and happier life.

Student 2: Group counseling has equipped me with practical strategies applicable to daily life in the future. Techniques like mindfulness meditation and cognitive behavioral therapy will help me face life's stresses and challenges with a more peaceful mindset. I expect these strategies to help me better regulate my emotions and improve my psychological resilience. Even when encountering unhappy events, I can quickly adjust my state, avoid the recurrence of depressive emotions, and always maintain my love for life.

Student 4: It is hoped that the skills acquired through group counseling will continue to be beneficial in my future life. The ability to manage emotions through techniques such as emotional recording and analysis and positive self-talk will help me maintain a good psychological state. This will not only make my life more enjoyable but also improve my interpersonal skills and learning/work efficiency, as I will no longer be hindered by depressive feelings and can devote more enthusiasm and energy to all aspects of life.

In summary, during group interviews, keywords such as "depression" "group counseling" "techniques" "negative" "positive" "change" and "life" were frequently mentioned. Analysis showed a significant reduction in students' depressive manifestations, particularly in areas that previously troubled them, such as social interaction, learning, and life interests. Techniques learned in group counseling—such as emotional recording/analysis based on cognitive behavioral therapy, mindfulness meditation, and positive self-talk training—enabled them to manage emotions more

effectively. By transforming negative thought patterns and learning self-acceptance, students became more positive and optimistic, actively engaging in life. This not only improved their mental health but also enhanced their overall quality of life, allowing them to embrace a future filled with hope.

2.8 Summary of the Results of Phase 2

In Phase 2's study, building on the Phase 1's finding of a close association among self-concept, cognitive emotion regulation strategies, and depression, an Integrative group counseling intervention was designed to enhance individual mental health. The intervention was administered to the experimental group, while the control group received no intervention. Data on self-concept, relatively adaptive cognitive emotion regulation strategies, relatively maladaptive cognitive emotion regulation strategies and depression levels were collected from both groups at pretest, post-test, and follow-up test stages.

In the experimental group, the self-concept scores were at a low level in the pretest (M=2.33, SD=0.04). After the integrative group counseling intervention, the post-test scores significantly increased to a moderate level (M=3.03, SD=0.08). Although there was a slight decrease in the follow-up test period, the scores still remained at a moderate level (M=3.00, SD=0.07). The scores of relatively adaptive cognitive emotion regulation strategies were moderate in the pretest (M=2.59, SD=0.16), significantly increased to a high level in the post-test (M=4.76, SD=0.19), and remained at a high level in the follow-up test period (M=4.72, SD=0.25). In contrast, the scores of relatively maladaptive cognitive emotion regulation strategies decreased significantly from a moderate level in the pretest (M=3.04, SD=0.08) to a low level in both the post-test (M=1.29, SD=0.09) and follow-up period (M=1.33, SD=0.11). The depression level was moderate in the pretest (M=3.23, SD=0.11), and both the post-test (M=2.54, SD=0.06) and follow-up test period (M=2.58, SD=0.07) showed a decline to a low level.

At each stage, significant differences were observed between the experimental group and the control group in self-concept (F=26.387, P=0.001), relatively adaptive cognitive emotion regulation strategies (F=29.688, P=0.001), relatively maladaptive

cognitive emotion regulation strategies (F=-49.633, P=0.001), and depression level (F=-17.020, P=0.001). Results of the Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) showed that both the time effect and the interaction effect between time periods and groups were extremely significant (all $p<0.05$), indicating that the intervention effect became more evident over time, and there were significant differences in the change trends of various factors between the experimental group and the control group.

Further post-hoc simple effects analysis revealed that in terms of self-concept: between-group comparisons: there was no significant difference between the control group and the experimental group at pretest (t=-0.741, p=0.464). However, the experimental group's scores were significantly higher than the control group's at post-test (t=26.387, p=0.001) and follow-up test (t=26.789, p=0.001). Within-group comparisons: In the experimental group, self-concept scores significantly increased from pretest to post-test (M.D.=0.70, $p<0.001$) and from pretest to follow-up test (M.D.=0.67, $p<0.001$). In contrast, the control group showed no substantial changes across different time points (all $p>0.05$).

In terms of relatively adaptive cognitive emotion regulation strategies: between-group comparisons: no significant difference was found between the control group and the experimental group at pretest (t=-0.014, p=0.989). However, the experimental group's scores were significantly higher than the control group's at post-test (t=29.688, p=0.001) and follow-up test (t=24.507, p=0.001). Within-group comparisons: in the experimental group, scores on this strategy significantly increased from pretest to post-test (M.D.=2.17, $p<0.001$) and from pretest to follow-up test (M.D.=2.13, $p<0.001$). The control group showed no significant changes across time points (all $p>0.05$).

In terms of relatively maladaptive cognitive emotion regulation strategies: between-group comparisons: there was no significant difference between the control group and the experimental group at pretest (t=0.291, p=0.775). However, the experimental group's scores were significantly lower than the control group's at post-test (t=-49.633, p=0.001) and follow-up test (t=-42.670, p=0.001). Within-group comparisons:

in the experimental group, scores on this strategy significantly decreased from pretest to post-test (M.D.=-1.75, p<0.001) and from pretest to follow-up test (M.D.=-1.71, p<0.001). The control group exhibited no significant changes across different time points (all p>0.05).

In terms of depression levels: between-group comparisons: no significant difference was observed between the control group and the experimental group at pretest (t=1.375, p=0.186). However, the experimental group's depression scores were significantly lower than the control group's at post-test (t=-17.020, p=0.001) and follow-up test (t=-14.576, p=0.001). Within-group comparisons: in the experimental group, depression levels significantly decreased from pretest to post-test (M.D.=-0.69, p<0.001) and from pretest to follow-up test (M.D.=-0.66, p<0.001). Although there was a slight change from post-test to follow-up, the difference was not significant (M.D.=0.04, p=0.348). The control group showed no significant changes across all time points (all p>0.05).

Combined with qualitative research, interview results indicate that students demonstrated obvious positive changes in emotional regulation and self-cognition after participating in the integrative group counseling. They reported being better able to cope with negative emotions, holding more positive perceptions of their own abilities, and adopting a more optimistic attitude toward learning and life. For example, when facing stress, they no longer experience excessive anxiety but instead attempt to use the cognitive emotion regulation strategies they learned to adjust their mindset. These qualitative feedbacks provide a powerful supplement to the quantitative research results, further confirming the effectiveness of the integrative group counseling intervention in enhancing self-concept, strengthening the application of relatively adaptive cognitive emotion regulation strategies, reducing the use of relatively maladaptive cognitive emotion regulation strategies, and lowering depression levels.

In conclusion, the integrative group counseling intervention significantly improved the experimental group's scores on self-concept, cognitive emotion regulation strategies, and depression levels, with intervention effects persisting during the follow-

up phase. This indicates that the intervention has both immediate and long-term positive impacts. Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) and simple effects analysis strongly demonstrate the intervention's effectiveness, while qualitative research findings further highlight the practical value of integrative group counseling in addressing individual psychological issues and enhancing mental health.

CHAPTER 5
DISCUSSION AND SUGGESTIONS

The research project " The Influence of self-concept, cognitive emotion regulation strategies on depression and reducing depression of vocational college students through integrative group counseling " is conducted in two phases.

Phase 1 is to explore the effects of self-concept and cognitive emotion regulation strategies on depression, with the aim of determining which factor is the most important predictor of depression. The findings of this research are not merely aimed at uncovering the intensity and characteristics of these correlations, but also at determining which among these predictive factors exerts the most significant influence on depression.

Phase 2 utilizes the pretest data from Phase 1 to select 20 individuals with moderate levels of depression to participate in this stage of the research. The study aims to reduce depression among Chinese vocational college students through the development of integrative group counseling. The 20 participants are randomly divided into two groups: one group serves as the control group, and the other as the experimental group, with 10 members in each group. Integrative group counseling interventions were implemented in the experimental group. Through comparing the score variations of multiple variables between the experimental and control groups at three time points—prior to the integrative group counseling program, immediately after its completion, and during a two-week follow-up assessment—this analysis aims to assess the efficacy of integrative group counseling activities in improving self-concept and cognitive emotion regulation strategies, while alleviating depression.

The research sample consisted of 400 Chinese students from the first, second, and third grades of the Department of Preschool Education, the Department of Art, and the Department of Early Childhood Education at Yuncheng Preschool Education College. The data were collected through online questionnaires. Scales with short or problematic responses were removed, resulting in a final sample size of 400 participants. After

obtaining ethical approval from Srinakharinwirot University, the researchers received a research permission letter from the university. Subsequently, the researchers independently collected the data.

The research instruments include four components: 1) Respondent information, and demographic Information; 2) Self-Rating Depression Scale (SDS); 3) Tennessee Self-Concept Scale (TSCS); 4) Cognitive Emotion Regulation Questionnaire (CERQ). The overall validity of the instrument's ranges from 0.826 to 0.976.

The results of Phase 1 are divided into four parts: 1) Demographic characteristics of the sampled population; 2) Descriptive statistical analysis of variables; 3) Correlation analysis of variables; 4) Multivariate regression models for variables.

The results of Phase 2 are divided into four parts:1) Demographic characteristics of the control group and the experimental group; 2) Descriptive statistical analysis of each factor at various stages (pretest, post-test, and follow-up test period) in the experimental group and the control group; 3) Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) on Variable Differences in Pretest, Post-test and Follow-up test periods; 4) Simple effects analysis of repeated measures on depression, self-concept, and cognitive emotion regulation strategies.

Therefore, the findings are synthesized as follows:

1. Summary of Research Findings
    1.1 Summary of Results from Phase 1
    1.2 Summary of Results from Phase 2
2. Discussion
    2.1 Discussion of Results from Phase 1
    2.2 Discussion of Results from Phase 2
3. Suggestions
    3.1 Suggestions on the Theoretical and Practical Implications
    3.2 Suggestions for Future Research

1. Summary of Research Findings

1.1 Summary of Results from Phase 1

The research results are presented according to the following hypotheses:

Hypothesis 1: Self-concept and cognitive emotion regulation strategies among Chinese vocational college students influence depression. Specifically, self-concept and relatively adaptive cognitive emotion regulation strategies are negatively correlated with depression, while relatively maladaptive cognitive emotion regulation strategies are positively correlated with depression.

The results indicated that the proposed Hypothesis 1 was consistent with the empirical data. Correlational analyses between depression and the two types of cognitive emotion regulation strategies (relatively adaptive and relatively maladaptive) as well as self-concept among Chinese vocational college students showed significant associations among variables. Depression was significantly negatively correlated with self-concept ($r = -0.402$, $p < 0.001$) and relatively adaptive cognitive emotion regulation strategies ($r = -0.600$, $p < 0.001$), but significantly positively correlated with relatively maladaptive cognitive emotion regulation strategies ($r = 0.647$, $p < 0.001$).Self-concept was significantly positively correlated with relatively adaptive cognitive emotion regulation strategies ($r = 0.594$, $p < 0.001$) and significantly negatively correlated with relatively maladaptive cognitive emotion regulation strategies ($r = -0.507$, $p < 0.001$); relatively adaptive and relatively maladaptive cognitive emotion regulation strategies were significantly negatively correlated with each other ($r = -0.713$, $p < 0.001$).These findings suggest that individuals with more positive self-concepts tend to employ relatively adaptive cognitive emotion regulation strategies, which in turn helps alleviate depression.

Regression analysis results showed that the standardized coefficient (β) of relatively maladaptive cognitive emotion regulation strategies was 0.443 ($t=8.303$, $p<0.001$), which was more prominent than that of self-concept ($\beta=-0.062$, $t=-1.294$, $p<0.01$) and relatively adaptive cognitive emotion regulation strategies ($\beta=-0.276$, $t=-4.822$, $p<0.001$). These results indicated that relatively maladaptive cognitive emotion

regulation strategies had the most significant effect on the degree of depression, while self-concept and relatively adaptive cognitive emotion regulation strategies played a certain role in predicting depression but were still weaker than relatively maladaptive cognitive emotion regulation strategies. In conclusion, among the three research factors, relatively maladaptive cognitive emotion regulation strategies were the most significant predictor of depression.

1.2 Summary of Results from Phase 2

Hypothesis 2: After participating in integrative group counseling, the depression scores of the experimental group would be significantly lower than those in the pretest phase.

