



THE INFLUENCE OF SELF-IMAGE AND MENTAL TOUGHNESS ON ANXIETY AND  
REDUCING ANXIETY AMONG CHINESE UNIVERSITY STUDENTS THROUGH  
INTEGRATIVE GROUP COUNSELING



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Title	THE INFLUENCE OF SELF-IMAGE AND MENTAL TOUGHNESS ON ANXIETY AND REDUCING ANXIETY AMONG CHINESE UNIVERSITY STUDENTS THROUGH INTEGRATIVE GROUP COUNSELING
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This study was to explore the Chinese college students' mental toughness and self-image, and the influence of anxiety, affecting mental toughness and self-image, and a predictor of anxiety, and develop an Integrated group guidance scheme, enhance the most influential predictor of anxiety, and reduce the anxiety level. The research is divided into two stages, and in each stage, quantitative and qualitative studies are used to confirm the research results. Phase 1 uses a stratified random sampling method to extract 400 students. Using the mental toughness (MTQ48) scale (adaptation), the physical self-image questionnaire (short form), and the anxiety scale (SAS) to collect quantitative data. Results show that mental toughness and self-image, anxiety have a significant negative correlation, and the influence factors of mental toughness on anxiety factors ( $R = 0.164$ , square adjusted  $R = 0.159$ ,  $F = 38.802$ ,  $p < 0.001$ ). In Phase 2, there were a total of 20 students. Their anxiety scores were all between 50 and 69. In the second stage, there were a total of 20 students. Their anxiety scores were all between 50 and 69. They were randomly divided into an experimental group of 10 people ( $n=10$ ) and a control group of 10 people ( $n=10$ ). Comprehensive group counseling intervention was applied to the experimental group, and the two groups were compared, aiming to enhance psychological resilience and reduce anxiety.

Keyword : anxiety self-image, mental toughness, Integrated group counseling, Chinese college students

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## TABLE OF CONTENTS

	Page
ABSTRACT .....	D
ACKNOWLEDGEMENTS.....	E
TABLE OF CONTENTS.....	F
LIST OF TABLE.....	H
LIST OF FIGURES.....	J
CHAPTER 1 INTRODUCTION .....	1
1. Research Background .....	1
2. Research Questions.....	8
3. Research Objectives.....	8
4. Research Significance .....	9
5. Research Scope.....	9
6. Variables .....	10
7. Definitions.....	11
CHAPTER 2 LITERATURE REVIEW.....	14
1. Anxiety.....	15
2. Self-Image .....	27
3. Mental Toughness.....	32
4. Integrated group counseling .....	42
5. The theories and methods employed in the Phase 1 .....	59
6. Theories and methods applied in group counseling in the Phase 2 .....	61
7. Conceptual Framework.....	66

8. Research Hypotheses.....	68
CHAPTER 3 METHODOLOGY .....	69
1.Phase 1: Exploring the Impact of Self-Image and Mental Toughness on Anxiety....	70
2.Research Instruments .....	72
3. Data collection .....	84
4. Research procedures .....	85
5. Data Analyses .....	86
6. Phase 2: Reducing Anxiety through Integrated Group Counseling.....	86
CHAPTER 4 RESULTS.....	95
1.Phase I: The Impact of Body Self-Image and Mental Toughness on Anxiety Among Chinese University Students .....	96
2 Phase Two: An Integrative Group Counseling Program to Alleviate Anxiety Among Chinese University Students .....	110
CHAPTER 5 DISCUSSION AND SUGGESTIONS.....	147
1. Summary of Results .....	148
2. Discussion.....	152
3. Recommendations .....	156
REFERENCES.....	159
APPENDIX .....	171
VITA .....	269

## LIST OF TABLE

	Page
Table 1 Types of Anxiety among College Students .....	26
Table 2 Sample Collection Situation Table .....	70
Table 3 Partial Anxiety Test Table .....	74
Table 4 part of mental toughness (MTQ48) scale (adaptation).....	76
Table 5 Partial Self-Image Scale .....	83
Table 6 Integrative Group Counseling Program .....	91
Table 7 The symbols used in data analysis .....	95
Table 8 Demographic characteristics of the sample (n = 1009) .....	97
Table 9 Descriptive statistics of the variables under study .....	100
Table 10 anxiety and mental toughness and Pearson correlation result of self-image(n = 400).....	101
Table 11 Summary of the regression model of Mental toughness, self-image and Anxiety factors(n = 400) .....	102
Table 12 Mental Toughness and Self-Image ANOVA table(n = 400) .....	103
Table 13 Description and statistics of anxiety, Mental toughness and self-image in the experimental group (n =10) before the test, after the test and during the follow-up period.....	124
Table 14 Anxiety, Mental toughness and self-image description and statistics of the control group (n =10) before the test, after the test and during the follow-up period. ...	125
Table 15 Significant results of between-subject and within-subject effects of pretest, post-test, and follow-up related factors in the experimental group and control group.	126
Table 16 Comparison of Mental toughness at each time point in each group .....	129

Table 17 Comparison of anxiety levels at each time point in each group ..... 130

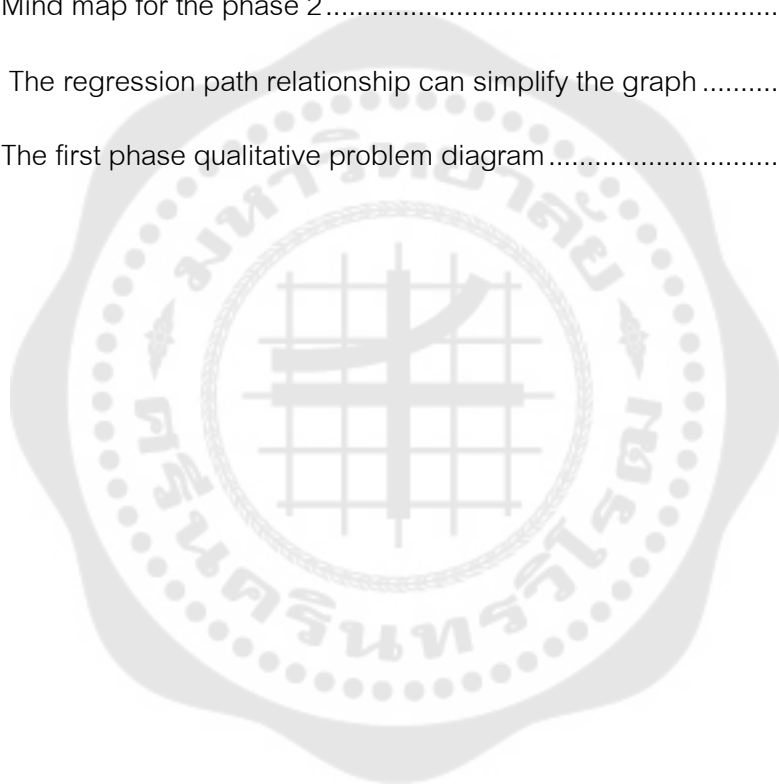
Table 18 shows the differences in anxiety and its influencing factors before the test, after the test and during the follow-up period (pairwise comparisons across time periods). ..... 131

Table 19 shows the differences in Mental toughness before the test, after the test and during the follow-up period, as well as their influencing factors (pairwise comparisons across time periods)..... 132



## LIST OF FIGURES

	Page
Figure 1 Mental toughness element.....	34
Figure 2 Phase 1 conceptual frame diagram .....	67
Figure 3 Phase 2 conceptual frame diagram .....	68
Figure 4 Mind map for the phase 2.....	88
Figure 5 The regression path relationship can simplify the graph .....	104
Figure 6 The first phase qualitative problem diagram.....	106



# CHAPTER 1

## INTRODUCTION

### 1. Research Background

In today's era of rapidly advancing information dissemination, many pieces of information that were previously unfamiliar or unknown have now entered our view due to the explosion of information and the progression of time. University students, as the reserve talent for the nation and a crucial factor in the country's future, are increasingly facing psychological issues that are being given more attention. For instance, at China's top-ranked National University of Defense Technology, the dropout rate reached 12.70% in 2022. With 2,758 new students admitted in 2022, this implies approximately 350 students dropped out (National University of Defense Technology, 2022). As educators in higher education, we must pay attention to dropout situations. Similarly, top universities such as Tsinghua University, Peking University, Fudan University, and Shanghai Jiao Tong University also face dropout issues. Tsinghua University sees around 281 students withdrawing annually, while Peking University has about 142 students choosing to withdraw each year (Tsinghua University, 2022 ; Peking University, 2022). This dropout issue is not unique to Chinese universities; it also occurs in universities worldwide. Among those who drop out, many are affected by various forms of anxiety, including academic anxiety, employment anxiety, emotional anxiety, and anxiety related to social interactions and peer competition.

Anxiety refers to the emotional experience of tension, worry, and distress in response to a situation that is anticipated to have negative effects or threats to oneself. It is a common psychological health issue (Liu & Qi, 2018). When an individual's experience of anxiety exceeds their coping capacity, it can lead to negative impacts, such as affecting mood, reducing work efficiency, causing sleep disturbances, and impairing physical health (Wen, 2021). Epidemiological surveys indicate that the prevalence rate of anxiety risk is 15.8%, with youth being a high-risk group for anxiety (Fu & Zhang, 2023). Everyone may experience anxiety from time to time, but individuals with anxiety disorders often endure intense and excessive fear and worry. These

feelings are usually accompanied by physical tension and other behavioral and cognitive symptoms, making them difficult to control and causing significant distress. Without treatment, anxiety disorders can persist for a long time. They interfere with daily activities and may damage a person's family, social, academic, or work life. Individuals with anxiety disorders might experience excessive fear or worry about specific situations (e.g., panic attacks or social events) or, in the case of generalized anxiety disorder, about a wide range of daily situations. These symptoms typically last for an extended period—at least several months. Individuals often avoid situations that provoke their anxiety, but this avoidance can lead to a cycle of worsening anxiety.

For university students, who are a crucial force in society and transitioning from adolescence to adulthood, the pressures they face are unprecedented (Ghrouz, Noohu, & Dilshad et al., 2019). Many students struggle with adapting to the autonomy of university studies after the strict management of high school. The complexity of interpersonal relationships also confuses them, and the uncertainty about the future and fear of making choices can be overwhelming (Bruffaerts, Mortier, & Kiekens et al., 2018). Given that university students' psychological maturity is still developing, anxiety is widespread among them (Kim, Yu, & Kim, 2020), and some students even choose to drop out as a form of escape. However, dropping out is just one manifestation of anxiety among university students; it is not a solution to anxiety, but rather a sign that the student is struggling to cope with their anxiety on their own. Many students continue to suffer from anxiety but are unsure how to address it, leading to ongoing distress.