The results showed that the depression level in the experimental group was significantly lower than that in the pretest phase. A detailed analysis is as follows:

In the experimental group, the depression level was at a moderate level during the pretest (M=3.23, SD=0.11), and both the post-test and follow-up test periods showed a decrease to a low level (post-test: M=2.54, SD=0.06; follow-up: M=2.58, SD=0.07).

Between-group comparisons showed no significant difference in depression levels between the control group and the experimental group at pretest (t=1.375, p=0.186). However, during the post-test (t=-17.020, p=0.001) and follow-up test (t=-14.576, p=0.001) periods, the experimental group had significantly lower depression levels than the control group.

Within-group comparisons revealed that in the experimental group, depression levels decreased significantly from pretest to post-test (M.D.=-0.69, $p<0.001$) and from pretest to follow-up test (M.D.=-0.66, $p<0.001$). Although there was a change from post-test to follow-up test, the difference was not significant (M.D.=0.04, p=0.348). The control group showed no significant changes across all time points (all $p>0.05$).

These results indicate that the depression level in the experimental group was significantly lower than that in the pretest phase, supporting Hypothesis 2.

The results of Phase 2 also showed that:

Self-concept scores in the experimental group were at a low level during the pretest (M=2.33, SD=0.04). After the integrative group counseling intervention, post-test scores significantly increased to a moderate level (M=3.03, SD=0.08), and although slightly decreased during the follow-up period, they remained at a moderate level (M=3.00, SD=0.07).Scores for relatively adaptive cognitive emotion regulation strategies were moderate at pretest (M=2.59, SD=0.16), significantly increased to a high range at post-test (M=4.76, SD=0.19), and remained high during follow-up test (M=4.72, SD=0.25). In contrast, scores for relatively maladaptive cognitive emotion regulation strategies decreased significantly from a moderate pretest level (M=3.04, SD=0.08) to low levels at post-test (M=1.29, SD=0.09) and follow-up test (M=1.33, SD=0.11).Depression levels were moderate at pretest (M=3.23, SD=0.11) and decreased to low levels at both post-test (M=2.54, SD=0.06) and follow-up test (M=2.58, SD=0.07).

These results indicate that the integrative group counseling intervention significantly improved the experimental group's performance in self-concept, cognitive emotion regulation strategies, and depression levels. Moreover, the intervention effects persisted during the follow-up phase, suggesting that the intervention has both immediate and long-term positive impacts, which strongly demonstrates its effectiveness.

2.Discussion

2.1 Discussion of the Results from Phase 1

Hypothesis 1: Self-concept and cognitive emotion regulation strategies influence depression among Chinese vocational college students, such that self-concept and relatively adaptive cognitive emotion regulation strategies are negatively associated with depression, while relatively maladaptive cognitive emotion regulation strategies are positively associated with depression.

The results of this study showed a significant negative correlation between self-concept and depression among Chinese vocational college students ($r = -0.402$, $p <$

0.001), meaning that individuals with a more positive self-concept exhibit lower levels of depression, while those with more negative self-concepts tend to have higher depression levels. This finding is consistent with the results of a qualitative study on self-concept in adolescents with depressive episodes conducted by Qiu, Qian, Yang, Peng, & Dong (2023). Ding et al. (2016) showed that individuals' inappropriate and inaccurate self-cognition and evaluation can cause them to develop or maintain a depressive state.

Individuals with more negative self-concepts have correspondingly lower self-evaluations. They lack reasonable planning for the future, are dissatisfied with their current self-state, consider life meaningless, and fail to appreciate the value of individual existence, making them more prone to depressive emotions.

Additionally, the results showed that self-concept was positively correlated with relatively adaptive cognitive emotion regulation strategies ($r=0.594$, $p<0.001$) and negatively correlated with relatively maladaptive cognitive emotion regulation strategies ($r=-0.507$, $p<0.001$). Multiple regression analysis indicated that the predictive power of self-concept ($\beta=-0.062$, $t=-1.294$, $p<0.01$) was weaker than that of relatively adaptive and maladaptive strategies, it suggests that self-concept might exert its effect through a pathway mechanism of "self-concept—strategy selection—depression relief" rather than directly influencing depression. Zhao (2022) explored the relationships among family functioning, self-concept, coping styles, and peer relationships in high school students. The results showed that individuals with higher self-concept levels were more likely to adopt positive coping styles. Li et al. (2025) found that relatively adaptive cognitive emotion regulation strategies help individuals effectively manage negative emotions and alleviate depression. Conversely, negative self-concept tends to trigger relatively maladaptive cognitive emotion regulation strategies such as catastrophizing and self-blame, which in turn intensify negative emotional experiences and increase the risk of depression.

The study showed a significant negative correlation between relatively adaptive cognitive emotion regulation strategies and depression ($r = -0.600$, $p < 0.001$), and these strategies independently predicted depression in the regression analysis ($\beta = -0.276$, t

= -4.822, $p < 0.001$). These findings corroborate the "Broaden-and-Build Theory of Positive Emotions". Xu et al. (2025) showed in their study on how exercise fun promotes mental health in children and adolescents in remote rural areas: a test of the broaden-and-build effect of positive emotions that positive emotions expand an individual's cognitive and behavioral repertoires, facilitate the construction of psychological resources, and enhance the development of human and social resources—such as strengthening existing social ties or forging new connections with human resources. This increase in social resources helps individuals gain more support and assistance in social contexts, thereby improving their mental health and adaptability. For example, students using "positive reappraisal" strategies reinterpret academic setbacks as "opportunities for skill development" rather than "failures," a cognitive restructuring that reduces the cumulative effect of negative emotions.

Relatively maladaptive cognitive emotion regulation strategies (such as rumination, other-blame, catastrophizing, etc.) showed the strongest positive correlation with depression ($r = 0.647$, $p < 0.001$), and had the highest standardized coefficient in the regression analysis ($\beta = 0.443$, $t = 8.303$, $p < 0.001$), indicating they are the core predictor of depression. This is consistent with the "Rumination-Depression Cycle Model". Hu (2025) pointed out in his study on the impact of rumination on sleep quality in college students, the mediating role of depressive mood, that the "rumination-depression cycle model" theory suggests that after individuals experience negative events, the more they repeatedly think about the event itself, its causes, and possible adverse consequences, the more prone they are to negative emotions such as anxiety and depression. For example, when students attribute interpersonal conflicts to their own personality flaws, this attribution style can lead to excessive generalized self-negation, expanding the negative outcomes of specific events to a denial of their entire personality and solidifying them into unchangeable self-labels, thereby weakening their sense of self-worth. Sustained self-negation causes students to suppress emotions, avoid social interaction, intensify feelings of loneliness, and form a vicious cycle of "self-negation-

emotional suppression-social withdrawal-loneliness intensification", which in turn triggers depressive emotions.

2.2 Discussion of the Results from Phase 2

Hypothesis 2: After participating in the integrative group counseling, the depression scores of the experimental group in the post-test and follow-up test stages were significantly lower than those in the pretest stage.

The depression scores of the experimental group showed a significant decreasing trend from the pretest to the post-test and remained at a low level during the follow-up test. In stark contrast, the control group exhibited minimal change, with their depression levels remaining at a moderate level throughout the study. This result provides crucial evidence for the effectiveness of integrative group counseling, consistent with the analytical conclusions of Cuijpers, Karyotaki, Reijnders, Purgato, & Barbui (2018), which indicated that psychological interventions can effectively alleviate depression. Ma et al. (2021) showed in their randomized controlled trial on group intervention for improving depressive symptoms in college freshmen that group intervention effectively reduced the incidence of depression in college students. Xu et al. (2022) effectively alleviated depression in college students through cognitive-behavioral group intervention, and Li et al. (2022) intervened in college students' depression using mindfulness therapy.

In this study, the integrative group counseling aimed at reducing depression levels likely worked through multiple pathways: enhancing self-concept increased individuals' psychological resilience, thereby reducing students' vulnerability to negative events; strengthening relatively adaptive cognitive emotion regulation strategies helped individuals cope with stressors more rationally, interrupting the vicious cycle of depressive emotions to some extent; a mutual aid model is formed among group members, which reduces individual feelings of loneliness and helplessness through emotional resonance and experience sharing.

Notably, although there was a slight increase in depression levels from the post-test to the follow-up period, the difference was not significant (M.D.=0.04, p=0.348),

indicating that the intervention effects demonstrated good stability and that individuals maintained improved emotional states after leaving the group environment. This is consistent with the findings of Meischke, Rief, & Glombiewski (2018) in their study on the long-term effects of mindfulness coaching.

In the qualitative research, participants' feedback (such as learning to use "positive reappraisal" and "rational analysis" to cope with negative emotions) further revealed the practical impact of the intervention. These qualitative data not only validated the quantitative results but also aligned with the findings of Alasadi & Baiz (2023), who noted that individuals can effectively apply the skills learned in group counseling to real-life scenarios after the intervention. For example, through group counseling, students recognize the shortcomings in their emotional regulation strategies and then actively apply techniques such as 'deep breathing,' 'muscle relaxation,' and 'positive self-talk' from the training to learning and daily life scenarios. This forms a virtuous cycle where 'correct cognition generates adaptive emotions and positive behaviors, and these emotions and behaviors in turn reinforce correct cognition.'

Through the integrative group counseling, participants believed that the skills they learned would have long-term positive effects in the future, enhancing psychological resilience and preventing depression relapse. This view is consistent with the research findings of Kivlighan et al. (2021), who proposed that psychological interventions can enhance individuals' ability to cope with future setbacks.

Overall, this study not only confirms the effectiveness of integrative group counseling in improving students' cognitive emotion regulation strategies and reducing depression levels but also enriches existing research findings, providing more robust empirical evidence and practical guidance for mental health education in colleges and universities.

3. Suggestions

3.1 Suggestions on the theoretical perspective and practical Implications

3.1.1Theoretical Implications

1) According to the research findings, self-concept, adaptive cognitive emotion regulation strategies, and relatively maladaptive cognitive emotion regulation strategies are all significantly correlated with depression. Among these three factors, relatively maladaptive cognitive emotion regulation strategies are the most significant predictor of depression, indicating that improving relatively maladaptive cognitive emotion regulation strategies should be regarded as a core element in depression-related theories. Future construction of depression theories can focus on exploring the internal mechanisms by which these factors influence depression and the dynamic mediating pathway of "self-concept-cognitive emotion regulation strategies-depression". For example, it is necessary to verify whether self-concept indirectly affects depression by influencing strategy selection, so as to provide more targeted and effective theoretical guidance for clinical treatment and psychological intervention.

2) The effectiveness of integrative group counseling (the depression level of the experimental group significantly decreased by 0.69 units in the post-test, $p<0.001$) validates the value of integrating multiple theories in integrative group counseling. Future theoretical development can further explore the specific applications of different therapies in each stage of integrative group counseling. For example, humanistic therapy is primarily used in the relationship-building stage to promote mutual trust through "unconditional positive regard" and "empathy"; the working stage focuses on cognitive-behavioral techniques, using the "CBT model" to correct irrational beliefs (e.g., reframing "exam failure = insufficient ability" into "exam failure is an opportunity to adjust learning strategies"); the termination stage combines narrative therapy, strengthening positive self-identity through "life story reconstruction" to form an intervention system with close integration of theory and practice.

3.1.2. Practical Implications

The results of this study indicate that integrative group counseling can effectively improve individuals' self-concept, optimize cognitive emotion regulation

strategies, and thereby reduce depression levels. In interviews, participants commonly reported that the cognitive restructuring techniques in Rational Emotive Behavior Therapy (REBT) were particularly effective in enhancing self-concept and alleviating depressive emotions. These techniques assist individuals in identifying and modifying negative, irrational thinking patterns, replacing them with positive and rational cognitions, thus reshaping a positive self-image and fostering an internal environment conducive to mental health. Meanwhile, the role-playing techniques in CBT provide individuals with clear and actionable problem-solving approaches, helping students methodically advance self-improvement plans, gradually accumulate successful experiences, and thereby enhance self-confidence and self-efficacy.

Based on the above findings, psychologist, educators, and designers of relevant intervention programs should actively integrate the ABC model and cognitive restructuring techniques from Rational Emotive Behavior Therapy (REBT) into their daily practices to help individuals reshape positive self-concepts, enhance the level of cognitive emotion regulation strategies, and alleviate depressive emotions. Meanwhile, introducing mindfulness meditation to provide individuals with comprehensive psychological support can promote the overall improvement of their mental health. Specifically, the practical application suggestions are as follows:

1) For mental health practitioners, educators, and policymakers, this study holds significant practical guiding significance. The significant improvement in the self-concept of individuals in the experimental group and the effective reduction in depression levels fully demonstrate the effectiveness of group counseling interventions focusing on optimizing self-concept. Mental health educators should consider integrating training to enhance positive self-concept into the curriculum system and counseling services. For example, guiding individuals to conduct positive self-talk, carrying out successful experience activities, providing personalized positive feedback, etc., to help individuals establish a stable and positive self-concept and fundamentally alleviate depressive emotions.

2) In the regression analysis, cognitive emotion regulation strategies showed a significant direct predictive effect on depression, revealing the potential value of these strategies in the field of mental health. Mental health practitioners, educators, and policymakers should consider launching targeted training programs on cognitive emotion regulation strategies to teach individuals how to apply adaptive strategies (such as positive refocusing and positive reframing) when facing life difficulties, effectively cope with setbacks and stress, and reduce depression levels.

3) The successful implementation of the integrative group counseling program in this study confirms the significant effectiveness of integrative group counseling interventions in alleviating depression. Mental health practitioners, educators, and relevant institutions should actively promote similar integrative intervention models, integrate person-centered therapy, cognitive-behavioral therapy, rational emotive behavior therapy, narrative therapy, mindfulness practices, psychoeducation and other means according to individual actual needs, so as to provide comprehensive and systematic support and help for individuals with depression. At the same time, it is necessary to create a positive and tolerant social and psychological environment, encourage individuals to actively participate in social activities, share emotional experiences, strengthen social support networks, and jointly help individuals get out of depression and achieve psychological rehabilitation and growth.

3.2 Suggestions for future research

1) In the process of implementing integrative group counseling interventions, this study found that carefully designed and attractive warm-up activities can significantly enhance participants' enthusiasm for engagement, laying a good foundation for the smooth implementation of subsequent intervention sessions. It is recommended that mental health practitioners and educators design innovative and interesting warm-up activities when conducting integrative group counseling to create a relaxed and pleasant atmosphere, alleviate individual psychological defenses, promote harmonious relationships among participants, and effectively improve the overall effectiveness of the intervention.

2) Future research should focus on exploring the long-term effects of interventions aimed at enhancing self-concept and optimizing cognitive emotion regulation strategies on reducing depression levels. It is necessary to extend the follow-up period, deeply track the durability and stability of intervention effects, clarify the cycle time for maintaining the effectiveness of integrative group counseling, and provide a scientific basis for formulating long-term and effective depression intervention programs.

3) Further research should be conducted to explore the mutual influence model among relatively adaptive cognitive emotion regulation strategies, relatively maladaptive cognitive emotion regulation strategies, and self-concept. It is necessary to analyze how to form a more scientific and efficient intervention program through integrative group counseling to achieve all-round and multi-level intervention for depression, so as to provide more targeted guidance for mental health practitioners and educators to carry out integrative group counseling for reducing depression levels.

4) Other psychological factors affecting depression, such as psychological resilience, self-efficacy, life event stress, social support, etc., should be examined to expand research on other influencing factors of depression, construct a more comprehensive and systematic model of depression influencing factors, and provide theoretical support for the development of more comprehensive and effective depression intervention programs.

5) Although the integrative group counseling in this study has achieved good results, future research still needs to actively explore other innovative or supplementary intervention methods to meet the diverse needs of different individuals. These methods may include digital interventions based on internet and mobile technologies, personalized one-on-one psychological counseling, specific student care programs, peer support programs, etc., to provide more convenient, diverse and personalized psychological support and help for individuals with depression, and further improve the effectiveness of depression intervention.

REFERENCES

Abramson, L.Y., Metalsky, G.I., & Alloy, L.B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review,* 96, 358–372.

Abramson, L.Y., Seligman, M.E., & Teasdale, J.D. (1978). Learned helplessness in humans: *Critique and reformulation. Journal of Abnormal Psychology,* 87, 49–74.

Acremont, M., & Van der Linden, M. (2006). How is impulsivity related to depression? Evidence from a French validation of the cognitive emotion regulation questionnaire. *Journal of Adolescence,* 29, 65–75.

Angaelo, M. (2022). The predictive validity of college students' self-concept and learning motivation on academic achievement. *Journal of Research in Vocational Education,* 4(3).

Angold, A., & Rutter, M. (1992). Effects of age and pubertal status on depression in a large clinical sample. *Developmental and Psychopathology*, 4, 5–18.

Axelson, D.A., Doraiswamy, P.M., & Boyko, O.B. (1992). In vivo assessment of pituitary volume with magnetic resonance imaging and systematic stereology: Relationship to dexamethasone suppression test results in patients. *Psychiatry Research,* 44, 63–70.

Alasadi, A., & Baiz, N. (2023). The application of skills learned in group counseling to real-life scenarios*. Journal of Counseling Psychology,* 70(2), 234–246.

Beck, A.T. (1963). Thinking and depression: I. Idiosyncratic content and cognitive distortions. *Archives of General Psychiatry,* 9(4), 324–333.

Beck, A. T. (2001). Cognitive therapy: Basics and applications (S. T. Zhai, & B. Y. Guo, Trans.). Beijing, China: China Light Industry Press.Beck, A. T. (2001). Cognitive therapy: Basics and applications (T. S. Zhai & B. Y. Guo, Transl.). Beijing, China: China Light Industry Press.

Beck, A.T., Rush, A.J., & Shaw, B.F. (1979). *Cognitive therapy of depression.* New York: Guilford.

Behera, S., Paluri, S., & Mishra, A. (2021). Mental health status of students pursuing professional training: A questionnaire-based study. *Journal of Education and Health Promotion,* 10(3), 99.

Belsky, D.W., & Domingue, B.W. (2022). Progress and challenges in G×E research on depression. *American Journal of Psychiatry,* 180(2), 111–113.

Berking, M., Wirtz, C.M., & Svaldi, J. (2014). Emotion regulation predicts symptoms of depression over five years. *Behaviour Research and Therapy,* 57, 13–20.

Bruffaerts, R., Mortier, P., & Kiekens, G. (2018). Mental health problems in college freshmen: Prevalence and academic functioning. *Journal of Affective* Disorders, 225, 97–103.

Campbell, J.D., Trapnell, P.D., Heine, S.J., Katz, I.M., Lavallee, L.F., & Lehman, D.R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology,* 70, 141–156.

Catalan, R., Gallart, J.M., & Castellanos, J.M. (1998). Plasma corticotropin-releasing factor in depressive disorders. *Biological Psychiatry,* 44(1), 15–22.

Cao, D.H. (2021). Research on the relationship between life stressors and depression status of vocational college students under the epidemic. *Psychological Monthly,* 27–28.

Çelik, N., Ceylan, B., & Ünsal, A. (2019). Depression in health college students: Relationship factors and sleep quality. *Psychology, Health & Medicine,* 24(5), 625–630.

Chen, D.N., & Chen, Z.H. (2024). The impact of self-compassion on depression: The mediating effect of advantage utilization. *Journal of Guizhou Normal University,* 40(3), 78–84.

Chen, H.Y. (2024). Psychological distress and positive self-concept among college students with left-behind experience: A chain mediated role in understanding social support and hope. *Campus Psychology,* 22(1), 9–14.

Chen, X., An, H.P., & Li, W.C. (2021). The application of group counseling in the teaching of psychological health education courses in vocational colleges. *Modern Vocational Education,* 27, 40–41.

Chen, X.Y., Qiao, G., & Pan, M.M. (2022). Research on depression among college students across the country during the COVID-19 epidemic. *Psychological Monthly,* 17(17), 220–222.

Chen, Y. (2022). The influence of cognitive emotion regulation strategies on college students' depression: The mediating role of personal growth initiative and its intervention (Doctoral dissertation). *Chengde Medical University.*

Chinese Medical Association Psychiatric Branch. (2001). *CCMD-3: Chinese classification and diagnostic criteria for mental disorders (3rd ed.).* Shandong, China: Shandong Science and Technology Press.

Compas, B.E., Phares, V., Banez, G.A., & Howell, D.C. (1991). Correlates of internalizing and externalizing behavior problems: Perceived competence, causal attributions, and parental symptoms. *Journal of Abnormal Child Psychology*, 19(2), 197–218.

Cooley, C.H. (2020). *Human Nature and the Social Order.* Huaxia Publishing House.

Corey, G. (2012). *Theory and Practice of Counseling and Psychotherapy.* Cengage Learning.

Corey, G. (2016). *Theory and Practice of Group Counseling.* Cengage.

Coyne, J.C. (1976). Depression and the response of others. *Journal of Abnormal Psychology,* 85, 186–193.

Cuijpers, P., Karyotaki, E., Reijnders, M., Purgato, M., & Barbui, C. (2018). Psychotherapies for depression in low- and middle-income countries: A meta-analysis. *World Psychiatry,* 17(2), 169–181.

Cuijpers, P., Karyotaki, E., & Reijnders, M. (2018). Meta - analysis of the effect of psychological intervention on alleviating depressive symptoms. JAMA Psychiatry , 75(2), 145 - 152.

Deffenbacher, J.L., & Beck, A.T. (2000). Prisoners of Hate: The Cognitive Basis of Anger, Hostility and Violence. Politics & the Life Sciences, 19(2), 122–368.

Delucia-Waack, J. L., Geritty, D. A., Kalodner, C. R., et al. (2014). *Group counseling and group therapy: A guide for practitioners*. Translated by Li Songwei, Lu Xiaohua, & Jia Xuan. Beijing, China: China Machine Press.

Ding, Q., Zhang, Y.X., Zhang, C.Y., et al. (2016). The chain mediating role of social comparison and self-concept clarity in the relationship between social networking site use and adolescent depression. *Chinese Journal of Clinical Psychology,* 24(5), 823–827.

Domaradzka, E., & Fajkowska, M. (2018). Cognitive-Emotional Regulation Strategies in Anxiety and Depression Understood as Types of Personality. *Frontiers in Psychology,* 9, 856.

Dong, Y.J., Li, L., & Li, Y.Q. (2022). Analysis of Psychological Health Education for Vocational College Students from the Perspective of Positive Psychology. *Education Research,* 5(5), 43–45.

Du, X.P., Jiang, J., & Jiang, W. (2023). Factors influencing self-concept clarity and intervention strategies: a new perspective based on the triple integration hypothesis of self-concept structure. *Psychological Science,* 46(1), 170–180.

Ellis, A. (1973). *Humanistic psychotherapy: The rational-emotive approach.* New York: The Julian Press.

Ellis, A. (1972). *Rational-emotive therapy and its application to emotional education.* New York: Institute for Rational Living.

Ellis, A. (2015). Rational emotive behavior therapy (J. Guo, J. Y. Ye, & B. Y. Guo, Trans.). Chongqing, China: Chongqing University Press, pp. 34-36.Ellis, A. (2015). *Rational emotive behavior therapy* (J. Guo, J. Y. Ye, & B. Y. Guo, Transl.). Chongqing, China: Chongqing University Press.

Ellis, A. (2021). Rational emotions (W. Li, & L. Zhang, Trans.). Beijing, China: China Machine Press.Ellis, A. (2021). *Rational emotions* (W. Li & L. Zhang, Transl.). Beijing, China: China Machine Press.

Emilie, J., & Nathalie, G.N. (2020). Affective and cognitive theory of mind in children with intellectual disabilities: How to train them to foster social adjustment and emotion regulation. *Journal of Education and Training Studies,* 8(4), 80.

Emma, C. (2024). Social media use among Australian university students: Understanding links with stress and mental health. *Computers in Human Behavior Reports,* 14, 100–398.

Fan, F.M., & He, J. (2022). *Group psychological counseling (2nd ed.).* Shanghai: East China Normal University Press.

Feng, J.D., Xin, W., & Chang, C. (2021). Psychometric properties and measurement invariance of the Cognitive Emotion Regulation Questionnaire in Chinese adolescents with and without major depressive disorder: A horizontal and longitudinal perspective. *Frontiers in Psychiatry,* 12, 736887.

Garnefski, N. (2004). Cognitive emotion regulation strategies and depressive symptoms: Differences between males and females. *Personality and Individual Differences*, 36, 267–276.

Geiselmann, B., & Bauer, M. (2000). Subthreshold depression in the elderly: Qualitative or quantitative distinction. *Comprehensive Psychiatry,* 41(2), 8–32.