In China, universities typically have student counseling centers. According to data from the Student Counseling Center at Wuchang University of Technology, interviews with students who sought counseling for anxiety and those who withdrew from school due to anxiety revealed that these students often experience poor physical appearance, body shape, and health conditions. Additionally, descriptions from peers indicate that these students generally have introverted personalities, are reluctant to communicate, and some barely engage in social interactions. Their academic skills are also below average, and they lack resilience and coping abilities when facing problems

and challenges, as well as an optimistic attitude. When dealing with various pressures from school, life, academics, and interpersonal interactions alone, these students often exhibit anxiety. Generally, anxiety is influenced by factors such as self-image and mental toughness (Wuchang University of Technology, 2023). As mentioned by Li (2017) in his study on the causes of anxiety among university students and adjustment methods, anxiety is characterized by fear and worry in social interactions, which can affect an individual's self-perception and self-image. Anxiety can lead to distorted self-evaluations, resulting in a negative self-image. For instance, anxious university students may focus more on others' opinions of themselves, leading to self-doubt and insecurity. According to Yu (2019), in her research on the relationship between self-objectification and appearance anxiety among female university students, experiences of objectification lead women to internalize others' perspectives on their physical appearance, resulting in self-objectification and, consequently, appearance anxiety. Appearance anxiety is a type of socially evaluative anxiety related to one's physical appearance, which may stem from excessive concern about one's appearance and negative expectations of not meeting societal beauty standards. Research by Liang, Zhang, and Wu (2019) indicates that students with weakened mental toughness due to emotional abuse during childhood are more prone to anxiety when facing problems or difficulties. In contrast, individuals with strong mental toughness are better at self-regulation and adapting to their environment, making effective use of internal and external resources, and positively adjusting their mindset to handle crises and challenges in interpersonal interactions. This underscores the protective role of mental toughness in the psychological health of individuals who have experienced childhood trauma. This research on mental toughness and self-image emphasizes their critical roles in understanding and managing anxiety. By strengthening mental toughness, individuals can better cope with life's challenges and reduce the impact of anxiety.

Self-image is a multidimensional construct that encompasses both positive and negative attributes, including perceptions, attitudes, and behaviors (Cash, 2002; Thompson, 1999). It refers to an individual's overall cognitive and subjective evaluation

of their identity, traits, abilities, values, appearance, and social roles. Self-image is a crucial component of an individual's internal psychological world, deeply influencing their emotions, behaviors, motivations, and interactions with others. A positive body image involves feeling satisfied with one's body, being comfortable with one's appearance most of the time, and having a positive perception of oneself. People with a positive body image accept their appearance and often feel proud of their bodies, even if their appearance does not align with societal ideals. The development of self-image includes aspects such as self-cognition, self-evaluation, and self-intention, with self-intention being a significant component of self-image (Elwood Jacobson, 2001). A positive self-image is essential for university students' psychological health and well-being. It enhances self-confidence and self-esteem, promotes positive emotional experiences and social interactions, and improves the ability to cope with challenges and difficulties. In contrast, a negative self-image can lead to low self-esteem, anxiety, depression, and other negative emotions and issues.

In psychology, Mental Toughness is a composite quality referring to an individual's ability to quickly recover and adapt when facing pressure, setbacks, and difficulties. Mental Toughness includes three core elements: resilience, adaptability, and strength (Cheng, 2024). It represents a psychological state characterized by perseverance, strong adaptability, and the ability to recover and continue developing despite challenges, stress, and adversity. Mental Toughness can be understood as a personality trait or psychological capability that enables individuals to maintain a positive, optimistic attitude and exhibit strong stress resistance and recovery abilities in the face of difficulties. This mental toughness not only helps individuals maintain stable performance under challenges but also fosters personal growth and development. For university students, possessing good mental toughness means having strong adaptability, stress resistance, and the ability to adjust negative emotions promptly. Conversely, students with lower mental toughness may struggle with adaptation, stress management, and timely emotional adjustment, leading to self-doubt and various forms of anxiety.

Research indicates that individuals with anxiety often neglect aspects of their self-image, such as appearance, body shape, personal image, and interpersonal skills, while being overly sensitive to others' evaluations of them. When faced with problems and difficulties, these individuals may tend to retreat and avoid challenges, lacking effective stress resistance and a positive, optimistic attitude. Excessive concern about others' opinions can lead to pessimistic emotions and hinder self-adjustment. Poor mental toughness exacerbates these issues, making individuals more susceptible to various anxiety disorders. On the other hand, students who can self-regulate negative emotions typically exhibit strong mental toughness, effectively managing stress and trauma. Negative factors in the adaptation process can impede the development of mental toughness, and anxiety can have a detrimental impact on an individual's ability to cope with adversity, thereby weakening mental toughness (Li, M. H., 2022).

Most current research focuses on the relationship between self-image and anxiety, as well as mental toughness and anxiety among university students. However, there has been little in-depth empirical research on the relationship among self-image, mental toughness, and anxiety, particularly among university students in Chinese universities. Therefore, it is necessary to study and analyze the impact of self-image and mental toughness on anxiety among Chinese university students to provide a scientific theoretical basis for preventing and reducing the occurrence of anxiety in this population. To effectively address the anxiety issues of Chinese university students, it is crucial to understand the factors and pathways that influence anxiety. This understanding will facilitate more effective psychological counseling and intervention, thereby preventing severe psychological impacts caused by anxiety and ensuring a healthy growth environment and learning atmosphere for university students (Pei, 2024).

In many Chinese universities, the student population is large, and a significant number of students experience anxiety symptoms. Intervening and treating students' anxiety is a massive undertaking, requiring an efficient yet economical method to assist. Integrated group counseling therapy was developed to meet this need. Integrated group counseling applies the principles of psychotherapy to a group of individuals with

common developmental issues and similar psychological distress, using interpersonal interactions within the group to achieve therapeutic goals (Chen et al., 2016). It is a form of psychological counseling conducted in a group setting, where individuals engage in interpersonal interactions to observe, learn, experience, and explore themselves. This process helps individuals improve their relationships with others, learn new attitudes and behaviors, and promote adaptation and development (He & Fan, 2010). Art psychotherapy, which includes dance therapy, music therapy, and drama therapy, is an intervention method that combines two important fields: art and psychology. In the context of art therapy, clients may express psychological images through visual art forms. Through art psychotherapy, these psychological images can be used to release uncomfortable emotions, clarify thoughts, and address psychological needs. This expression of psychological images reflects and integrates the client's developmental status, abilities, interests, personality, thoughts, and inner emotions (Zeng, 2022).

For university students, who tend to be lively and imaginative, individual counseling is not suitable for addressing anxiety issues, as it hinders data collection. Individual data collection is labor-intensive and prone to large and inaccurate errors. In contrast, integrated group counseling is more economical and can help a larger number of students. Integrated group counseling applies the principles of psychotherapy to a group of individuals with common developmental issues and similar psychological distress. Through interpersonal interactions, group members influence each other, achieving therapeutic goals (Chen, 2021). Integrated group counseling is suitable for university students, and the high-functioning group therapy model can alleviate negative emotions, reduce anxiety, and improve interpersonal skills among anxious patients (Chang, 2018). Group therapy is an intervention method in psychotherapy that allows group members to re-enact early relationship patterns in a safe environment, externalize conflicts and emotions, and thus reshape internal relationship patterns and improve mental health (Huang, 2024). Research by Zhang, Zhong, and Jin (2020) suggests that depressed university students often feel low and isolated, and activities like group discussions, integrated group counseling, and lectures can compensate for this

shortcoming. In an integrated group counseling environment, they form close bonds due to shared psychological issues, opening up, sharing experiences, and providing genuine feedback. This interaction can motivate them to change erroneous perceptions and promote positive behavioral changes. Integrated group counseling is widely used across different fields of psychology, and its effectiveness is well established. Combining art psychotherapy with integrated group counseling offers a new approach for research. A "diversified" group psychological counseling method is conducive to the exchange of values and information, as group members with different backgrounds and experiences bring diverse perspectives and understandings of issues. This diversity provides rich context for group members, broadens their thinking, and expands their horizons. In today's society, with an increasing number of innovative approaches, the bold combination of art and integrated group counseling provides a solid foundation for this new form of psychotherapy. Unlike traditional psychotherapy, this method uses art as a medium to effectively address emotional and behavioral problems. It enhances participants' confidence and sense of security while promoting interaction and cooperation among group members, thereby demonstrating the unique advantages of this integrated approach.

In summary, research on the psychological anxiety of university students has become increasingly important. This study is divided into two phases. The first phase involves researching the factors influencing anxiety, combining theories and the findings of many scholars to conclude. Based on the results of the first phase, a counseling program will be developed in the second phase. This second phase involves integrated group counseling, adjusting factor variables based on the factors themselves, and using a "diversified" approach to combine integrated group counseling experiments with art. The goal is to determine how anxiety changes in the end. The research method for this study involves sampling students from universities, administering self-image, mental toughness, and anxiety questionnaires, and selecting students with a total anxiety score of 50-69 (Self-Rating Anxiety Scale, SAS). These students will then be divided into groups for group counseling intervention. The experimental group receiving intervention

will be compared with a control group that does not receive intervention to determine the impact on anxiety. This experimental study aims to effectively reduce and prevent anxiety among university students, ultimately protecting them from anxiety and promoting their physical and mental health, while also contributing to the stability of the campus and providing a healthy environment for university students to grow.

## 2. Research Questions

2.1 Which is the most influential predictor of anxiety among mental toughness and self-image?

2.2 Will the developed integrated group counseling based on the most influential predictor of anxiety in phase 1 reduce anxiety?

## 3. Research Objectives

This research consisted of 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 mental toughness and self-image of Chinese college students and the correlation with anxiety.

2) To study the influence of mental toughness and self-image on Chinese college students' anxiety, and determine whether Chinese college students' anxiety is the most significant predictor.

Phase 2: quasi-experiment

3) Based on the research results of the first phase, design an Integrated group counseling program with the most significant influencing factor on the anxiety of Chinese college students, thereby reducing the anxiety of Chinese college students.

4) Through Integrated group counseling, investigate the effectiveness of the intervention in reducing anxiety among Chinese college students.

#### 4. Research Significance

This research is expected to make a modest contribution to the relevant knowledge regarding the impact of anxiety:

4.1 It is beneficial to understand and regulate anxiety from self-image and mental toughness.

4.2 It is conducive to understanding the causes of anxiety formation and providing a theoretical basis for Integrated group counseling.

4.3 It is expected to understand the psychological predicaments of college students, prevent and reduce the occurrence of anxiety among college students, and provide a harmonious and stable growth environment for them.

4.4 From the perspective of practical significance, this study can also provide a relevant reference basis for the intervention strategies of anxiety behaviors among Thai college students.

In conclusion, whether in theoretical or practical significance, the primary task is to prevent and reduce anxiety among college students. We provide multi-faceted support and assistance to college students through methods such as questionnaires and group consultations. Understand the impact on anxiety, to better create a healthy, positive, and upward growth environment for college students, improve their mental health level, and free them from the trouble of anxiety.

#### 5. Research Scope

5.1 In the first phase, explore the influence of self-image and mental toughness on anxiety.

The survey subjects of this study are primarily university students from a university in Wuhan. A proportional stratified sampling method is employed, targeting students from four academic years (freshman to senior) across seven universities. The sampling population is determined using the Taro-Yamane method, with an expected margin of error ( $e$ ) set at  $\pm 0.05$ , indicating a minimum sample size of 364, accounting for 10.3% of the total population. The total population consists of 3,874 students from the seven universities, distributed as follows: 890 freshmen, 1,047 sophomores, 984 juniors,

and 953 seniors. A 10.3% sampling ratio is applied to each grade within the seven universities to determine the corresponding number of participants. Considering the possibility of incomplete and thus invalid data, a total of 400 samples were ultimately collected, with an average age ranging from 18 to 22 years. All participants volunteered to take part in the study.

#### **5.2 In the second phase, reduce anxiety among Chinese university students by developing an integrative group counseling program.**

Based on the research objectives, a purposive sampling method was used to select the research sample. For ongoing group activities, an optimal size is approximately eight members, one leader, and one recorder (Corey, 2016). Considering the possibility of members dropping out during integrated group counseling, it is advisable to select a group of ten participants initially. Since both the experimental and control groups require an equal number of participants, 20 individuals with anxiety scores between 50 and 69 from the preliminary phases should be selected for the second phase.