Geng, M.X., & Liang, Z.D. (2018). Path analysis of the impact of anxiety and attribution styles on depression among college students. *Campus Psychology,* 16(3), 190–192

George, H. (2005). *Mind, Self and Society* (Y Zhao, Trans.). Shanghai: Shanghai Translation Publishing House.

Ghrouz, A.K., Noohu, M.M., & Dilshad, M.M. (2019). Physical activity and sleep quality in relation to mental health among college students. *Sleep and Breathing*, 23(2), 627–634.

Gross,J.J.(2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology,* 39, 281–291.

Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology,* 85(2), 348–362.

Guo, X. J. (2020). The application of narrative therapy in improving college students' dormitory interpersonal relationships. *Literature Education (Downward)*, 33(11), 154–155.

Higgins, E.T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review,* 94(3), 319–340.

Hua, W.Q. (2022). Research on the current situation of depression, anxiety and stress among college students (Master's thesis). Jilin University.

He, L.Q. (2009). The application of experiential group activities in mental health education in colleges and universities. *Journal of Southwest Jiaotong University (Social Sciences Edition),* 10(6), 125–127.

He, Y. Q., Liu, Y., & Li, L. L. (2015). The effect of mindfulness group counseling on depression in college students. *Chinese Health Service Management*, 32(5), 389-392.

Hou, R.H., & Yu, G.L. (2006). Children's understanding of emotional expression rules and the use of strategies. Psychological Science, 29(1), 4.

Hou, Y.Q., Zhang, S.M., & Wang, Q.R. (2019). Empirical research on the intervention of group psychological counseling on the mental health level of college students. Journal of Langfang Normal University (Natural Science Edition), 19(2), 105–110.

Hua, W.Q. (2020). A study on the current status of depression, anxiety and stress of college students (Master's thesis). Jilin University.

Huang, L., Zhang, Y., & Hao, J. C. (2023). A Study on the Practical Path of College Physical Education to Improve College Students' Social Adaptability from the Perspective of Healthy China. In *Proceedings of the 10th China Physical Fitness Training Science Congress (Volume 1)* (Eds., pp. 785-792). South-Central University for Nationalities.

Huang, R.H., Li, W.H., & Zeng, X.Q. (2012). The mediating role of achievement motivation and coping styles in the relationship between self-concept and depression (Master's thesis). Wuhan University.

Huang, Z. (2023). Psychological rehabilitation of college students with depression. *Chinese School Health,* 44(3), 10001–10002.

Hu, F., & Ren, C.H. (2023). Research on overall happiness and self-concept of post-2000 college students under public crisis (Master's thesis). *Journal of Jiangxi Electric Power Vocational and Technical College.*

Hu, W.G, & Chen, S.J. (2018). Research on the relationship between career maturity of high school students and their self-concept and parenting styles (Master's thesis). *Journal of Wenzhou University (Social Sciences Edition).*

Hu, W.P. (2025). The impact of rumination on sleep quality in college students: The mediating role of depressive mood. *Psychological Monthly,* 20(8), 128–130.

Ivers, M., Alderton, E., & Swanson, R. (2022). Nontraditional post-baccalaureate students: How to better provide support for perceived mental health needs. *Journal of American College Health,* 1–8.

Jacobs, E.E., Schimmel, C,J,, Masson, R.L., & Harvill, R.L. (2015). *Group counseling: Strategies and skills.* Cengage Learning.

James, W. (2013). *The principles of psychology.* Peking University Press.

Jermann, F., Van der Linden, M., d'Acremont, M., & Zermatten, A. (2006). Cognitive Emotion Regulation Questionnaire (CERQ): Confirmatory factor analysis and psychometric properties of the French translation. *European Journal of Psychological Assessment,* 22(2), 126–131.

Jiang, G. R., Li, D. Y., & Ren, Z. H. (2021). The current situation and characteristics of mental health literacy among Chinese citizens. *Journal of Psychology*, 53(2), 182–201.

Jin, S. H. (2010). *Social psychology (2nd ed.).* Higher Education Press.

Jia, Y. F., Li, S. J., & Li, H. (2008). The theoretical model of self-concept and its development trend. *Journal of Shenyang Normal University (Social Science Edition),* (2), 139–142.

Jin, Z. J., Shi, Y. F., & Peng, W. B. (2021). Analysis of the causes and prevention of depression among college students. *Journal of Southwest Forestry University (Social Science),* (2), 101–106.

Judd, L. L. (1994). Subsyndromal symptomatic depression: Evidence for a new mood disorder. *CNS Drugs,* 1(6), 399–404

Kim, E. J., Yu, J. H., & Kim, E. Y. (2020). Pathways linking mental health literacy to professional help-seeking intentions in Korean college students. *Journal of Psychiatric and Mental Health Nursing,* 27(4), 393–405.

Kökönyei, G., Kocsel, N., Király, O., Griffiths, M. D., Galambos, A., Magi, A., & Demetrovics, Z. (2019). The role of cognitive emotion regulation strategies in problem gaming among adolescents: A nationally representative survey study. *Frontiers in Psychiatry,* 10, 273.

Kivlighan, D. M., Buttolph, M., & Kunze, M. (2021). Long-term effects of group counseling on psychological resilience: A 3-year follow-up study. *Journal of Counseling Psychology,* 68(3), 345–356.

La Montagne, L. G., Diehl, D. C., Doty, J. L., & Smith, S. (2023). The mediation of family context and youth depressive symptoms by adolescent emotion regulation. *Youth & Society,* 55(3), 552–580.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* Springer Publishing Company.

Li, H. J. (2018). Application of Seeker Center Therapy in College Psychological Counseling. *Modern Vocational Education*, (26), 126.

Li, J. H. (2017). A study on the application of rational emotive behavior therapy in emotion management groups [Dissertation]. Jiangxi Normal University.

Li, J., Luo, X.Q., & Wang, J. (2022). A study on the intervention of mindfulness-based cognitive therapy (MBCT) on depressive mood in college students. *Psychological Monthly,* 2022(15), 18–20, 24.Li, L. (2023). The relationship between social support and sense of life meaning of college students: The mediating effect of self-concept (Master's thesis). Southwest Minzu University.

Li, M. (2016). *Narrative psychotherapy.* Beijing, China: The Commercial Press.

Li, X.M., Gao, Z.N., Feng, J., et al. (2025). The mediating role of cognitive emotion regulation strategies in the relationship between types of internet addiction and depression in college students. *Neural Diseases and Mental Health*, 25(3), 153–160.

Li, X. Y., Zhang, N., & Shi, J. (2023). The influence of family parenting style on college students' mental health: *The mediating role of self-concept.* Psychology Monthly, (22), 97–100.

Li, X.Y., Zhang, N., & Shi, J. (2023). The impact of family upbringing on the mental health of college students: The mediating role of self-concept. *Psychological Monthly,* 18(22), 97–100.

Li, Z., Zou, H.O., & Wang, L.Y. (2020). A longitudinal study on cognitive function and depression among elderly people in the community. *Chinese Journal of Nursing,* 55(9), 1394–1398.

Lin, P. C. (1980). Revision of the Tennessee Self-Concept Scale. *Chinese Journal of Testing,* 27, 71–78.

Lin, Y. (2020). The Reference Significance of "Person - Centered Therapy" in Ideological and Political Education of Colleges and Universities. Science & Technology Education Journal (Issue 25), 86 - 87.

Liu, C. H., Stevens, C., & Sylvia, H. M. (2023). The prevalence and predictors of mental health diagnoses and suicide among U.S. college students: Implications for addressing disparities in service use. *Depression and Anxiety,* 36(1), 8–17.

Liu, M. D., & Chen, H. X. (2023). The application of narrative therapy in psychological health education for vocational college students. *Psychology Monthly,* 18(15), 209–2011.

Liu, Q. G., & Liu, Y. X. (2007). Analysis of the role of cognitive emotion regulation strategies between life events and mental health of college students. *Medicine and Society,* 20(8), 48–49.

Liu, Q.Q., Fan, S.S., & Hu, W.Y. (2023). Ethical behavior of supervision in group supervision and ethical awareness of supervised individuals. *Chinese Journal of Clinical Psychology*, 31(4), 882, 886–891.

Liu, W. (2017). The application research of group dynamics in occupational therapy. *Journal of Practical Clinical Nursing,* 2(46), 186–187.

Luo, K., Zhang, S.M., & Zhu, H.B. (2021). Research on left-behind experience and self-concept development of college students. *Journal of Jianghan University (Social Sciences Edition),* 38(2), 102–111.

Maes, M., Bosmans, E., & Jongh, R. (1997). Increased serum IL-6 and IL-1 receptor antagonist concentrations in major depression and treatment-resistant depression. *Cytokine,* 9(11), 853–859.

Ma, L., Guo, L.F., Li, Y., Li, Y.F., Lu, D., & Zhang, L.Y. (2020). Current situation of depression symptoms among college students and its relationship with negative life events. *Modern Preventive Medicine,* 47(8), 1435–1438.

Ma, X., Liang, S. G., Tian, Y. Q., & Shen, Y. J. (2021). A randomized controlled trial of group intervention for improving depressive symptoms in college freshmen. *Chinese Mental Health Journal,* 35(8), 613–618.

Mao, Y.C. (2021). The impact of mental health education on the mental health status of vocational nursing students. *Psychological Monthly,* 16(10), 14–15.

Markus, H., & Kunda, Z. (1986). Stability and malleability of the self-concept. *Journal of Personality and Social Psychology,* 51(4), 858–886.

Maslow, A. H. (2021). *Motivation and personality* (3rd ed.). Beijing, China: China Renmin University Press.

Mayanchi, A.S., Khan, A., & Latif, A.B.A. (2020). Validation of developed instruments on study habits, creativity, and self-concept on college students in Nigeria. *Annals of Tropical Medicine and Public Health,* 23(6), 148–155.

Meischke, H., Rief, W., & Glombiewski, J. A. (2018). The long - term effect of mindfulness - based counseling. Psychotherapy and Psychosomatics, 87(1), 53-55.

Metalsky, G.I., Joiner, T.E., Hardin, T.S., & Abramson, L.Y. (1993). Depressive reactions to failure in a naturalistic setting: A test of the hopelessness and self-esteem theories of depression. *Journal of Abnormal Psychology,* 102(1), 101–109.

Morales, A., Rodríguez Menchón, M., & Espada, P.J. (2022). Examining academic self-concept as a mediator of the relationship between anxiety and depression: A longitudinal study. Child and Adolescent Mental Health, 28(3), 354–362.

Morrow, E.K. (2021). Maternal depression and socialization of children's positive affect regulation. *Journal of Child and Family Studies,* 30(10), 1–14.

Nelson-Jones, R. (1982). *The theory and practice of counseling psychology.* London: Holt, Rinehart and Winston.

Nie, J., Tao, Z., Zhao, J. K., Jiang, Q., & Wu, Y. G. (2025). The intervention effect of cognitive-behavioral group counseling on anxiety and depressive symptoms in patients with pulmonary nodules. *Acta Academiae Medicinae Wannan*, 44(2), 167-171.

Owen, Y.L. (2010). *Group psychotherapy: Theory and practice.* Beijing: China Light Industry Press.

Peng, T., Zhang, X.Z., & Luo, J. (2024). The influence of psychological quality of freshmen in higher vocational colleges on school adaptation: The chain mediating role of positive coping styles and depression. *Journal of Wuhan Technical College of Communications,* 26(1), 85–91.

Phillips, L.H., Henry, J.D., Hosie, J.A., & Milne, A.B. (2003). Age, anger regulation and well-being. *Aging & Mental Health,* 7(3), 250–256.

Piñero, F.C.M., Moral, V.P., & Mondejar, R.L. (2024). Motivational climate, physical self-concept, and social relationships in adolescents in physical education classes: A systematic review. *Education Sciences,* 14(2), 100–102.

Qian, M.Y., Chen, Z.G., & Zhang, X. (1999). Goal setting and self-evaluation of depressed people in solitaire tasks. *Acta Psychologica Sinica,* (2), 209–214.

Qian, L.J. (2020). Research on Beck's cognitive theory of depression under the background of Chinese culture (Doctoral dissertation). Nanjing Medical University.

Qian, M.Y. (1994). *Psychological counseling and psychotherapy* (pp. 215–222). Beijing: Peking University Press.

Qian, X.L., Wang, C.J., & Peng, S.N. (2023). The impact of positive coping strategies on general self-efficacy among college students: The mediating role of cognitive reappraisal. *Chinese Journal of Psychological Science,* 46(3), 8.

Qiu, W., Qian, J., Yang, J., Peng, H., & Dong, L. (2023). A qualitative study on the self-concept of adolescents with depressive episodes. *Primary Medical Forum,* 27(24), 1–3, 15.

Rado, S. (1928). The problem of lancholia. *International Journal of Psychoanalysis,* 9, 420–438.

Ramona, T., EvaMaria, E., & Janieta, B. (2022). Strengthening emotional development and emotion regulation in childhood—As a key task in early childhood education. *International Journal of Environmental Research and Public Health,* 19(7), 3978.

Rogers, C.R. (1947). Some observations on the organization of personality. *American Psychologist, 2*, 358–368.

Rogers, C.R. (1959). A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), Psychology*: A study of a science* (Vol. 3, pp. 184–256). McGraw-Hill.

Rogers, C.R. (1947). Some observations on the organization of personality. In A. Kuenzli (Ed.), *The phenomenological problem (*pp. 1–15). Harper and Row.

Rogers, C.R. (2004). On becoming a person: *A therapist's view of psychotherapy* (G Yang, N You, F Pan, Trans.). China Renmin University Press.

Rogers, C. R. (2004). *Client-centered therapy* (M. Li, & Y. Li, Trans.). Beijing, China: People's Publishing House.

Rogers, C.R. (2006). *Carl Rogers on encounter groups* (BR Zhang, Trans.). China Renmin University Press.

Rong, Y.X. (2018). An intervention study of group counseling on peer relationships of high school students (Master's thesis). Central China Normal University.

Rubin, K.H., Coplan, R.J., Fox, N.A., & Calkins, S.D. (1995). Emotionality, emotion regulation, and preschoolers' social adaptation. *Development and Psychopathology,* 7(1), 49–62.

Sarah, S., & Alyson, Z. (2023). The influence of NPY on the relationship between emotion regulation and psychopathology in survivors of childhood interpersonal trauma. *Biological Psychiatry,* 93(9S), S114.

Seligman, M. E. P. (1975). Helplessness: On depression, development, and death. San Francisco: W.H. Freeman.

Shahab, Y., & Ahmad, A. (2023). The role of emotion regulation difficulties and intrusive and deliberate rumination in the association between insecure attachment and prolonged grief. *Omega,* 102, 3022282–31189539.

Shavelson, R.J., & Bolus, R. (1982). Self-concept: The interplay of theory and methods. *Journal of Educational Psychology,* 74(1), 3–17.

Six, S.G. (2022). The effect of mental health app customization on depressive symptoms in college students: Randomized controlled trial. *JMIR Mental Health,* 9(3), e9516.

Smith, H.M., & Betz, N.E. (2002). An examination of efficacy and esteem pathways to depression in young adulthood. *Journal of Counseling Psychology,* 49(4), 438–448.

Sun, C.L., Zhu, J.T., & Zhang, J.Y. (2023). The relationship between subliminal depression and dual attribution in college students: The mediating role of psychological capital. *Chinese Journal of Health Psychology,* 31(8), 1212–1216.

Sun, L.L., Wang, L.H., & Ge, L. (2021). Interventional study of group attribution training on symptoms and self-efficacy of adolescent depression patients. *Journal of Shanxi Health Vocational College,* 31(5), 9–10.

Sun, X.H. (2024). Exploration of the application of Maslow's hierarchy of needs theory in university management. *Modern Business and Industry,* 45(4), 212–214.

Tory, H., & Higgins, E. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review,* 94(3), 319–340.

Takebayashi, M., Kagaya, A., & Uchitomi, Y. (1998). Plasma dehydroepiandrosterone sulfate in unipolar major depression. *Journal of Neural Transmission,* 105(5), 242–253.

Teng, H.Y. (2011). Research on the correlation between depression, anxiety and extracurricular physical exercise of vocational college students. *Zhejiang Sport Science,* (2), 57–60, 64.

Thompson, R.A. (1991). Emotional regulation and emotional development. *Educational Psychology Review,* 3, 269–307.

Tian, L.M., Yuan, J.C., & Li, Y.M. (2018). The impact of peer presence and self-esteem on adolescent risk-taking behavior: Evidence from ERPs. *Journal of Psychology,* 50(1), 47–57.

Timo, C.V., Mieke, H.V., & Jannick, D. (2021). Grade retention and academic self-concept: A multilevel analysis of the effects of schools' retention composition. *British Educational Research Journal,* 47(5), 1340–1360.

Vanden, B., Kivela, J.F., La, L., & Antypa, N. (2018). Chronotype and depressive symptoms in students: An investigation of possible mechanisms. *Chronobiology International,* 35(9), 1248–1261.

Vittengl, J.R., Clark, L.A., Thase, M.E., & Jarrett, R.B. (2022). Levels of depressed mood and low interest for two years after response to cognitive therapy for recurrent depression. *Behaviour Research and Therapy,* 148, 103996.

Vich, M., Lukeš, M., & Burian, J. (2020). Out of sight, out of mind? Exploring the long-term effects of Relational Mindfulness Training (RMT). *Journal of Contextual Behavioral Science,* 16, 162–171.

Wang, H., & Chen, Y.L. (2023). Research on depression and psychological health counseling strategies for college students. *China School Health,* 44(12), 1756.

Wang, J., & Lu, N. (2006). Research on the relationship between cognitive emotion regulation strategies, self-harmony and depression of vocational college students. *Journal of Preventive Medicine Information,* (6), 677–681.

Wang, Q., & Tao, M.J. (2023). Psychological health education for college students from the perspective of positive psychology: Values, dilemmas, and pathways. *Progress in Psychology,* 13(11), 4.

Wang, X.J. (2020). An intervention study of group counseling on emotional intelligence of sixth-grade primary school students (Master's thesis). Qinghai Normal University.

Wang, Y.T., Fan, X.F., & Zhang, L. (2022). The impact of family income on the mental health of college students: The role of self-concept and collective self-esteem. *Psychological Research,* 15(1), 70–77.

Wang, Y., & Wen, S.X. (2014). A review of research on self-concept. *Journal of Educational Institute of Jilin Province* (Middle), (4), 134–135.

Wang, Y.Y. (2019). Discussion on the difference patterns of cognitive emotion regulation strategies and depression of vocational college students: Stress level and gender. *Education Informatization Forum,* (5), 147–148.

Wang, Z. (1984). Self-Rating Depression Scale (SDS). *Shanghai Archives of Psychiatry,* 2(2), 71–72.

Wang, Z.H. (2020). Exploration of structural dimensions and questionnaire development for college students' occupational self-concept. *Journal of Jilin University of Engineering and Technology,* 36(11), 53–55.

Wei, Y.M. (2007). The psychosocial mechanism and cognitive coping intervention of college students' depression (Doctoral dissertation). Jilin University.

Wen, H.Z. (2019). Research on the relationship between depression, psychological loneliness, and core self-evaluation among college students. *Modern Vocational Education,* (16), 198–200.

Whale, R., Clifford, E.M., & Bhagwagar, Z. (2001). Decreased sensitivity of 5-HT receptors in melancholic depression. *Brain,* 178, 454–457.

Winer, B. J., Brown, D.R., & Michels, K. M. (1991). Statistical principles and experimental design. New York: McGraw-Hill.

Wu, X.B. (2018). Group counseling and therapy: *A brand new interpersonal-psychodynamic model.* Beijing: China Light Industry Press.

Xiao, Y. X., & Wu, L. (2019). Valuing the Cultivation of Young Children's Positive Self-Concept—Inspiration from Rogers' "Self-Concept". *Reading and Writing: Educational and Teaching Journal*, 16(12), 86.

Xiang, G.C., Chen, H., & Wang, Y.L. (2021). The relationship between adolescent self-concept clarity and subjective well-being: Based on latent profile analysis. *Journal of Southwest University (Social Sciences Edition),* 47(2), 153–160, 229.

Xi, M.J. (2017). The relationship between cognitive emotion regulation strategies and depression and anxiety in high school students. *Chinese Journal of Public Health,* (4), 630–633.

Xue, S., Li, Y.X., & Zhao, G.X. (2024). The relationship between collective self-esteem, individual self-esteem, depression, and anxiety among college freshmen [C]//The 11th National Conference on Psychology [2024-04-14].

Xu, J., & Xie, B.G. (2021). The relationship between career self-concept clarity and depression among college students: The moderating effect of gender and gender equality views. *Psychological Development and Education,* 37(4), 584–591.

Xu, X., Liu, F.Y., Wang, Z.Q., et al. (2025). How does exercise enjoyment promote the mental health of children and adolescents in rural remote areas? Testing the broaden-and-build effect of positive emotions. *Journal of Wuhan Institute of Physical Education,* 59(4), 68–79.

Xu, Q., Zou, X.D., He, L., Fu, Z.F., & Wang, J.P. (2022). Helpful factors of cognitive-behavioral group intervention in alleviating depressive symptoms in college students. *Chinese Mental Health Journal,* 36(11), 905–912.

Yalom, I.D. (1972). The theory and practice of group psychotherapy: An overview. *American Journal of Psychotherapy,* 26(4), 435–452.

Yalom, I.D., & Leszcz, M. (2022). *Group psychotherapy: Theory and practice* (6th ed.). China Light Industry Press.

Yang, Z.L. (2023). *Dictionary of psychology.* Shanghai: Shanghai Dictionary Publishing Hous.

Yan, J.Y. (2023). The relationship and intervention research among family intimacy, cognitive emotion regulation strategies and adolescent depression (Doctoral dissertation). Chengde Medical University.

Yao, L. (2023). The influence of social comparison on emotion recognition in individuals with subthreshold depression (Master's thesis). Chongqing Normal University.

Yuan, G., Zhao, J., & Zheng, D. (2021). Accuracy of Self-Rating Depression Scale and Beck Depression Scale in distinguishing the severity of depression. *Neurology and Mental Health,* 21(12), 868–873.

Yuan, K., Luo, Y.Y., Ye, L., Du, M.X., Sun, J., & Li, Q. (2021). The influence of maladaptive cognitive emotion regulation strategies on the psychological vulnerability of graduate students: The mediating role of psychological capital. *China Journal of Health Psychology,* 30(4), 596–601.

Yuan, G., Jing, G., & James, G. (2023). The association of childhood maltreatment with Internet addiction: The serial mediating effects of cognitive emotion regulation strategies and depression. *Child Abuse & Neglect,* 140, 106134.

Yu, G.L. (2015). *Social psychology.* Beijing: Beijing Normal University Press.

Yu, L. (2019). The effect of growth group counseling on improving interpersonal communication ability of college students (Master's thesis). China Medical University.

Yu, Q.W., Fang, L., & Qin, K.C. (2022). Childhood psychological maltreatment and internet gaming addiction in Chinese adolescents: Mediation roles of maladaptive emotion regulation strategies and psychosocial problems. *Child Abuse & Neglect,* 129, 105669.

Zghidi, N. (2021). Analysis of the influence of school practice on Tunisian pupils' self-concept, mental health and academic achievement. *Journal of Educational Research and Policies,* 3(7), 1–10.

Zhang, F.Y., Gong, Z.Y., & Shao, X.Z. (2022). Negative cognitive processing bias in depressed college students. *Chinese Journal of Health Psychology,* 30(1), 134–139. https://doi.org/10.13342/j.cnki.cjhp.2022.01.027

Zhang, J. (2016). A brief discussion on the development and application of cognitive-behavioral therapy (CBT) in China. *Caizhi (Talent and Wisdom)*, (4), 265.

Zhang, J., Zheng, S., & Hu, Z. (2022). The effect of physical exercise on depression in college students: The chain mediating role of self-concept and social support. *Frontiers in Psychology,* 13, 841160.

Zhang, L.J., & Liu, X.Y. (2003). Reliability and validity of Zung Self-Rating Depression Scale and its application in depression screening. *Chinese Journal of Clinical Psychology,* 11(4), 318–320.

Zhang, R.W., Pual, T.P., & Wong, L.D. (2020). The impact of interpersonal relationships and self-concept on the meaning of life: A follow-up study. *Psychological Science*, 43(5), 1154–1161.

Zhang, S.H., Sang, B., Liu, Y., & Pan, T.T. (2020). Differences in the use of daily emotion regulation strategies among adolescents with different depressive symptoms. *Psychological Science,* 43(6), 1296–1303.

Zhang, W., Shi, R., & Guo, B.Y. (2019). Not just "talk therapy": The nonverbal dimension in psychoanalytic therapy. *Psychological Science,* 42(3), 755–760.