These students are then arranged in ascending order. They are randomly divided into two groups: one group serves as the control group, while the other group becomes the experimental group, each consisting of 10 members. The experimental group will undergo integrated group counseling activities, while the control group will not receive any counseling intervention. After the integrated group counseling sessions, comparisons will be made with the control group. Following the integrated group counseling, all students in the experimental group will be interviewed.

## **6. Variables**

### Phase 1

Quantitative Research (QUAN):

Independent Variables:

Self-image

Mental toughness

Dependent Variable: Anxiety

## Phase 2

Independent variables:

Integrative group counseling

Dependent variable:

Anxiety

Mental toughness

## 7. Definitions

### 7.1 Anxiety

Anxiety refers to an emotional state characterized by unpleasant inner turmoil, often involving a generalized and unfocused overreaction to a situation, accompanied by behaviors such as pacing, physical complaints, and rumination. More simply, it manifests as a state of agitation and distress. Anxiety can have a profound impact on individuals' mental well-being, potentially leading to extreme behaviors such as self-harm or suicide in severe cases. Essentially, anxiety is a negative human emotion, and research into anxiety aims to alleviate and prevent it by identifying contributing factors. In this study, the focus is on university students experiencing moderate anxiety, as measured by the Self-Rating Anxiety Scale (SAS) with scores between 50 and 69. The issue of anxiety has garnered increasing attention in recent years, with university anxiety becoming a significant concern affecting students' academic performance, employment prospects, and overall well-being. This study employs the Self-Rating Anxiety Scale (SAS), developed by Chinese-American professor Zung Zai in 1971. The scale has been extensively validated and adapted to the Chinese context, demonstrating good reliability and validity.

## 7.2 Self-Image

Self-image refers to an individual's perception of themselves, serving as an indicator of mental health and a determinant of behavior. A negative self-image can lead to pessimistic or critical self-evaluations, which in turn can affect one's ability to face challenges. A poor self-image can result in significant psychological issues. In this study, university students are a group particularly concerned with self-image, paying attention to their appearance and others' evaluations. The BSIQ comprises nine factors: overall appearance evaluation, weight evaluation, health/fitness evaluation, adverse impact, health/fitness impact, social dependence, ideal investment, attention to appearance, and height dissatisfaction, totaling 51 items. This questionnaire has been validated and adapted for the Chinese context, showing good reliability and validity.

## 7.3 Mental Toughness

Mental toughness refers to the ability to manage stress and remain unaffected by its potential negative impact through psychological adjustment. Individuals with good mental toughness can regulate themselves effectively and possess the capacity to handle stress and adversity. In this study, mental toughness refers to the mental toughness of university students, specifically their ability to adapt and respond to stress, challenges, and adversity. Research indicates that mental toughness is the phenomenon of individuals effectively adapting and developing despite severe threats or adversity. This study uses the Mental Toughness Questionnaire (MTQ48), which assesses mental toughness based on four dimensions: control, challenge, confidence, and commitment. Dr. Lee Crust of Lincoln University compared the integrative SMTQ and MTQ48 scales and concluded that "both tools appear to capture the core components of mental toughness, but MTQ48 seems to provide a more comprehensive measure."

#### 7.4 Integrative group counseling

Integrative group counseling **refers to** a form of psychological counseling that is conducted in a group setting. Groups can address specific issues and employ integrated therapeutic methods. It involves bringing together individuals with similar concerns to discuss and address issues such as stress and anxiety, and to explore communication and trust-building within the group. Integrated group counseling makes use of various therapeutic approaches, including psychoanalysis, rational emotive behavior therapy, behaviorism, person-centered therapy, and narrative therapy. Through multiple group sessions, members are encouraged to engage in self-reflection, exploration, and positive change within a supportive and stable environment. The sessions help individuals grow and develop, ultimately aiming to treat psychological issues. Each group session lasts for 2 hours and is held once a week for a total of 8 weeks. The process is generally divided into an initial phase (Week 1), a growth phase (Weeks 2-7, including transition, normalization, and working phases), and a concluding phase (Week 8).

It is noteworthy that this study integrates art therapy techniques into integrated group counseling. Art therapy, unlike traditional psychotherapy that primarily uses verbal communication, incorporates artistic materials and activities as therapeutic tools. This includes music therapy, dance therapy, and art therapy. Under the guidance of a leader, group activities are combined with art therapy methods to enhance participants' self-image and mental toughness, thereby improving their anxiety levels. The project aims to provide targeted support based on enhancing self-image and mental toughness, ultimately reducing and preventing anxiety among Chinese university students.

#### 7.5 Chinese university Students

Chinese university Students refer to undergraduate students enrolled at Wuchang University of Technology in Wuhan, Hubei, China. These students come from

seven universities within the university and include students from the four academic years: freshmen, sophomores, juniors, and seniors.

## CHAPTER 2 LITERATURE REVIEW

This chapter provides a review of the relevant theories, definitions, influencing factors, and strategies of anxiety. The first phase of the research is focused on self-image and mental toughness, two definitions, measurement, and the research status quo of independent variables. The research in the second phase was consistent with anxiety intervention and integrative group counseling as intervention programs. The specific contents of this chapter are as follows:

### 1. Anxiety

#### 1.1 Definition of Anxiety

#### 1.2 Theoretical Research on Anxiety

#### 1.3 Measurement of Anxiety

#### 1.4 Related Research on Anxiety

#### 1.5 Research on Anxiety Among University Students

### 2. Self-Image

#### 2.1 Definition of Self-Image

#### 2.2 Measurement of Self-Image

#### 2.3 Research on the Relationship Between Self-Image and Anxiety

### 3. Mental Toughness

#### 3.1 Definition of mental toughness

#### 3.2 Measurement of Mental Toughness

#### 3.3 Research on the Relationship Between Mental Toughness and

Anxiety

### 4. Integrated group counseling

#### 4.1 Definition of integrated group counseling

#### 4.2 Integrative group consulting advantages

4.3 Integration of Psychological Counseling Theories and Techniques in Integrated Group Counseling

4.4 Design of Integrated Group Counseling

4.5 Application of Integrated group counseling to improve university students ' Students'Anxiety

4.6 Current Status of Integrated Group Counseling Research Domestically and Internationally

5. The theories and methods employed in Phase 1

6. Theories and methods applied in group counseling in Phase 2

7. Conceptual Framework

8. Research Hypotheses

The following will elaborate on each point in detail based on the above outline.

## 1. Anxiety

### 1.1 Definition of Anxiety

Anxiety is an emotional state characterized by an unpleasant sense of internal turmoil, often associated with subjective distress over anticipated events (Davison, 2008). It typically accompanies behaviors such as pacing, physical discomfort, and rumination (Seligman, 1989). Anxiety involves a pervasive sense of unease and worry, affecting various aspects of one's well-being and often resulting in an exaggerated response to perceived threats (Bouras & Holt, 2020). Common symptoms include muscle tension (American Psychiatric Association, 2013), irritability, fatigue, shortness of breath, abdominal tightness, and difficulty concentrating. Anxiety is closely related to fear, which is a response to real or perceived immediate threats; anxiety, on the other hand, involves anticipation of future threats, including fear (American Psychiatric Association, 2013). Individuals experiencing anxiety may avoid situations that previously triggered anxiety (Barker, 2003). Triggers for anxiety can include threats to bodily integrity, self-esteem, or self-image.

While anxiety is a normal human response, it may be diagnosed as an anxiety disorder when its severity exceeds typical levels, persists longer than usual, or

cannot be reasonably justified. Anxiety disorders, such as generalized anxiety disorder and obsessive-compulsive disorder, have specific clinical definitions (Evans, 2021). Anxiety disorders are typically characterized by persistence, usually lasting six months or longer, although this duration can vary, especially in children (American Psychiatric Association, 2013).

Anxiety reflects a negative emotional response to a perceived or anticipated worsening of real or future events' value characteristics (Qiu, 2018). In contrast, anticipation is an emotion reflecting positive expectations about the future. Anxiety involves complex, unpleasant emotional states such as tension, unease, worry, and distress related to anticipated danger or threat (Liu, 2018). While anxiety is a normal human emotion, excessive or insufficient anxiety can lead to emotional or physiological disorders.

Realistic anxiety is a normal emotional response to potential challenges or threats, and it aligns with the reality of the danger. It is adaptive, as it motivates individuals to mobilize their resources to cope with the threat effectively, and it disappears when the danger is resolved. Realistic anxiety is an essential part of human adaptation and problem-solving, forming part of the evolutionary emotional and behavioral response to environmental challenges.

Pathological anxiety, on the other hand, is characterized by persistent, unfounded tension or a sense of impending disaster or threat, accompanied by significant autonomic dysfunction and motor agitation. It often leads to subjective distress or impaired social functioning. Key characteristics of pathological anxiety include: 1) The intensity of anxiety lacks a realistic basis or is disproportionate to the actual threat; 2) Anxiety causes significant emotional distress and diminished self-efficacy, making it maladaptive; 3) Anxiety is relatively persistent and does not resolve with the resolution of the objective problem, often related to personality traits; 4) It includes autonomic symptoms such as chest discomfort, palpitations, and shortness of breath; 5) A sense of impending disaster or misfortune; 6) Extreme pain and fear related

to anticipated threats, with perceived lack of coping ability, potentially affecting real-life adaptation.

Anxiety and fear are closely related but distinct emotional states. Fear typically arises as an immediate reaction to a real or perceived direct threat. At the same time, anxiety involves a more anticipatory concern about potential future threats, which may include elements of fear (American Psychiatric Association, 2013). When individuals face anxiety, they may choose to avoid situations that have previously triggered anxiety in an attempt to prevent experiencing that discomfort again (Barker, 2003).

The causes of anxiety are diverse and may involve perceived or actual threats to physical integrity, mental toughness, self-esteem, or self-image. However, it is important to note that anxiety is not entirely negative; as a normal human response, it can help us better cope with challenges and threats in appropriate contexts. When anxiety becomes excessive, prolonged beyond normal limits, or lacks reasonable justification, it may transform into a pathological condition known as anxiety disorder.

Anxiety disorders, such as generalized anxiety disorder and obsessive-compulsive disorder, each have distinct clinical definitions and characteristics (Walsh, 2021). The key distinction between anxiety disorders and everyday anxiety is their persistence and impact. Typically, anxiety disorders are characterized by a sustained psychological state lasting six months or longer. However, this standard allows for some flexibility based on specific circumstances, such as in children, where the duration might be shorter (American Psychiatric Association, 2013).

In summary, while anxiety affects emotions and, in severe cases, can lead to physiological disorders, it is fundamentally an emotional response. Excessive accumulation of distressing emotions can potentially cause physical health issues. This study focuses on Chinese university students, specifically sampling those with mild to moderate anxiety. Severe anxiety and associated physiological disorders are beyond the scope of this research.

## 1.2 Theoretical Concept of Anxiety

Anxiety, being one of the most common psychological disorders, has been a vibrant area of research in psychology (Spielberger & Vagg, 1987). However, there are various perspectives on the definition of anxiety. Existing research mainly includes psychoanalytic, physiological, phenomenological, behaviorist, cognitive, and social support viewpoints.