Zhang, W.X. (2022). *Group psychological counseling.* Beijing: Tsinghua University Press.

Zhang, X.L., Cheng, S.Z., & Wang, L. (2023). The effect of cognitive reassessment group psychological counseling on improving depression among vocational college students. *Campus Psychology*, 21(5), 345–349.

Zhang, Z.C, Zhong, Y., & Jin, X.L. (2024). The improvement of interpersonal distress of medical students by self-esteem group psychological counseling. *China Higher Medical Education,* (3), 45–46, 49.

Zhao, G.C. (2024). Current situation, causes, and prevention and treatment of depression among college students. *Special Health,* (36), 295–296.

Zhao, H. (2023). The advantages and implementation methods of group psychological counseling in higher vocational mental health education. *Education Informatization Forum,* (11), 96–98.

Zhao, K. (2022). A study on the relationship among family functioning, self-concept, coping styles, and peer relationships in high school students (Master's thesis). Harbin Normal University.

Zhao, T.T. (2022). Relaxation training for relaxation therapy. *Beneficial for Opening a Book - Seeking Medical Advice,* (7), 45.

Zhao, W.B., Zhao, S.H., & Feng, H.L. (2023). Analysis of psychological health education for vocational college students. *Henan Agriculture,* (27), 23–24.

Zhao, Y. (2019). Ignorance of depression is cruel to depressed individuals. *Jiangsu Health Care,* (6), 40–41.

Zheng, H.B., & Zheng, Y.P. (1987). Application of Self-Rating Depression Inventory (BDI) in depressed patients. *Chinese Journal of Neuropsychiatric Diseases,* (4), 236–237.

Zheng, X., Wu, S.M., & Liu, L.F. (2024). The relationship between optimism and depression in college students: A chain mediation of negative cognitive bias and negative emotions. *Psychological Exploration,* 44(1), 66–73.

Zheng, Y., & Huang, X.T. (1997). The structure of self-concept: A content analysis of college students' responses to "Who am I?". *Journal of Southwest China Normal University (Philosophy and Social Sciences Edition),* (1), 77–82.

Zhou, Y.Y. (2023). The relationship between depression, negative life events and cognitive emotional regulation strategies of college students and the intervention research (Doctoral dissertation). Chongqing Normal University.

Zou, Y.R. (2022). The relationship between social support, self-esteem and anxiety and depression among college students in higher vocational colleges. *Campus Psychology,* 20(5), 342–346.

Zung, W.W.K. (1965). A Self-Rating Depression Scale. *Archives of General Psychiatry,* 12(1), 63–70.

APPENDIX

APPENDIX 1

Self-Rating Depression Scale (SDS)

1-4 entitled Basic Information

1. What is your gender? [single choice]

A. Male

B. Female

2. Which faculty do you belong to?

A. Department of Preschool Education

B. Department of Art

C. Department of Early Education of Chemistry and Materials

3. What year are you in at college? [single choice]

A. Freshman

B. Sophomore

C. Junior

4. Where is your place of residence

A. City

B. Township

C. Rural Area

1	2	3	4
No or very little time	Little part of the time	Quite a lot of time	Most or all of the time

Item:

1.I feel depressed and in low spirits.

*2. I think the morning is the best time of the day.

3.I burst into tears or feel like crying from time to time.

4.I have a bad sleep at night.

*5. I eat as much as usual.

*6. I feel as happy as before when in close contact with the opposite sex.

7.I find that my weight is decreasing.

8.I have the trouble of constipation.

9.My heart beats faster than usual.

10.I feel tired for no reason.

*11. My mind is as clear as usual.

*12. I don't think there are difficulties in the things I often do.

13.I feel restless and can't calm down.

*14. I have hope for the future.

15.I get angry and excited more easily than usual.

*16. I think it's easy to make decisions.

*17. I think I'm a useful person and someone needs me.

*18. My life is very interesting.

19.I think others will live better if I die.

*20. I'm still interested in the things I was interested in before

APPENDIX 2

Tennessee Self-Concept Scale (TSCS)

1	2	3	4	5
Exactly the same	Mostly the same	Partly the same or partly different	Mostly different	Completely different

Items:

1.I am in good health.

2.I like to keep myself neat and decent often.

3.I behave properly and act orderly.

4.I have good morality.

5.I am a hopeless person.

6.I am often in a good mood.

7.My family is happy and harmonious.

8.My family doesn't love me.

9.I hate this world.

10.I am kind and friendly to others.

11.Occasionally, I think of some bad things that cannot be told.

12.I sometimes tell lies.

13.I am physically ill.

14.I am full of illnesses all over my body.

15.I am honest.

16.My morality is not strong, and sometimes I want to do bad things.

17.My mood is calm, without worry or sadness.

18.I often have hatred in my heart.

19.I think my family doesn't trust me.

20.My family and friends think highly of me.

21.I am very popular with others.

22.It's difficult for me to make friends.

23.Sometimes I feel like cursing.

24.Occasionally, because of physical discomfort, my temper becomes a little irritable.

25.My body is neither fat nor too thin.

26.I am satisfied with my appearance.

27.I don't think I am trustworthy enough.

28.I often feel uneasy in conscience.

29.I look down upon myself.

30.I am satisfied with my current situation.

31.I have tried my best to be filial to my parents.

32.I think I don't trust my family enough.

33.I am satisfied with my social skills.

34.I am satisfied with the way I treat others.

35.Occasionally, I would gossip about others behind their backs.

36.During competitions, I always hope to win.

37.I don't feel very well physically.

38.I am not satisfied with some parts of my body.

39.I think my behavior is in line with my conscience.

40.I am satisfied with my moral behavior.

41.I think I am a pretty good person.

42.I am not satisfied with myself.

43.I don't like my family very much.

44.I am satisfied with the good relationship I currently maintain with my family.

45.I think I am not ideal in social aspects.

46.I think my relationship with others is not ideal.

47.When hearing dirty jokes, sometimes I can't help laughing.

48.Sometimes I postpone the things I should do today to the next day.

49.My movements often seem clumsy.

50.I rarely feel physically uncomfortable.

51.I often do things with conscience in my daily life.

52.In order to outdo others, sometimes I will use improper means.

53.Under any circumstances, I can take care of myself.

54.I often dare not face difficult problems.

55.I often have quarrels with my family.

56.My behavior often fails to meet the expectations of my family.

57.I find it difficult to talk to strangers.

58.I try to understand others' views on things.

59.I lose my temper occasionally.

60.I am good at taking care of my body.

61.I often sleep poorly.

62.I rarely do improper things.

63.For me, it is difficult to do the right thing or behave well.

64.I often act rashly without prior consideration.

65.When I encounter difficulties, I can solve them easily.

66.I care about my family very much.

67.I try to treat friends and family fairly and reasonably.

68.When I am with others, I often feel uncomfortable.

69.I get along well with others.

70.Of the people I know, I don't like every one of them.

APPENDIX 3

Cognitive Emotion Regulation Strategy Scale

1	2	3	4	5
Never	Sometimes	Generally	Often	Always

1.I feel that I should be blamed for this matter.

2.I think I have to accept what happened.

3.I often think about how I feel about the things I have experienced.

4.I will think of better things than what I have experienced.

5.I consider what things I can do best.

6.I think I can learn something from this situation.

7.I think things could have been worse originally.

8.I often think that what I have experienced is worse than others' experiences.

9.I think others should be blamed for this matter.

10.I think I should be the person responsible for what happened.

11.I think I have to accept the reality.

12.I indulge in the thoughts and feelings about the experienced things.

13.I will think of pleasant things that have nothing to do with what I have encountered.

14.I consider how to best cope with this situation.

15.I think the experienced things can make me a stronger person.

16.I think others have worse experiences.

17.I have been thinking about how terrible the things I have experienced are.

18.I think others should be responsible for what happened.

19.I think I can't change anything about this matter.

20.I want to know why I have such feelings about the experienced things.

21.I will think of better things instead of what I have encountered.

22.I will think about how to change this situation.

23.I think there are also positive aspects in this situation.

24.I often think that the things I have experienced are the worst.

25.I consider the mistakes made by others in this matter.

26.I think the main reason for this must lie with myself.

27.I think I must learn to accept the reality.

28.I will recall those pleasant experiences.

29.I am considering a plan that can make me do my best.

30.I look for the positive aspects from what happened.

31.I keep thinking about how terrible this situation is.

32.I think the cause of the matter lies with others.

APPENDIX 4

Details of the Arrangement of the Group Counseling Program

Stage 1: Ice - Breaker Activity - Name Repetition Fun, Fast Acquaintance Challenge

I. Activity Content

Activity Name: Name Repetition Fun

Rules: Members form a large circle. The first member says, "I'm XXX (name), and my unique action is XXX (for example, waving and saying 'Hi')." The second member repeats the first member's "name + action" and then introduces themselves: "He/She is XXX, and the action is XXX; I'm YYY, and the action is XXX (such as making a heart - shaped gesture with hands)." This continues in sequence. If a member forgets or makes a mistake, they have to perform a short act (like singing a line of a song, dancing briefly, or telling a joke).

Example: Suppose the first member is Xiao Li, and he says, "I'm Xiao Li, and my unique action is waving and saying 'Hi'." Then the second member, Xiao Wang, needs to say, "He is Xiao Li, and the action is waving and saying 'Hi'; I'm Xiao Wang, and the action is nodding and smiling." If during the process, Xiao Zhao forgets the information of the previous members or makes a mistake in describing the action, Xiao Zhao has to sing a line of a pop song as a short act.

II. Activity Summary

Theory of Person-Centered Therapy: Apply the technique of unconditional positive regard to create a group atmosphere of acceptance and inclusiveness, enabling members to feel respected and supported and reducing their defensive psychology.

Theory of Behavior Therapy: Adopt the technique of positive reinforcement, give affirmation (such as collective applause and verbal praise) to members' behaviors like remembering others' information and actively participating in interactions, enhance members' sense of belonging and enthusiasm for participation, and strengthen positive behaviors.

III. Comparison Table: The role of the activity in enhancing emotional regulation and reducing depression

Activity	Ways to enhance emotion regulation	Ways to reduce depression
Name Repetition Fun	Learn to pay attention to others during interactions, improve adaptability to social situations, enhance emotional stability, and be able to regulate nervous emotions when facing possible mistakes.	Reduce feelings of loneliness, strengthen connections with others, enhance self - efficacy by successfully remembering others' information, and alleviate the low self - worth in depression.

IV. Objectives

1. Break down the barriers among members through interactions and establish initial connections.

2.Remember each other's names and characteristics through fun tasks, reducing the tension in the initial stage of the group.

3.The gamified design increases members' expectations for group activities and creates a relaxed atmosphere.

V. Materials

1.Circular open space (such as the desks and chairs in the classroom arranged in a circle).

2.Small prizes (such as stickers, bookmarks).

VI. Process

1.Initial Stage (5 minutes)

(I) "Today, we're going to play a 'Name Magic' game. The goal is to link everyone's names and characteristics like a chain! It doesn't matter if you make a mistake.

Performing a show is a chance to bring joy to everyone ~" The leader starts with an enthusiastic and humorous tone, quickly attracting members' attention. Using the interesting expression "Name Magic" stimulates members' curiosity, and emphasizing that mistakes are not a big deal alleviates members' possible nervousness.

(II) Deliberately remember the previous person's name wrong and perform an exaggerated action (such as meowing like a cat) to cause laughter and relieve tension. By demonstrating a wrong case, the leader shows a relaxed and humorous attitude, making members understand that the game atmosphere is relaxed and that even mistakes can bring joy, further eliminating members' psychological burdens.

2.Working Stage (20 minutes)

(I) Start from any member, with each person's time not exceeding 30 seconds. The leader uses a mobile phone to time and keeps the rhythm brisk. Select a member as the starting point, and this member introduces themselves according to the rules. Then, the next member quickly follows. The leader strictly controls the time to ensure that the game rhythm is compact and keeps members' attention and participation enthusiasm high.

(II) When a member gets stuck, other members give a smiling encouragement. After the performer finishes, the whole group applauds and says, "Welcome to our happy family!" When a member gets stuck or makes a mistake, other members show understanding and support by smiling. After the performer finishes the show, all members applaud and say the welcome words, making the performer feel accepted and welcomed by the group and strengthening the group's cohesion.

(III) "Little A remembered everyone's actions. Your concentration is amazing!" "Little B's performance let us see your sense of humor ~" The leader gives timely comments during the game, giving specific and sincere praise for members' excellent performances and affirming the efforts and creativity of the performers. This enhances members' self - confidence and sense of participation and guides members to appreciate and pay attention to each other.

3.Closing Stage (5 minutes)

(I) "Now everyone has remembered at least 3 partners' names and actions. This is the beginning of a wonderful connection! Remember, in this group, relaxed participation is more important than perfection ~" The leader summarizes the game, emphasizing the achievements of members in the game and making members realize that they have established initial connections with each other. The leader once again emphasizes the relaxed atmosphere of the group and encourages members to maintain a positive and relaxed attitude in subsequent activities.

(II) Give small prizes to members who made no mistakes throughout the game, or invite performers to draw a "courageous small reward". Reward outstanding members with small prizes to commend their excellent performances. For performers, invite them to draw a "courageous small reward", such as a special bookmark or a small badge, to affirm their courage in facing mistakes and actively participating, so that every member can feel their value and being recognized at the end of the game.

VII. Evaluation

1.Behavioral observation

(I) Carefully observe whether members actively make eye contact with others. For example, when introducing themselves and listening to others' introductions, whether members naturally interact with other members through eye contact. Frequent and natural eye contact indicates that members are actively participating in the interaction and integrating well into the group atmosphere.

(II) Pay attention to whether the laughter and applause are natural and frequent. During the game, natural and frequent laughter and applause reflect that members are enjoying the game in a relaxed and pleasant atmosphere, and the interaction between them is harmonious.

(III) Notice how members respond when they make mistakes, whether they are tense and rigid or actively respond with humor. If a member can actively respond with humor when making a mistake, such as saying "I'll do a little dance" and performing

naturally, it shows that the member can adapt well to the game atmosphere, is in a relatively relaxed psychological state, and has a positive self - regulation ability.

2.Memory effect test

Randomly select 2 members to see if they can accurately repeat the "name + action" of at least 3 other members. Through this test, we can intuitively understand the memory effect of members on others' information in the game and evaluate whether the game has achieved the goal of promoting members' quick acquaintance. If most of the selected members can accurately repeat, it indicates that the game is effective in helping members remember others' information.

3.Atmosphere feedback

Quickly ask after the activity, "Which partner's action impressed you the most?" to test the interaction effect. Through members' answers, we can understand which interactions in the game left a deep impression on members and judge whether the game has successfully promoted the mutual attention and communication among members. If members can quickly and thoroughly respond to a partner's action and related details, it shows that the game has effectively enhanced the interaction and impression among members.

Stage 2: Self - Concept Exploration - "Who Am I"

I. Activity Content

1.Self-Portrait Drawing

Provide each member with colored pens (more than 12 colors) and A4 paper. In the atmosphere created by gentle and soothing light music (such as the pure music version of "Canon"), members freely create self - portraits. After completing the drawings, members share the meanings of their paintings with the group one by one, deeply exploring their self - concept cognition. For example, some members may depict themselves with bright colors, symbolizing a positive and optimistic inner self; some members may highlight a certain physical feature in the painting or add some elements representing their dreams, thus expressing their unique understanding of themselves.

2.Ideal Business Card Design

After the self - portrait drawing and sharing are completed, provide members with blank business card templates and colored pens. Members design an exclusive business card based on their innermost expectations of their ideal selves. The business card can include information such as ideal occupations, identities, personal traits, achievements, and contact information (either virtual or real, which can represent the way they hope to connect with the outside world). After the design is completed, members share their business card design ideas in the group, explain the meaning of each element, and express their pursuit and longing for their ideal selves. Other members listen carefully and can ask questions or give feedback, such as expressing curiosity about a certain element on the business card or pointing out the shining points of the sharer they perceive from the business card.

II. Activity Summary

Person-Centered Theory: By means of the technique of empathic understanding, leaders and members earnestly listen to each other's sharing, feel and understand others' emotions and ideas. The non-verbal expression technique is applied. Through the self-portrait activity, members can explore their self-concept from a non-verbal perspective and express their inner world.

III. Comparison Table: The role of the activity in enhancing self-concept and reducing depression

Activity	Ways to enhance self-concept	Ways to reduce depression
Self - Portrait Drawing	The self - portrait deeply explores the subconscious self - image from a non - verbal perspective. For example, it uses specific colors and patterns to	In a safe and trusting group environment, members are fully accepted when sharing their self - portraits. They actively explore their self -

Activity	Ways to enhance self-concept	Ways to reduce depression
	reveal the inner world, comprehensively enhancing self - awareness and enabling members to have a clearer and more diverse understanding of themselves.	concepts, discover their positive traits, such as finding inner strength from the self - portrait. This helps to enhance their sense of self - worth, reduce the negative self - perception caused by depression, alleviate feelings of loneliness and self - negation, and strengthen their self - identity.
Ideal Business Card Design	Members sort out their understanding of their ideal selves by designing business cards, clarifying the identities and traits they aspire to have, thus enriching their self - understanding from a goal - oriented perspective. During the sharing process, they gain a deeper understanding of the connection between	When sharing business cards, members can feel the respect and support from others for their ideals, and clarify the direction of their value pursuits. At the same time, in the process of constructing their ideal selves, they can stimulate their inner motivation, reduce the confusion and powerlessness brought about by depression, and

Activity	Ways to enhance self-concept	Ways to reduce depression
	their ideal pursuits and their real selves through the feedback from others, and perfect their self - concept systems.	enhance their sense of control over life and positive expectations.

IV. Objectives

1.Create a safe and trusting group atmosphere and initially explore self - images.

2.Start the self - exploration journey through diversified expressions (verbal + non - verbal).

3.With the help of constructing the ideal self, deeply explore self - traits and enrich the understanding of the self - concept.

V. Materials

1.Colored pens (with more than 12 colors) and A4 paper.

2.Light music (such as the pure music version of "Canon").

3."Group Contract" poster.

VI. Process

1.Initial Stage (15 minutes)

(I) The leader introduces the goals of the group activities to members in a sincere and gentle tone, emphasizing that every aspect of each member is worthy of being listened to and respected here. At the same time, the confidentiality principles are elaborated in detail to make members understand that the content shared in the group will not be leaked, creating a safe atmosphere. For example, "Here, every story and every feeling of yours will be properly preserved. We will jointly protect each other's privacy."

(II) Members form pairs, stand face to face at an appropriate distance, then gently extend their hands with palms opposite, look into each other's eyes and smile

for 10 seconds, and then sincerely say "Nice to meet you." Through this simple and intimate interaction, a micro - connection is quickly established between members, alleviating the strangeness of the first meeting and laying a good foundation for subsequent activities.

2.Working Stage (60 minutes)

(I) Play light music, and members start to create freely. During the creation process, the leader quietly walks around among the members and asks some open - ended questions in a timely manner, such as "What do the blue and yellow colors you used represent?" to guide members to think deeply about their creative intentions and help them better express their inner feelings through painting.

(II) Invite members to take turns to display their paintings. The leader uses open - ended questions to guide members to share in depth, such as "Which part of this painting satisfies you the most? Why?" Encourage members not only to describe the surface content of the painting but also to share the emotions and thoughts behind it in depth, promoting in - depth communication and mutual understanding among members.

(III) After the self - portrait sharing is completed, members start to design ideal business cards. The leader can make appropriate rounds during the design process, give encouraging looks or ask soft - voiced questions, such as "Your career choice is very unique. Can you tell me the reason?" to inspire members to think deeply about the construction of their ideal selves.

(IV) Members voluntarily choose whether to share their designed business cards. After the sharing, other members share their feelings and feedback. The leader guides everyone to explore the positive pursuits and potential traits of the sharers from the business card design, promoting mutual support and understanding among members.

3.Closing Stage (15 minutes)

(I) The leader guides members to jointly discuss and develop the group contract, such as "Do not evaluate others' sharing", "Confidentiality principle", etc. During the discussion, fully listen to the opinions of each member to ensure that the contract

content is recognized by all members. After the formulation is completed, all members sign on the "Group Contract" poster to enhance members' sense of identity with the contract and their consciousness of abiding by it.

(II) Distribute sticky notes to each member. After careful consideration, members write down their expectations for the group, such as "I hope to know myself better in the group", "I look forward to gaining sincere friendship", etc. After members finish writing, they put the sticky notes into the "Wish Box". The leader makes a concluding speech, such as "Today, we started our self - exploration journey through painting and business card design. I look forward to everyone continuing to deepen their understanding of themselves and making progress together in the future ~", making members look forward to the subsequent group activities.

VII. Evaluation

1.Self - portrait analysis

(I) When members share the meanings of their self - portraits, record the positive labels (such as "optimistic", "brave") and negative labels (such as "inferior", "contradictory") that appear.

(II) Check whether there are members who express their positive selves through colors/symbols (such as using the sun to represent "warmth").

2.Depth of sharing

(I) Check whether members use "I" statements for in - depth expression (such as "I drew wings in the painting because I long for freedom").

(II) In the "ideal business card" sharing, check whether members can elaborate on the business card design ideas, their pursuit of the ideal self, and whether their thinking about the connection between the ideal self and the real self during the sharing process is in - depth.

3.Contents of the Wish Box

Count the frequency of keywords such as "safety", "being understood", and "growth" to evaluate the establishment of group security. At the same time, pay attention to the expectations related to "ideal business card design" and sharing, such as

"hoping to clarify my ideal direction more clearly", etc., to evaluate the effectiveness of this activity.

Stage 3: Deepening of Self - Concept - "My Growth Trajectory"

I. Activity Content

1.Growth Timeline

Members receive the "Growth Timeline" form, which covers five stages: childhood, primary school, junior high school, senior high school, and the present. Members are required to mark the events and turning points that have had a significant impact on them at each stage. For example, learning to ride a bicycle in childhood, winning a prize in a speech contest in primary school, experiencing the divorce of parents in junior high school, etc. Use colored stickers to distinguish between positive (red) and negative (blue) events. For instance, stick a red sticker for winning an important award and a blue sticker for encountering a major setback. After marking, conduct a detailed analysis of the impact of these events on the current self. For example, participating in club activities in senior high school has changed oneself from being introverted to being cheerful and has improved one's interpersonal skills.

2.Merit Praise

Each member takes turns to stand in the middle of the circle, and other members successively state his or her advantages, and are required to elaborate with specific examples. For example, "Xiao E, last time you took the initiative to help organize the activity. You considered everything very comprehensively. From the venue layout to the personnel arrangement, everything was in good order. This reflects your strong organizational ability." The member being praised holds a piece of sticky note paper and carefully records the key words of the advantages mentioned by everyone.

II. Activity Summary

Narrative Therapy Theory: Utilize the technique of story reconstruction to guide members to review their growth trajectories, reinterpret setbacks as growth experiences, change their perceptions of past negative events, and reduce the negative impact on their self-concepts.

Person-Centered Theory: Employ the technique of empathic response. During the merit praise session, members listen attentively and provide sincere feedback, enabling the praised individuals to feel understood and supported, thus enhancing their positive self-perception.

III. Comparison Table: The effect of activities on enhancing self-concept and reducing depression

Activity	Ways to enhance self-concept	Ways to reduce depression
Growth Timeline, Merit Praise	The growth timeline helps members systematically sort out their growth experiences, reexamine their own abilities and development, excavate positive elements from past experiences, and perfect their self-concept. The concentrated praise for advantages enables members to obtain positive evaluations from the perspectives of others. The elaboration of advantages based on specific examples enriches and strengthens positive self-recognition, and constructs a more comprehensive and positive self-concept.	The growth timeline reinterprets setbacks as opportunities for growth. For example, "failure in the college entrance examination" is transformed into "learning to reflect on oneself and improving learning ability", reducing the impact of negative experiences on the self-concept. In the concentrated praise for advantages, a large amount of positive feedback enhances members' self-esteem, alleviates the low self-esteem and negative thinking in depression, strengthens members' recognition of their own value, and reduces the generation of depressive emotions.

IV. Objectives

1.Deeply explore the influence of growth experiences on the formation of self-concept.

2.Promote emotional communication among members and strengthen positive self-cognition from the perspective of others.

V. Materials

1."Growth Timeline" A4 paper.

2.Colored stickers (red and blue).

3.Memo paper.

VI. Process

1.Initial Stage (10 minutes)

(I) The leader emphasizes the content of the group contract again, such as "Respect others' sharing, do not interrupt or judge", to create a safe sharing atmosphere and make members feel at ease to tell their growth stories.