### 1.2.1 Phenomenological / Humanistic Theory

Phenomenological and existential theories of anxiety can be traced back to Kierkegaard, who, in his work "The Concept of Anxiety," suggested that the existence of irrational subjective experiences is central to human existence. Anxiety arises with the formation of self-awareness and the emergence of the will for free choice (May, 1950). From an experiential perspective, one understands anxiety as not only stemming from one's own worries but also from the anxiety experiences of others. From an existentialist standpoint, it views anxiety as a result of self-creation. As perception evolves, anxiety becomes inevitable; it represents the bifurcation of human existence from non-existence, and life from death (Luo, 2003). The book "The Meaning of Anxiety" explores anxiety from a broader social perspective, addressing its meaning, classification, causes, and its relationship with culture, guilt, and personality. He suggests that anxiety arises from both social and psychological causes, such as the disruption of contemporary societal values, which threatens the sense of existence and basic values of individuals (Yang, 1999). Later, humanistic psychologists widely accepted existentialist views on anxiety. For instance, comparative studies of patients and normal individuals elaborate on the essence and causes of anxiety, asserting that it is essentially a state of psychological disturbance arising when an organism's existence is

threatened (Ma, 2002). Luo(2003) believes that when individuals encounter information that is inconsistent with their self-perception, they will experience anxiety.

### 1.2.2 Psychoanalytic Theory

Anxiety is a central concept in psychoanalytic theory, and this approach has a thorough and systematic study of anxiety. Freud was the founder of psychoanalytic theory. During his lifetime, he put forward two main theories of anxiety. His early theory suggested that anxiety originates from the id, while his later theory posited that anxiety originates from the ego. Anxiety is classified into three types based on the sources that threaten the self (external world, id, superego): objective (true) anxiety, neurogenic anxiety, and moral anxiety (Ye & Guo, 1998; Zhao & Shi, 2003). The development of anxiety consists of two decisive stages: the primary anxiety stage and the subsequent anxiety stage. Primitive anxiety is essentially a "primordial state" that arises when instincts threaten the ego and lacks sufficient cognitive and defensive capacity. Subsequent anxiety refers to anxiety that mobilizes the already developed internal defense mechanisms.

The Neo-Freudians critically inherited Freud's views on anxiety, opposing his overemphasis on instinctual drives and proposing new perspectives from different angles. Karen Horney, for example, divided anxiety into manifest anxiety and basic anxiety. She believed that a child with basic anxiety is likely to develop neurosis in adulthood and emphasized seeking the roots of anxiety in both macro social environments and micro individual environments. She argued that contradictions in social culture primarily affect individuals through early interpersonal relationships, especially parent-child relationships. The psychological mechanism of anxiety is basic hostility-repression-basic anxiety (Cai, 1995). Sullivan(1953) proposed that anxiety originates from interpersonal relationships, including relationships with real others and imaginary self-representations. When individuals face condemnation from significant

others or anticipate such condemnation, anxiety arises. He introduced the theory of anxiety transmission to explain the psychological mechanism of anxiety. Later, anxiety was defined on the basis of the socialized self, its relationship with self-esteem threats was noted, and it was pointed out that the self has a defensive function against anxiety, mainly through sublimation, selective neglect, division, and substitution. He distinguished between mild and severe anxiety, with mild anxiety being common in everyday life and having a socializing function, while severe anxiety is experienced only by infants and individuals with psychological disorders, having a destructive impact. Erikson believed that anxiety results from setbacks in a child's psychological development during social life. A child deprived of attentive care from parents, experiencing neglect, abandonment, or hostility, will grow up distrusting others and their environment, especially themselves, leading to persistent anxiety. Anxiety depends on whether the ego can choose appropriate behavioral ways to release instincts, and the essence of anxiety is the inability of the ego to use preferred ways to release instincts.

### 1.2.3 Behaviorist Theory

The prominent representatives of behaviorist theories on anxiety include Watson, Pavlov, Thorndike, Skinner, and Bandura. They view anxiety as a learned response that can be acquired through learning and also eliminated through learning. The theoretical basis for anxiety treatment proposed by behaviorists includes classical conditioning theory, operant conditioning theory, cognitive-behavioral correction theory, and social learning theory, as well as Wolpe's principle of reciprocal inhibition. Mowrer, Miller, and Dollard developed the viewpoint that "anxiety is a conditioned response produced by several pairings of a conditioned stimulus with an unconditioned stimulus," suggesting that reducing impulses leads to the occurrence of responses, and reinforcing them can increase the likelihood of response. Staats and Eifert changed the way of thinking and established a multi-level anxiety behavior theory. This theory's most significant contribution is integrating conditioning theory with cognitive theory, based on two premises: one, that a central emotional response exists based on anxiety, and two,

that aversive stimuli or more symbolic language can lead to the development of anxiety (Liu, 2006). Eysenck's explanation of anxiety is derived from his personality theory, suggesting that anxiety is partially hereditary and partially learned. The learned portion primarily depends on conditioned fears and the state of the nervous system.

#### 1.2.4 Physiological Theory

Most of the physiological research on anxiety has been obtained through experimental studies (Li, 2000; Wan, 2002). Gray (1982) proposed that the diaphragm-hippocampus system is fundamental to anxiety and other emotions. Domestic scholars have also found that weakened emotional control functions of the cerebral cortex and hyperactivity of the sympathetic nervous system are related to anxiety.

#### 1.2.5 Cognitive Theory

American psychologist Dodge (1980) proposed a significant information-processing model. This model posits that the entire information-processing process from an individual facing a cue in a social situation to responding behaviorally includes five steps or phases: encoding of input information, interpretation of cues, searching for responses, deciding on a response, and executing the response. However, cognitive processing biases may occur at each phase. Current psychologists have conducted in-depth research on cognitive factors related to anxiety, starting from Dodge's information-processing model. Evidence shows that anxious individuals are more likely to focus on threatening information and tend to interpret ambiguous, unclear stimuli as threatening cues. Even in the presence of contradictory evidence, anxious individuals are likely to maintain absolute and compulsive beliefs and thoughts about themselves and the external world. This characteristic is especially evident in the attribution of certain events by anxious individuals. Research on the evaluation of behavioral responses indicates that highly anxious individuals have more negative assessment of their behavior in certain situations compared to low-anxiety individuals.

Still, there are no differences in positive assessment. Studies also suggest that the development and maintenance of anxiety are related to various forms of cognitive biases, such as negative evaluation of one's achievements, selective memory for the negative aspects of one's achievements, low expectations of one's abilities and accomplishments, and negative self-descriptions in social interactions (Gai, 1999). Scholars generally believe that cognitive factors play a leading role in the formation of anxiety, and in-depth research into cognitive factors can provide theoretical guidance for controlling anxiety.

### **1.2.6 Social Support Theory**

Social support is generally divided into two categories: objective, practical, or visible support and subjective, experiential, or emotional support. As an essential environmental resource in an individual's social life, social support influences both physical and mental health, as well as behavioral patterns. The main effect model of social support suggests that social support has a universal enhancing effect, which is independent of stress. Regardless of the level of stress, social support has a direct positive impact on an individual's physical and mental health. On the other hand, the buffering model proposes that social support works by mitigating the effects of stress on an individual's physical and psychological health. It can buffer the adverse effects of stress events on an individual's well-being, with this buffering effect potentially being either general or specific (Wang, 2004).

## **1.3 Measurement of Anxiety**

### **1.3.1 Self-Rating Anxiety Scale (SAS)**

The Self-Rating Anxiety Scale (SAS) was developed by Chinese professor Zung(1971). Its structure and assessment method are quite similar to the Self-Rating Depression Scale (SDS), making it a convenient and straightforward clinical tool for analyzing patients' subjective symptoms. It is suitable for adults with anxiety symptoms and is widely used. Research abroad suggests that SAS can effectively reflect the subjective experiences of individuals with anxiety tendencies. In anxiety

clinics, SAS is commonly used to assess symptoms. According to Chinese norms, the cutoff value for SAS standard scores is 50 points, with scores ranging from 50 to 59 points indicating mild anxiety, 60 to 69 points indicating moderate anxiety, and 70 points and above indicating severe anxiety. However, because anxiety is a common symptom of neurosis, SAS is not very effective in distinguishing between different types of neuroses. Clinical grading of anxiety symptoms should also consider clinical symptoms, particularly the severity of key symptoms, with the scale's total score serving as a reference rather than an absolute standard.

### 1.3.2 Beck Anxiety Inventory (BAI)

Aaron developed the Beck Anxiety Inventory (BAI). Beck(1985). It is a self-report scale with 21 items, using a 4-point rating system to assess the extent of various anxiety symptoms experienced by the respondent. Suitable for adults with anxiety symptoms, the BAI accurately reflects the subjective level of anxiety. The 21 self-report items measure the degree of disturbance caused by various anxiety symptoms, with the ratings as follows: "1" for no anxiety; "2" for mild anxiety, with little disturbance; "3" for moderate anxiety, uncomfortable but tolerable; and "4" for severe anxiety, barely tolerable. BAI is used in psychological clinics, psychiatric outpatient settings, and inpatient care. The analysis method is straightforward: summing the scores of the 21 items to get a raw score, which is then converted into a standard score using the formula  $Y = \text{int}(1.19x)$ . BAI provides an integrative reflection of anxiety severity. It helps track recent mood experiences and changes in anxiety symptoms during treatment, making it a common tool in clinical psychological work in China.

### 1.3.3 Hamilton Anxiety Scale (HAMA)

The Hamilton Anxiety Scale (HAMA) was developed by M(1959) and is one of the earliest commonly used scales in psychiatric clinics, consisting of 14 items. It is listed as an essential diagnostic tool for anxiety disorders in the CCMD-3 (Chinese Classification of Mental Disorders). Clinically, it is often used to diagnose anxiety

disorders and assess their severity. HAMA primarily assesses the severity of anxiety symptoms in neurosis and other patients, but is less suitable for evaluating anxiety in various psychoses. Compared to the Hamilton Depression Rating Scale (HAMD), some items overlap, such as depressive mood, somatic anxiety, gastrointestinal symptoms, and insomnia, which can complicate the differentiation between anxiety and depression.

HAMA divides anxiety factors into somatic and psychological categories. Somatic anxiety includes items 7 to 13, while psychological anxiety includes items 1 to 6 and 14. The total score of HAMA provides a good indication of the severity of anxiety symptoms. It can be used to evaluate the severity of anxiety in patients with anxiety and depressive disorders and to assess the effects of various medications and psychological interventions. According to data from the Chinese scale coordination group, a total score of  $\geq 29$  points indicates severe anxiety;  $\geq 21$  points indicates significant anxiety;  $\geq 14$  points indicates anxiety; a score above 7 points indicates possible anxiety; and a score below 7 points suggests no anxiety symptoms. Analysis of somatic and psychological factors in HAMA not only reflects the psychopathological characteristics of patients but also the effectiveness of targeted symptom treatment (CCMD-3).

#### 1.4 Related Research on Anxiety

In recent years, with the acceleration of life pace and increasing life pressures, the number of individuals suffering from anxiety has risen significantly, imposing a substantial burden on families and society. Preventing and treating anxiety has become a critical research topic. The pathogenesis of anxiety is complex and lacks a unified perspective; however, anxiety is certainly caused by multiple factors rather than a single one.

Anxiety is primarily characterized by persistent and widespread anxiety or recurrent panic and unease, manifesting as a neurotic disorder (Lu, 2022). The onset of anxiety is mainly due to factors such as individual psychological states, living environment, work pressure, and disease factors. Clinical symptoms of anxiety include

palpitations, skin flushing or pallor, excessive sweating, tightness in breathing, insomnia, and restlessness, all of which severely impact physical health. Most anxiety patients experience insomnia that affects their daily life and work, exacerbating their condition and leading to a vicious cycle (Sun, 2021). Anxiety, as a primary symptom, can range from mild tension and discomfort to fear, depression, and panic, encompassing a spectrum of psychological experiences. Based on the nature of anxiety, it can be classified into chronic anxiety and acute anxiety, including generalized anxiety and panic attacks. The causes of anxiety remain unclear but are related to genetic factors, personality traits, cognitive processes, adverse life events, biochemical characteristics, and physical diseases (Liu, 2021). Psychological care is a primary treatment method for anxiety patients, and its clinical effectiveness significantly impacts patient recovery.

### 1.5 Research on Anxiety Among University Students

Recent studies have revealed that the overall level of anxiety among university students in China is higher than the national norm, with an incidence rate of anxiety being 26.6% (Chang, Yuan, & Wang, 2020). The mental health levels of university students are generally lower than those of their peers in the broader population (Liu, 2011). Addressing the mental health status of university students and developing their healthy personalities has become a key objective in university education, with significant implications for future societal development. One crucial factor influencing mental health is personality traits (Buelow & Cayton, 2020). Research shows that self-image and mental toughness are closely related to anxiety. A stable or extroverted self-image is less likely to lead to anxiety (Van & Comijs, 2016). Mental toughness, derived from the concept of physical resilience, is a new perspective in positive psychology that views adversity and difficult situations through a different lens (Xi, Zuo, & Wu, 2013). It refers to an individual's ability to effectively cope with and adapt to adversity and trauma and is considered a dynamic personal trait that can be developed to maintain and improve physical and mental health (Martin, Ginns, & Brackett, 2013; Wang & Chen, 2015).

Studies have indicated that mental toughness plays a mediating role in the relationship between personality and anxiety (Sun, Chen, & Xu et al., 2023), though results vary. Some research suggests that mental toughness partially mediates the effect of personality on anxiety (Zhao, Yu, & Zeng et al., 2023), while other studies find that mental toughness partially mediates the effect of neuroticism on anxiety (Sun, Pang, & Lü et al., 2023).

Anxiety is a prevalent mental health issue among university students, significantly impacting their daily lives and academic performance. International research suggests that anxiety is related to personal values, with self-centered values contributing to anxiety (Schwartz, Sagiv, & Boehnke, 2000). Noted in the 1950s that exam anxiety among university students arises from focusing attention on the self rather than the exam (Ingram, 1990). In academic settings, persistent mental strain to achieve high performance can result in inadequate rest and physical exhaustion, which in turn contribute to increased anxiety levels (Chang, 2024). This perspective was extended to social anxiety, where students focus on the self rather than the social interaction. In China, epidemiological surveys indicate that anxiety and depression are major mental health issues affecting students' daily lives (Fan & Wang, 2001). Despite extensive research on anxiety among university students abroad, systematic studies in China are relatively sparse. Thus, further investigation is warranted.

Table 1 Types of Anxiety among College Students

Anxiety type	The specific performance
Learning anxiety	1. High academic pressure. 2. Don't adapt to the learning method. 3. Test anxiety.
Employment anxiety	1. Losing faith in the future. 2. You're not confident in your abilities. 3. The fear into the society.
Financial anxiety	1. The family economic difficulties. 2. Economic independence.

Emotional anxiety	1. The bad feelings. 2. Interpersonal tension.
Social anxiety	1. Lack of social skills. 2. Afraid of loneliness.
Other anxieties	1. Physical health anxiety. 2. Using your brain inappropriately.

It can be seen from Table 1 that an integrative understanding of the sources and manifestations of college students' anxiety requires approaches from multiple aspects. This includes strengthening mental health education, creating a supportive and inclusive campus environment, and enhancing educational reforms in mental health. Only through such integrative efforts can students' anxiety be effectively alleviated and their all-around growth and development be supported.

## 2. Self-Image

### 2.1 Definition of Self-Image

Self-image, a concept first introduced by Morris Rosenberg in 1965, refers to a person's perception or concept of themselves—how we view ourselves. This includes physical appearance and gender. Self-image encompasses a person's self-perception, how they believe others perceive them, and the ideal self they aspire to be. These perceptions may relate to a person's appearance, personality, skills, values, principles, and how they align with societal norms for males and females. Self-image is a fundamental aspect of personality that can determine the success of interpersonal relationships and overall well-being. Self-abusive, self-defeating, or self-destructive behaviors may lead to a negative self-image. For example, Suzaan identifies three components of self-image: how a person perceives or views themselves; how they believe others view them; and the ideal self they want to become.

Self-image is a psychological image, often a difficult-to-change one, that not only reflects details that others might objectively assess (such as height, weight, hair color) but also conveys information about oneself derived from personal experiences or internalized judgments from others. In some contexts, it is considered a component of

self-concept. Social and cognitive psychologists often use a more specialized term to describe self-image, known as self-schema. Like any schema, the Self-image stores information and influences our thinking and memory. For example, research shows that information related to the self is prioritized during memory tasks, a phenomenon known as “self-referential encoding” (Rogers & Kirker,1977). Self-image is also thought to be the traits people use to define themselves, refining self-related information into a coherent schema (Schacter, 2010)

In summary, this paper defines self-image as a person’s perception or concept of themselves, encompassing their appearance, personality, and traits (Morin & Racy, 2021). It is the way an individual views and evaluates themselves, potentially influenced by various factors such as culture, family, friends, and personal experiences (Taylor & Brown, 1988).

## **2.2 Measurement of Self-Image**

### **2.2.1 Rosenberg Self-Esteem Scale (RSES)**

Morris Rosenberg developed the Rosenberg Self-Esteem Scale (RSES) in the mid-1960s to assess overall self-esteem. defined global self-esteem as “the individual’s positive and negative attitudes toward the self.” Rosenberg (1995) distinguished between worldwide self-esteem and specific self-esteem, acknowledging that they may be interrelated but also cautioning against treating these constructs as interchangeable, which could diminish their value as distinct phenomena. For example, attitudes toward objects can be positive, negative, or neutral. These attitudes can be toward the whole object or just a part of it. An individual might have a negative attitude toward their ability in a specific subject but a positive attitude toward their overall intelligence. Rosenberg's (1995) model attracted attention from other scientists. Some researchers tested his model and identified two components: self-confidence and self-deprecation, which counterbalance each other in individuals.

Initially used for adolescents, the scale is now also applicable to adults. Today, this scale is used by social psychologists, psychiatrists, doctors, therapists, and other professionals around the world.

### 2.2.2 Multidimensional Body-Self Relations Questionnaire (MBSRQ)

The Multidimensional Body-Self Relations Questionnaire (MBSRQ) was developed by American psychologist Thomas F. Cash in 1990. It primarily measures individuals' attitudes toward their body image. The questionnaire consists of 69 items and is divided into ten dimensions: Appearance Evaluation (attractiveness and satisfaction with body shape), Appearance Orientation (degree of concern with body appearance and grooming), Body Areas Satisfaction (feelings about body functions and coordination), Body Areas Attention (focus on body attributes), Health Evaluation (perception of physical health), Health Orientation (concern about health in daily life), Illness Attitudes (concern about physical symptoms), Body Part Satisfaction (satisfaction with different body parts), Overweight Preoccupation (concern about obesity and weight), and Self-Weight Categorization (classification and evaluation of body weight from low to high). The questionnaire uses a 5-point Likert scale, with higher scores indicating greater satisfaction with body image. Suitable for individuals aged 15 and above. In 2006, the scale was translated into Chinese, and Taiwanese scholars validated the Chinese version, showing high internal consistency and test-retest reliability, with dimension reliability coefficients ranging from 0.71 to 0.91 (Li & Zhang, 2015).

### 2.2.3 Body Image States Scale (BISS)

The Body Image States Scale (BISS) was developed by Cash et al(2002). It measures an individual's current body image state, focusing on understanding the subject's "feelings at the moment." It is designed to capture body image changes in response to interventions in different situations over a very short period. It includes six items related to body appearance, size, and shape,

attractiveness, looks compared to the usual self, and others. It uses a 9-point Likert scale, where "1" represents very dissatisfied and "9" means very satisfied, with higher scores indicating higher satisfaction with body image.

#### 2.2.4 Body-Self Image Questionnaire (BSIQ)

The Body-Self Image Questionnaire (BSIQ) was initially developed in 1999 to measure body image among young people—the development of this questionnaire involved data collection from three independent studies. The results identified nine factors, including Overall Appearance Evaluation, Obesity Evaluation, Health/Fitness Evaluation, Negative Impact, Health/Fitness Impact, Social Dependence, Ideal Investment, Attention to Grooming, and Height Dissatisfaction. The questionnaire consists of 51 items, with internal consistency reliability for subscales ranging from 0.68 to 0.92. Preliminary results indicate that BSIQ is a validated and reliable tool for providing multidimensional body image measurements. It was developed through an integrative, multi-phase process; however, further research is needed to build on this evidence using confirmatory factor analysis and external validity evidence. In 2005, additional research supported the validity of BSIQ (Rowe, 2005), simplifying the original BSIQ from 51 items to 27 items. Each subscale contains three items, and responses are recorded using a 5-point Likert scale, including "Not at all true," "Slightly true," "About half true," "Fairly true," and "Very true."

#### 2.3 Research on the Relationship Between Self-Image and Anxiety

Research by Chen(2024) indicates that university students' scores on the Beck Depression Inventory and Trait Anxiety Questionnaire are positively correlated. Anxiety scores are negatively correlated with the total score on the Tennessee Self-Concept Scale and its positive factors, while being positively correlated with the negative factor of self-criticism. Other studies have found a high negative correlation between university students' overall self-image scores and negative factors such as depression (Fan & Fu, 2001); additionally, significant negative correlations have been

observed between social anxiety and self-image (Chen, 2007; Liu, 2019). These findings suggest that a lower self-image score is associated with higher levels of anxiety among university students. This might be because individuals with higher self-image scores have a clearer self-perception and are more likely to possess a well-developed personality, which helps reduce their anxiety levels.

Self-worth and self-image are often a concern for individuals with anxiety disorders, who may worry about their self-worth and image being questioned or devalued. They might feel uncertain about their abilities and decisions, leading to excessive worry about others' opinions and evaluations. In the study "Exploring the Potential Categories of university Students' Self-Image and the Relationship Between Appearance, Gender, Depression, and Various Potential Categories" Zhang & Li (2021) it is noted that self-image refers to an individual's internalized views of their appearance (e.g., looks, height, weight) – essentially, how we perceive our body. Appearance, as an external characteristic, often has a unique impact on individuals. Research has found that appearance is generally considered to significantly affect work, study, and social interactions, such as individuals with attractive appearances being more favored by others and receiving more attention from teachers (Feingold & Ritts, 1992; O'Connor & Gladstone, 2018). Moreover, high satisfaction with appearance has been shown to enhance subjective well-being (Shi, 2021). However, many individuals are generally dissatisfied with their body image (Edi et al, 2013), with 78.2% believing their body proportions are imbalanced and 34.3% of university students experiencing body image concerns (Chang et al, 2013).