(II) Members close their eyes, follow the leader's guidance, take a deep breath, relax their bodies, and recall the most fulfilling thing in their childhood in their minds. The leader describes the scene in a gentle and soothing tone, such as "Imagine that you are back in that scene when you were a child. The sunlight is shining on you. You have successfully completed that thing that makes you proud. Feel the joy and pride in your heart at that time", awakening members' positive memories and warming them up for the subsequent sharing.

2.Working Stage (70 minutes)

(I) The leader distributes the "Growth Timeline" form and colored stickers and provides examples for members, such as "Living in the dormitory in senior high school ⟶ Learning to be independent". Members start to fill it out. The leader makes rounds and gives timely guidance, such as "What impact does this setback have on your current personality?" to encourage members to think deeply about the connection between the events and their current selves.

(II) Members are divided into groups of four, and each group selects a group leader to be in charge of the organization. Each person has 5 minutes to share their growth timeline and use the sentence pattern "This experience made me realize that I am _____" to focus on self-growth. During the sharing process, other members listen carefully and can ask appropriate questions but do not interrupt the sharing rhythm. For example, after a member shares the experience of being isolated by classmates in junior high school and states, "This experience made me realize that I am very strong inside and have learned how to get along with different people", other members can ask, "Then how did you learn to get along with different people?" to promote in-depth sharing.

(III) All members sit in a large circle. Starting from any member, they take turns to stand in the middle of the circle to receive concentrated praise for their advantages. The praise time for each member is strictly controlled within 2 minutes, and it must be combined with specific examples. The praised person records the advantages carefully and expresses gratitude to everyone after the praise. For example, when Xiao F stands in the middle, members successively say, "Xiao F, in the last team project, you took the initiative to undertake the most difficult part and stayed up late to complete the task, showing extremely strong sense of responsibility", etc.

3.Closing Stage (10 minutes)

(I) The leader distributes the carefully designed "Growth Energy Cards". Members write down their affirmations of themselves on the back, such as "I am more resilient than I thought", "I have unique creativity", etc. After writing, members give the cards to each other, passing on positive energy.

(II) The leader summarizes the activity, "Every experience is a piece of the puzzle of self-cognition. What others think of you allows us to see a more complete self. Through today's activity, everyone has a deeper understanding of themselves. I hope that in the future, you can continue to move forward with this growth force", emphasizing the importance of growth experiences and feedback from others on self-cognition and encouraging members to continue exploring themselves.

VII. Evaluation

1.Count the proportion of "positive impact" descriptions in negative events. For example, descriptions that transform negative events into positive impacts, such as "Failure in the college entrance examination ⟶ Learning to make plans and improving learning ability", account for the proportion of all negative event descriptions. If the proportion is high, it indicates that members can draw positive strength from setbacks and reconstruct their growth stories well.

2.Check the number of advantages recorded by each member. On average, it should be ≥ 5. At the same time, check whether the advantages are specific and whether they include examples. For example, "You took the initiative to help arrange the venue during the activity and considered everything carefully ⟶ You have the spirit of teamwork". Such records of advantages that include specific behaviors and corresponding traits can more effectively strengthen positive self-cognition.

3.Evaluate the specificity of self-affirmation statements. "I can persist in completing difficult tasks" is more targeted and motivating than vague statements like "I am good". Specific self-affirmation statements indicate that members have a clearer understanding of their own advantages and abilities and can better enhance their self-efficacy.

Note: If you need the specific content of the 4th to 10th integrative group counseling sessions, please contact: 519025458@qq.com.

APPENDIX 5

Application for Conducting Research

关于开展“自我概念、认知情绪调节策略对高职生抑郁的影响及团体综合咨询对其抑郁的干预研究”研究的申请

尊敬的学前教育系：

本人拟开展题为《自我概念、认知情绪调节策略对高职生抑郁的影响及团体综合咨询对其抑郁的干预研究》的研究。该研究旨在通过混合研究方法探讨自我概念、认知情绪调节策略对高职学生抑郁的影响，并开发一种综合团体咨询，以减少学生的抑郁，为心理健康从业者、教育工作者和政策制定者提供理论依据与实践指导。

本研究计划分为两个阶段进行：

第一阶段：定量研究阶段。探索自我概念、认知情绪调节策略对抑郁的影响，采用分层比例抽样方法，拟向贵部门在校学生发放相关问卷，以获取学生在这三个变量的基本数据，分析三个变量之间的相关关系。

第二阶段：开发综合团体咨询。采用目的性抽样方法，从第一阶段选择中等程度抑郁水平的 20 名个体，随机分为实验组与对照组各 10 人。实验组将参与 10 次的综合团体咨询干预，干预内容包括自我概念、认知情绪调节策略两个主题，干预前后对实验组、对照组的三个变量进行量化评估，以检验干预的成效。

上述研究将严格遵循伦理规范，确保所有参与者自愿参与，并签署知情同意书，所有数据仅用于学术研究，不涉及其他任何用途，确保匿名性与保密性。

为顺利推进该研究，特此申请贵部门：

1. 同意本研究在贵部门开展；

2. 协助协调问卷发放等事宜；

3. 提供必要的支持与指导。

本课题研究具有较强的理论价值与现实意义，成果亦可为学生心理健康教育及指导提供实证参考。恳请予以审批支持！

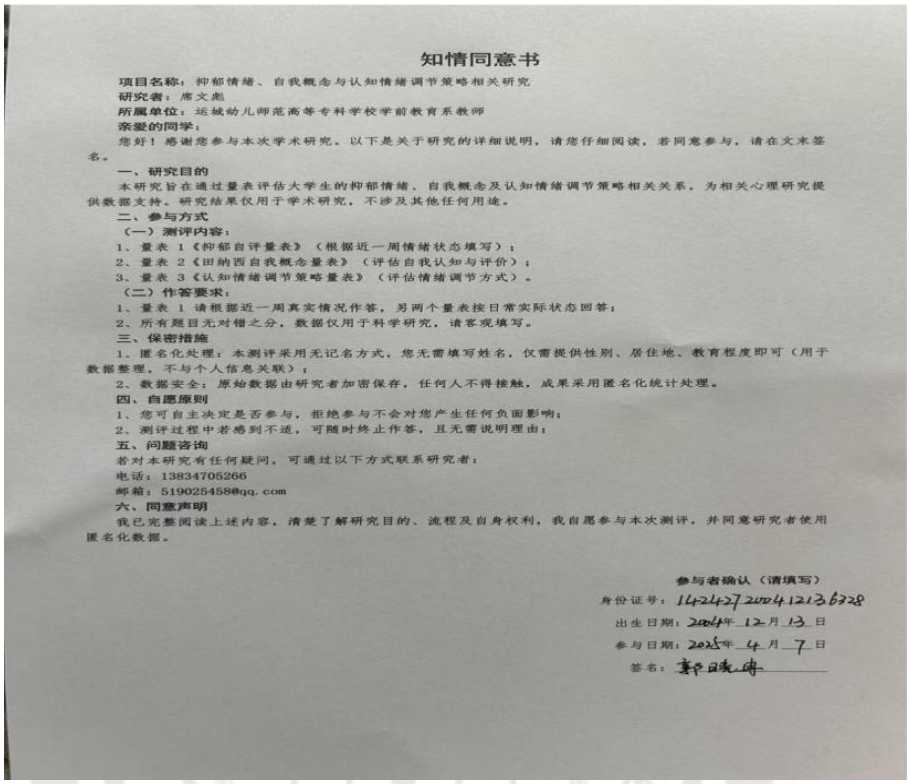
特此申请，望批准！

申请人 席文彪

2025 年 4 月 3 日

APPENDIX 6

Informed Consent Form



知情同意书

项目名称： 抑郁情绪、自我概念与认知情绪调节策略相关研究
研究者： 席文彪
所属单位： 运城幼儿师范高等专科学校学前教育系教师
亲爱的同学：
您好！感谢您参与本次学术研究。以下是关于研究的详细说明，请您仔细阅读，若同意参与，请在文末签名。

一、研究目的
本研究旨在通过量表评估大学生的抑郁情绪、自我概念及认知情绪调节策略相关关系，为相关心理研究提供数据支持。研究结果仅用于学术研究，不涉及其他任何用途。

二、参与方式
（一）测评内容：
1、量表 1《抑郁自评量表》（根据近一周情绪状态填写）；
2、量表 2《田纳西自我概念量表》（评估自我认知与评价）；
3、量表 3《认知情绪调节策略量表》（评估情绪调节方式）。
（二）作答要求：
1、量表 1 请根据近一周真实情况作答，另两个量表按日常实际状态回答；
2、所有题目无对错之分，数据仅用于科学研究，请客观填写。

三、保密措施
1、匿名化处理：本测评采用无记名方式，您无需填写姓名，仅需提供性别、居住地、教育程度即可（用于数据整理，不与个人信息关联）；
2、数据安全：原始数据由研究者加密保存，任何人不得接触，成果采用匿名化统计处理。

四、自愿原则
1、您可自主决定是否参与，拒绝参与不会对您产生任何负面影响；
2、测评过程中若感到不适，可随时终止作答，且无需说明理由；

五、问题咨询
若对本研究有任何疑问，可通过以下方式联系研究者：
电话：13834705266
邮箱：519025458@qq.com

六、同意声明
我已完整阅读上述内容，清楚了解研究目的、流程及自身权利，我自愿参与本次测评，并同意研究者使用匿名化数据。

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身份证号：142427200412136328
出生日期：2004年12月13日
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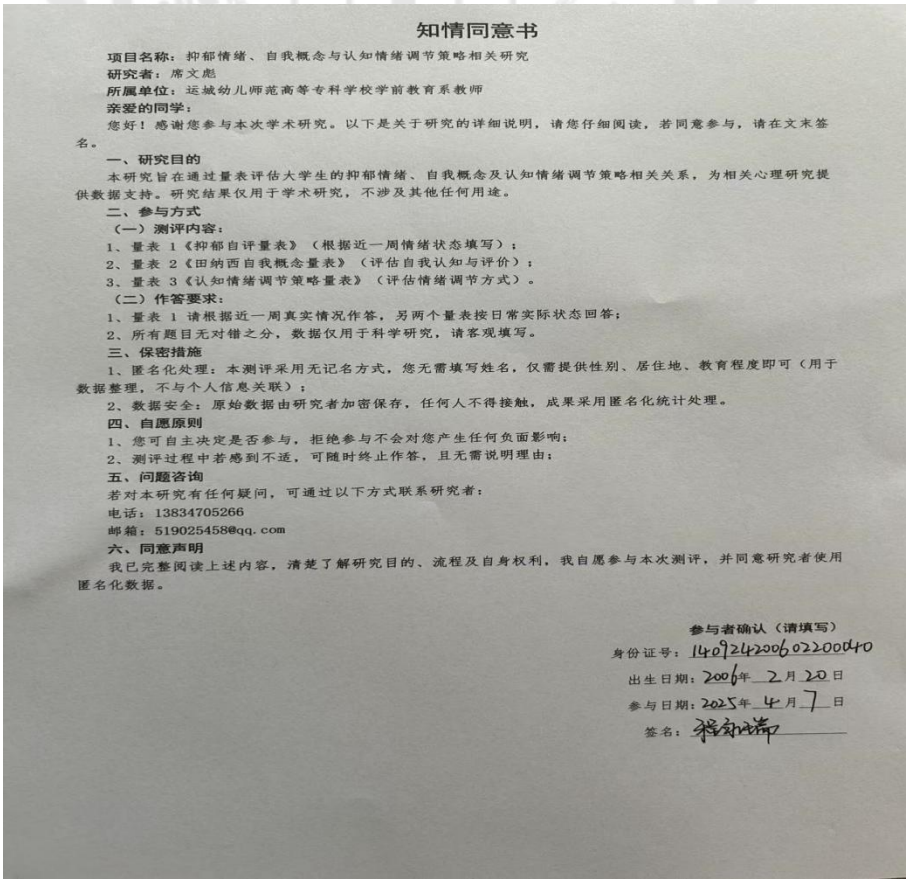

知情同意书

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研究者： 席文彪
所属单位： 运城幼儿师范高等专科学校学前教育系教师
亲爱的同学：
您好！感谢您参与本次学术研究。以下是关于研究的详细说明，请您仔细阅读，若同意参与，请在文末签名。

一、研究目的
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身份证号：140924200602200040
出生日期：2006年2月20日
参与日期：2025年4月7日
签名：[signature]