Excessive focus on self-image often leads to appearance anxiety, which is characterized by concerns about not meeting societal standards of beauty, fear of negative evaluations by others, and non-adaptive emotional behaviors such as tension and distress (Moscovitch & Huyder, 2011). In recent years, the cosmetics industry has flourished in China, with cosmetic surgery now accounting for 58% of the medical beauty market. (Sun, 2018) Young people are increasingly focused on appearance. However, due to excessive concern about their appearance and others' negative

evaluations, appearance anxiety has become more severe. Appearance anxiety mainly manifests as compulsive thoughts about appearance, excessive checking of appearance, and worries about disguising appearance, leading to various psychological and behavioral issues such as depression (Hawes, 2020) and eating disorders (Levinson, 2018). Body satisfaction is a major indicator of an individual's subjective experience and evaluation of their body image. Physiologically, body satisfaction affects the degree of appearance anxiety (Turan, 2019). From an internal characteristics perspective, self-harmony refers to the internal consistency of the self and the coordination between the self and experiences. Research indicates a close relationship between social anxiety and self-harmony, and since appearance anxiety is a type of social anxiety, self-harmony may be a significant factor influencing appearance anxiety (Pan, 2013). When there are discrepancies in how individuals perceive their self-image, the balance of self-harmony is disrupted, leading to appearance anxiety due to fear of negative evaluations from others. From a gender perspective, the ideal appearance may vary from person to person, with both men and women experiencing dissatisfaction with their appearance (Schuck, 2018). Typically, young women may pursue a slim figure, while men may seek muscular development. Past research has shown that women generally have poorer attitudes toward body image and lower body satisfaction compared to men (Quitkat, 2019). Thus, differences in self-image appearance can impact anxiety levels.

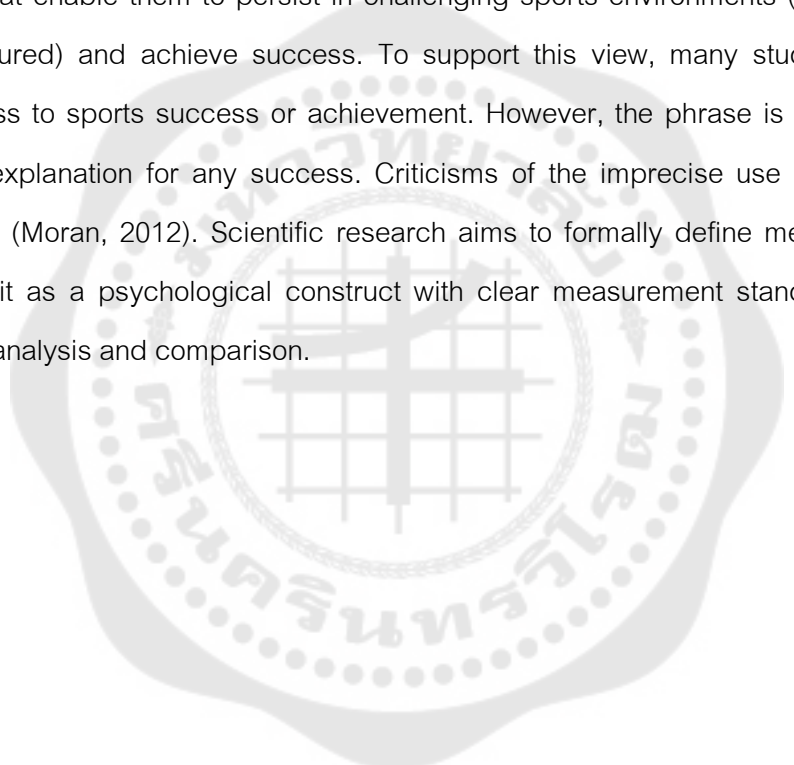
### **3. Mental Toughness**

#### **3.1 Definition of mental toughness**

Mental toughness is an indicator of an individual's adaptability and self-confidence, and it can predict success in sports, education, and work (Lin, Mutz, Julian, & Peter, 2017). This concept emerged within the context of sports training as one of a range of attributes that make a person a better athlete, capable of enduring rigorous training and challenging competitive environments without losing confidence. Coaches, sports psychologists, sports commentators, and business leaders have used the term.

Mental toughness can be viewed as the application of perseverance traits. Synonyms might include resilience, determination, willpower, and steadfastness. Individuals with mental toughness are likely to embrace challenges that help them achieve their goals, whether in sports, academics, or their careers.

In everyday language, "mental toughness" is often used to refer to any set of positive psychological attributes that help a person cope with difficult situations. Coaches and sports commentators casually use the term to describe athletes' mental states that enable them to persist in challenging sports environments (e.g., competing while injured) and achieve success. To support this view, many studies link mental toughness to sports success or achievement. However, the phrase is often used as a default explanation for any success. Criticisms of the imprecise use of this term are common (Moran, 2012). Scientific research aims to formally define mental toughness, viewing it as a psychological construct with clear measurement standards to enable reliable analysis and comparison.



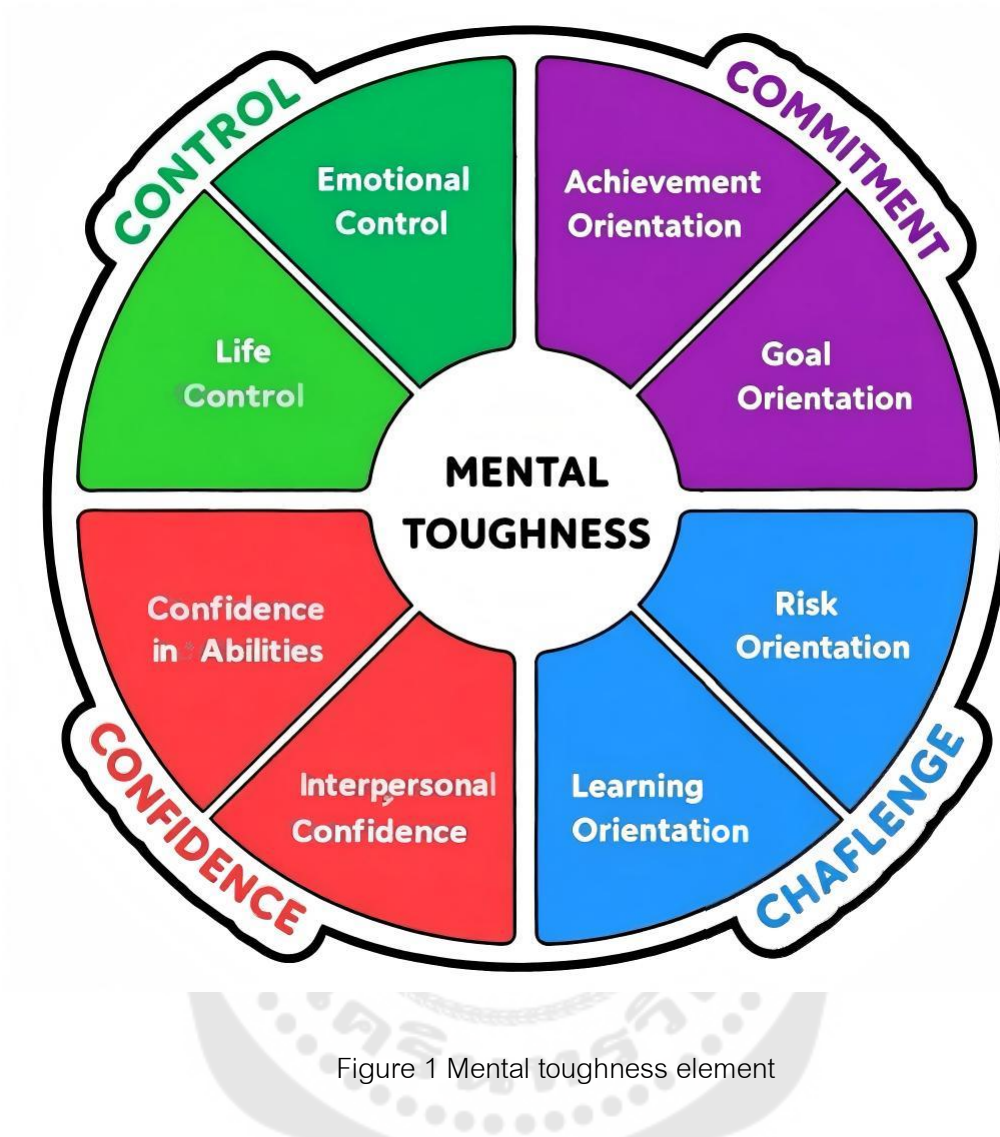


Figure 1 Mental toughness element

Below is a summary of the four aspects of the mental toughness model, which includes four parts: confidence, challenge, control, and commitment. This diagram was finally drawn through a summary and induction process, corresponding to four different parts.

Different scholars have various definitions of mental toughness. For example, Jones, Hanton, Connaughton(2002) using personal construct psychology, interviewed top athletes, elite coaches, and sports psychologists, and derived the following definition of mental toughness: "Having natural or developed psychological advantages that allow you to: generally cope better than your opponents with the many demands placed on athletes by sport (competition, training, lifestyle); specifically,

remain more determined, focused, confident, and in control under pressure than your opponents"

Peter(2002) and colleagues proposed a model of mental toughness, conceptualizing it as a personality trait. Their model includes four components: confidence, challenge, control, and commitment. They developed a questionnaire to measure mental toughness (Clough, Marchant, Earle, 2007). They combined existing psychological theories with applied sports psychology, aiming to bridge the gap between research and practice. They compared emerging mental toughness data with the concept of resilience, which is a key individual difference and resource for coping with stress, and has become an accepted concept in health psychology in the study of stress and illness. They believe that mental toughness has broad applications and should not be confined to sports. They discuss and describe in detail the development work related to their model in their book on mental toughness (Clough & Strycharczyk, 2012).

Australian researchers Gucciardi, Gordon, and Dimmock (2008) also proposed different definitions and frameworks of mental toughness, primarily based on their research with Australian football players. Using personal construct psychology, these authors defined mental toughness as follows: "Mental toughness in Australian football is a set of values, attitudes, behaviors, and emotions that enables you to persist through and overcome any obstacles, adversity, or stress, while also maintaining focus and motivation when things are going well, continuously achieving your goals". Although this definition was derived from research with Australian football players, it has been extended to other sports, including cricket (Gucciardi & Gordon, 2009; Gucciardi, 2011) and football (Coulter, Mallett, & Gucciardi, 2010). This definition views mental toughness as having both passive and active traits; athletes can use attributes of mental toughness to endure and perform well under adversity, and also apply other attributes to maintain peak performance when the game is going well.

### 3.2 Measurement of Mental Toughness

### 3.2.1 Sports Mental Toughness Questionnaire (SMTQ)

Unlike personality resilience, which generally applies to various contexts, sports psychologists have developed the concept of mental toughness specifically for athletes. Mental toughness refers to an innate or developed psychological advantage that enables athletes to cope better with the pressures of competition, training, and life. It involves staying determined, focused, confident, and maintaining self-control under pressure, leading to superior performance compared to opponents (Jones, Hanton, & Connaughton, 2007). Research has shown that athletes with high mental toughness have greater control beliefs over stressors, tend to view stress situations as challenges rather than threats, exhibit higher self-efficacy, and employ more problem-focused coping strategies (Kaiseler, Polman, & Nicholls, 2009). Thus, mental toughness significantly enhances an individual's coping effectiveness, reducing the psychological and physiological discomforts that limit personal performance (Gucciardi et al., 2008). High mental toughness is also associated with strong self-belief, a willingness to set challenging goals, dedication to personal tasks, and a strong desire for success (Jones et al., 2007). Additionally, after controlling for demographic variables, mental toughness has shown significant predictive power for athletes' optimism, flow experiences, and performance (Zhu, Hu, Yu, Wang, & Gao, 2013; Crust & Swann, 2013; Nicholls, Polman, Levy, & Backhouse, 2008).

The Sports Mental Toughness Questionnaire (SMTQ) was developed by Sheard, Golby, and Wersch (2009). This questionnaire consists of 14 items and measures three dimensions: confidence, determination, and control. Responses are rated on a 5-point scale from 1 ("not at all like me") to 5 ("completely like me"), with items 2, 4, 7, 8, 9, and 10 being reverse-scored. During reliability and validity testing, items 8 ("I would choose to give up in difficult situations") and 11 ("I possess certain traits that set me apart from other competitors") had factor loadings below 0.4 and were therefore removed. The total mental toughness score is the sum of the scores from the remaining 12 items, with higher scores indicating greater mental toughness.

### 3.2.2 MTQ48 Questionnaire

The MTQ48 scale is used to assess an individual's ability to maintain a positive attitude, adapt, and recover when facing challenges, stress, or adversity. It measures psychological adaptability and resilience in response to life stressors, setbacks, and difficulties. This resilience allows individuals to cope effectively with challenges, maintain health, and achieve success. The MTQ48 is widely used in sports, education, and military settings to evaluate levels of mental toughness.

The MTQ48 typically includes several dimensions or sub-scales to assess mental toughness. These dimensions may include, but are not limited to:

Challenge: Attitude and response to challenges.

Commitment: Degree of perseverance and dedication to goals or tasks.

Control: Ability to control one's behavior and emotions.

Confidence: Self-belief in one's abilities and worth.

Resilience: Ability to recover and grow after setbacks.

Each dimension contains specific items or questions for respondents to answer based on their experiences. These responses are used to calculate an individual's mental toughness score.

Athlete selection and training: In the field of sports, mental toughness is considered to be one of the essential factors for the success of athletes. The evaluation of athletes' mental toughness through MTQ48 can provide a reference for selection and training.

Education assessment: In the field of education, teachers can utilize the MTQ48 to evaluate students' psychological well-being and stress resilience, thereby developing more targeted educational programs.

Career Development and Coaching: In the career field, the MTQ48 can help individuals understand their level of mental toughness, enabling them to develop effective career development plans and strategies for coping with career challenges.

Below is a design for a more integrative "Mental Toughness" scale. We can expand on the structure based on the Mental Toughness Questionnaire 48 (MTQ48)

and refine its four core dimensions: Control, Commitment, Challenge, and Confidence. Here is a more detailed example of the scale design.

The MTQ48 is widely used in several areas:

**Athlete Selection and Training:** In sports, mental toughness is a crucial factor for success. MTQ48 helps in assessing athletes' mental toughness levels, providing valuable insights for selection and training.

**Educational Assessment:** In education, MTQ48 can be used by teachers to evaluate students' psychological qualities and stress tolerance, aiding in the development of targeted educational programs.

**Career Development and Counseling:** In the professional field, MTQ48 helps individuals understand their levels of mental toughness, aiding in career planning and strategies for overcoming professional challenges.

As a psychological measurement tool, MTQ48 has high reliability and validity. However, it is essential to note that different versions of MTQ48 may vary in items and dimensions. Therefore, it is crucial to select the appropriate version based on the specific research objectives and the target population.

### **3.3 Research on the Relationship Between Mental Toughness and Anxiety**

Mental toughness has a predictive effect on anxiety: higher levels of mental toughness are associated with lower levels of anxiety. This is mainly because individuals with high resilience have ample external and internal resources that help them better adapt to anxiety, leading to reduced psychological distress and improved mental state, and thus lower anxiety levels (Axelsson, Rydn, & Johnsson, 2018).

Analysis shows that senior students with lower levels of mental toughness and emotional intelligence tend to experience higher levels of social anxiety, and vice versa. Research indicates that strong mental toughness contributes to maintaining high levels of mental health (Dray, Bowman, & Campbell, 2017). Resilient interns are more likely to face adverse events in their internships in a positive manner, resulting in higher positive emotions and lower negative emotions, such as anxiety. Therefore, educators

should focus on fostering mental toughness and emotional intelligence among interns. Activities, case discussions, and opportunities for interns to showcase their skills should be organized to tap into their internal psychological potential, thereby alleviating social anxiety (Gao, 2022).

Studies have shown that social anxiety in university students is related to their psychological qualities. Mental toughness enables individuals to buffer or resist the negative effects of stress and crises, promoting effective adaptation and growth (Cai, Liang, & Zhou, 2010). Mental toughness is a quality that helps individuals resist the impact of stress in challenging situations. Exploring the relationship between mental toughness and social anxiety in university students provides theoretical support for improving social anxiety among this group.

Zhang's (2016) research on mental toughness and anxiety indicates a significant negative correlation between university students' mental toughness and social anxiety. Higher levels of mental toughness are associated with lower levels of social anxiety. Mental toughness significantly predicts social anxiety levels, suggesting that enhancing resilience can effectively improve social anxiety among university students. With increasing concerns about university students' mental health, interpersonal issues are a common problem. The ability to interact well with others is crucial for students' academic performance, relationships with teachers and peers, and successful social integration. Given the challenging job market and complex social environment, improving students' social anxiety is vital for their academic and personal well-being. Mental toughness enables students to utilize internal and external resources to overcome difficulties and achieve positive development, making it a significant factor in improving social anxiety. Therefore, higher education institutions should enhance mental toughness training to help students manage interpersonal relationships and adapt to social environments better.

Among university students, mental toughness is characterized by diversity and complexity. Each student's background, personality, and experiences contribute to varying aspects of their resilience. For instance, some students may be naturally

optimistic and confident with strong self-regulation abilities, while others may be more sensitive and require additional social support.

The concept of mental toughness also emphasizes the interaction between internal and external factors. Internal factors such as self-perception, emotional regulation, and coping strategies are core components of resilience, while external factors like social support, educational resources, and family environment significantly impact its development. Therefore, fostering mental toughness in university students requires attention to both internal and external factors, providing a supportive environment for their growth.

### 3.4 The relevant theories of mental toughness

As a key psychological mechanism for individuals to cope with adversity, the theoretical system of mental toughness has evolved from classic process models to an interdisciplinary integrated framework, forming diverse research perspectives. From the dimension of theoretical construction, the process model proposed by Richardson (2002) points out that mental toughness is a process in which individuals achieve adaptation through the dynamic balance of "disintegration-reconstruction" in the face of adversity. The interaction between protective factors (such as social support and self-efficacy) and risk factors is the core mechanism. This model is not only included in the highly cited research of *Journal of Clinical Psychology* but also serves as an essential theoretical basis for the cultivation of mental toughness among Chinese college students. In contrast, Masten's (2001) "Ordinary Magic Theory" breaks the perception of the "special nature" of mental toughness, arguing that it originates from the cumulative effect of daily adaptive systems such as problem-solving ability and secure attachment. This viewpoint has been further verified by the review research of Professor Gan Yiqun from Peking University (2024) and is used to explain the mechanism of neuroplasticity under stress.

From an interdisciplinary perspective, significant breakthroughs have been made in the research on the neural mechanisms and molecular genetics of mental

toughness. The research team led by Gan Yiqun (2024) pointed out in *Current Opinion in Behavioral Sciences* that the regulation of emotions by the ventrolateral prefrontal cortex (vlPFC) and ventromedial prefrontal cortex (vmPFC), the meaning-making function of the default mode network (DMN), and the polymorphism of the BDNF gene together constitute the biological basis of mental toughness. Moreover, cognitive reappraisal training can enhance the connection between the prefrontal lobe and the limbic system to improve stress resistance. The "Dual-Processing Theoretical Model" proposed by Wu Jianhui (2025) supplements this from the perspective of stress response, arguing that mental toughness is the result of the dynamic balance between the "sensitivity-protection" dual systems. Individuals with high sensitivity need to buffer stress through protective factors such as internal sense of control and cognitive flexibility. This model has been applied to the online training system of Southwest University, and empirical evidence shows that a 4-week intervention can increase mental toughness levels by 28%.

Research on cultural specificity has further expanded the theoretical boundaries. Ungar's (2011) "Culturally Responsive Model" emphasizes the cultural differences in protective factors. For example, the "interdependent self-concept" in collectivist cultures enhances resilience through a sense of community belonging. This model has been verified by a research team from Peking University, which found that the mental toughness of Chinese college students is significantly correlated with family support and traditional cultural values such as filial piety. Werner's (1993) "Developmental Ecological Model," based on the Kauai Longitudinal Study, points out that mental toughness in childhood adversity stems from the interaction between individual traits (such as internality) and external resources (such as teacher support), providing a long-term tracking basis for cross-cultural comparisons.

In the practice of intervention and measurement, Ellis's (1962) "Cognitive-Affective-Behavioral Model" has become a classic framework for mental toughness intervention by identifying stressors (A), beliefs (B), emotional consequences (C), and conducting cognitive restructuring (D) (Reason and emotion in psychotherapy). The "4C

Model" proposed by Clough et al. (2002) quantifies mental toughness from four dimensions: Control, Commitment, Challenge, and Confidence. Its MTQ48 questionnaire is widely used in corporate training; for instance, Huawei's mental toughness training program has used it to increase team recovery efficiency by 40%.

Current research shows a more precise trend. Gan Yiqun's (2024) team has combined AI technology to predict the effects of interventions using genetic, brain imaging, and behavioral data, and developed the "Resilient Brain" app, which can monitor stress in real-time and provide customized plans. Wu Jianhui's (2025) neurofeedback research shows that 8 weeks of EEG biofeedback training can enhance the activity of the prefrontal cortex, reduce individuals' cortisol levels by 19%, and significantly improve working memory, providing a new path for the scientific cultivation of mental toughness.

#### 4. Integrated group counseling

##### 4.1 Definition of integrated group counseling

Integrated group counseling, also known as group psychotherapy, is a form of psychological counseling conducted in a group setting. It involves interpersonal interactions within the group to facilitate individuals in recognizing, exploring, and accepting themselves, improving their relationships with others, and learning new attitudes and behaviors through observation, learning, and experience. This process aims to support personal development and adaptation (Fan, 1996).

The origins of integrated group counseling can be traced back to Western countries. In 1905, American physician Joseph H. Pratt successfully applied integrated group counseling in clinical settings. Two years later, Jesse Davis and Frank Parsons introduced a course called "Career and Moral Counseling" in a high school in Edward, Massachusetts. They pioneered career and moral decision-making groups, as well as career development groups. By the 1930s, integrated group counseling programs were widely implemented in schools across the United States. In the early 1990s, Fan Fumin from Tsinghua University was introduced to integrated group counseling at Tsukuba University in Japan and subsequently introduced and promoted this form of

psychological counseling in China. Although it has been developed relatively recently in China, it has been widely recognized and applied in the fields of education, therapy, and personal development.

Integrated group counseling is a professional helping method based on psychological theories and techniques, delivered through activities in a group context to provide psychological education (Fan, 2022). Different regions in China may use various terms, such as integrated group counseling or small group guidance, but most commonly, it is referred to as integrated group counseling. Groups can be classified based on various attributes, including developmental, training, therapeutic, structured, unstructured, open, and closed groups. In the context of university students' mental health education, integrated group counseling serves unique functions including education, development, prevention, and therapy (Ding, 2019). The process involves mutual interaction, support, and shared learning among members, maximizing their potential and enhancing educational outcomes.

Integrated group counseling is conducted in a group setting to provide psychological support and guidance. A counselor organizes a group based on similar issues among participants, and through joint discussion, training, and advice, addresses shared developmental or psychological problems. Typically, one or two leaders facilitate the group, which includes five to ten members. Members participate in group meetings and activities, engage with one another, discuss concerns, and support each other, thereby gaining insights into themselves and others. This process aims to improve interpersonal relationships, increase social adaptability, and promote personal growth. The effectiveness of integrated group counseling largely depends on the leadership of the group.

Integrated group counseling provides a structured setting where individuals with similar issues come together to discuss emotions such as anxiety and tension, learn communication skills, and build mutual trust. By engaging in discussions, training, and activities, group members use group dynamics to share joy and lessen pain. Interpersonal interactions within the group influence individuals, and initial light activities

help members get acquainted. As members interact, they observe, learn, and experience each other, gradually building trust, reducing psychological barriers, altering behaviors, and fostering mutual support. This process enhances group cohesion and develops positive behavioral patterns.

## 4.2 Integrative group consulting advantages

### 4.2.1 Compared to individual counseling, Integrative group counseling has greater advantages

Integrated group counseling, while sharing theoretical models and philosophical backgrounds with individual counseling, offers distinct advantages due to its unique dynamics. Although various theoretical approaches, such as psychoanalysis, behaviorism, cognitive-behavioral therapy (CBT), encounter groups (humanistic approach), family therapy, and psychodrama, are applied in both individual and group settings, integrated group counseling has its own set of strengths (Fan, 1996).

In the context of clinical treatment for depression or depressive emotions, institutions and educational organizations often prefer CBT for its relatively quick effectiveness. In universities, for instance, short-term CBT groups are frequently organized for students with significant depressive symptoms or those adjusting to new environments. These groups typically consist of six sessions, each with a specific theme such as introduction, trust-building, interpersonal skills training, understanding depression and emotional expression, self-confidence training, and closure. Activities within these sessions include discussions, games, role-plays, and relaxation training, focusing on both cognitive and behavioral changes (Sun, Fan, Lui, 2000). Due to the nature of group members, relationships are often established more readily, though the depth of counseling may be relatively shallow.

In contrast, integrated group counseling for severe depression in medical settings usually involves longer-term therapy facilitated by specialized practitioners. Such groups typically consist of 8 to 10 members, meeting weekly for 90

minutes over 12 sessions. These sessions are divided into pre-treatment, initial, middle, and termination phases, each with specific goals and tasks (Ye & Li, 2006).

Compared to individual counseling, integrated group counseling offers two notable advantages:

Group settings foster mutual understanding, acceptance, and support among members. The counselor can leverage group dynamics for intervention and treatment, which is difficult to achieve in individual counseling. The group setting provides opportunities for members to interact, practice social skills, and observe others' behaviors, which enhances learning and behavioral change (Fan, 1996). Individuals with depression often experience self-doubt, pessimism, and social withdrawal. Integrated group counseling addresses these issues by providing a supportive environment where individuals can share their experiences and receive feedback, reducing feelings of isolation and alienation (Sun, Fan, Lui, 2000).

**Group Dynamics and Modeling:** In integrated group counseling, the collective dynamics—such as empathy and support—play a significant role. Research in group dynamics suggests that small groups act as fundamental entities where the internal interdependence of members determines the group's characteristics. Changing attitudes and behaviors at the group level can be more effective than changing them individually. In integrated group counseling, the "wholeness" effect of group dynamics often manifests as group cohesion and support. Individuals with depression benefit from the group's understanding, support, and shared experiences, which significantly improve their mood and outlook (Chen, 2006).

The role of role models and demonstrations in group settings is significant for individuals with depression. Observing and emulating positive behaviors of group members can lead to cognitive restructuring and improved interpersonal skills. Discussions about life's meaning, values, and personal experiences within the group can broaden individuals' perspectives and offer new solutions to their problems. Realizing that others share similar struggles can normalize their experiences and reduce feelings of uniqueness and isolation (Dong et al., 2011). These normalizations and

empathic connections are more pronounced in group settings than in individual counseling. Furthermore, providing support to others in the group enhances individuals' own sense of value and purpose, helping them to develop a more accurate self-perception and overcome feelings of inadequacy (Sun, Fan, Lui, 2000).

#### **4.2.2 Integrative group counseling is more suitable for an Eastern cultural context**

Many social psychologists categorize cultures worldwide into collectivist and individualist models. People from these different cultural backgrounds exhibit significantly different personality tendencies, which influence their self-concept, cognition, learning, emotions, and motivations (Ye, 2004). Eastern collectivist cultures, including Chinese culture, emphasize interpersonal relationships and the importance of order and authority. The value of "harmony" is deeply embedded in Chinese behavior (Yang, 1998). Therefore, psychological counseling theories designed and constructed for individuals in collectivist contexts must pay special attention to interpersonal relationships.

Another key feature of collectivist cultures is the emphasis on authority and order, which provides essential insights for constructing indigenous psychological counseling theories. Sociological studies have explored different family structures in Eastern and Western cultures to understand the complexities of social actions in China. They have identified a structure defined by the interplay of parental authority, ethical norms, interest distribution, and kinship relationships (Zhai, 1998). This illustrates the significance of authority and order for Chinese individuals.

Cultural differences can lead to the ineffectiveness of Western psychological theories, techniques, and ethical norms in China. Research on client resistance in counseling sessions has found that the interaction between the counselor's directive approach and the client's resistance to authority significantly predicts client resistance. This means that clients who are less inclined to challenge authority are more

likely to distrust the counselor if the counselor adopts a non-directive approach, leading to increased resistance to counseling (Wang & Jiang, 2008).

As a result, individual counseling methods developed within a Western cultural context face limitations in China. In contrast, integrated group counseling has become prevalent in China, particularly in educational settings. One reason for this phenomenon is the emphasis on interpersonal connections and the dynamics of authority and order in integrated group counseling, which aligns with collectivist values. Generally, a group counselor must master 22 leadership techniques, including active listening, restating, clarifying, summarizing, questioning, explaining, confronting, emotional responses, support, empathy, catalyzing, prompting, goal setting, evaluation, feedback, suggesting, protecting, self-disclosure, modeling, handling silence, blocking, and ending (Wu et al., 2002). Most of these techniques are similar to those required in individual counseling, but five are unique to integrated group counseling: catalyzing, prompting, protecting, modeling, and handling silence.

Hong Kong scholar Chen(2020) and colleagues have further refined the group leader's interactive techniques into nine categories: bidirectional communication, connecting feelings, problem-solving, cognitive explanation, emotional disclosure, support and encouragement, focusing, initiation and blocking, and experience sharing. These techniques focus on creating and maintaining group atmosphere and guiding and utilizing group dynamics. The emphasis on enhancing the authority of the group leader to foster the group atmosphere and dynamics better highlights the distinct role of group counselors compared to individual counselors. Therefore, for individuals in collectivist cultures who value interpersonal connections and authority, integrated group counseling offers unmatched advantages.

### 4.3 Integration of Psychological Counseling Theories and Techniques in Integrated Group Counseling

#### 4.3.1 Rational Emotive Behavior Therapy (REBT)

Concept:

Rational Emotive Behavior Therapy (REBT) was founded by Albert Ellis in the 1950s and is considered an early form of cognitive-behavioral therapy. Ellis posited that emotional distress primarily arises from irrational beliefs and thought patterns about events, rather than from the events themselves. The core aim of REBT is to help individuals identify, question, and change these irrational beliefs to improve their emotional state and behavior (Dryden, 2012).

Techniques:

Cognitive Restructuring: Helps clients identify and challenge their irrational beliefs using methods such as logical questioning and empirical validation to alter negative cognition.

ABC Model: Assists clients in understanding the process of emotional responses, including the Activating event (A), Beliefs (B), and Consequences (C) of emotions and behaviors.

Emotional Regulation Exercises: Includes practices such as emotional imagery exercises and mindfulness meditation to help individuals cope with stress and anxiety.

Behavioral Assignments: Guides clients in making positive behavioral changes to test the validity of their cognitive assumptions.

Purpose:

REBT is widely used to treat psychological issues such as depression, anxiety, and anger management. It helps clients change irrational beliefs, improve emotional regulation abilities, and enhance mental toughness (Ellis & Dryden, 2007).

#### 4.3.2 Relaxation Therapy in Behaviorism

#### Concept:

Relaxation therapy is rooted in the framework of behaviorism and aims to alter individuals' emotional and physiological responses through conditioning mechanisms. Based on research by behaviorists such as Watson and Skinner, relaxation therapy posits that repeated practice of specific relaxation techniques can reduce anxiety responses and enhance individuals' ability to adapt to stressors (Jacobson, 1938).

#### Techniques:

**Deep Breathing Training:** Utilizes abdominal breathing techniques to regulate the autonomic nervous system, thereby lowering heart rate and blood pressure.

**Progressive Muscle Relaxation:** Involves systematically tensing and then relaxing muscle groups to gradually relax both the body and mind.

**Imagery Relaxation Techniques:** Employs guided imagery to help individuals relax and focus their attention.

**Mindfulness Meditation:** Assists individuals in observing and managing their emotions in the present moment, reducing symptoms of anxiety and depression.

#### Purpose:

Relaxation therapy is primarily used to treat anxiety disorders, stress-related conditions, and sleep disorders. It works by lowering physiological arousal levels and psychological stress responses, thereby improving emotional regulation abilities (Davis et al , 2000).

### 4.3.3 Person-Centered Therapy (PCT)

#### Concept:

Person-Centered Therapy, founded by Carl Rogers in the 1950s, is a significant component of humanistic psychology. This therapy emphasizes that every individual has the potential for self-actualization and inherent goodness. Psychological distress often arises from discrepancies between an individual's "self" and their

experiences. By creating an environment of unconditional acceptance, individuals can restore self-consistency (Rogers, 1951).

Techniques:

**Unconditional Positive Regard:** Provides the client with unconditional respect and acceptance, encouraging them to express their true feelings.

**Empathy:**The therapist conveys a deep understanding and resonance with the client's experiences through both verbal and non-verbal means.

**Congruence:**The therapist maintains authenticity and transparency in interactions, building a trusting relationship.

**Facilitating Self-Exploration:**Uses techniques such as questioning and reflection to help clients gain a deeper understanding of their inner experiences.

Purpose:

PCT is widely used to address various psychological issues such as anxiety, depression, and interpersonal problems. Its primary goal is to promote self-actualization and self-acceptance in clients, thereby enhancing mental toughness and life satisfaction (Cain, 2010).

#### 4.3.4 Narrative Therapy

Concept

Narrative Therapy originated in the 1980s, influenced by postmodernist ideas, particularly those of French philosopher Michel Foucault. It was co-founded by Australian psychotherapist Michael White and New Zealand psychotherapist David Epston. Initially applied in family therapy, Narrative Therapy has since expanded to various settings, including mental health education, post-disaster psychological reconstruction, hospitals, and communities. Its unique philosophical perspective and nuanced counseling language provide clients with profound psychological growth experiences (Yuan, 2019).

The core concept of Narrative Therapy is that people develop alternative stories and create new meanings through continuous storytelling in social

interactions. This process helps individuals reshape the meaning of their lives, redefine their identity and interpersonal relationships, and actively address life problems. The therapeutic model includes externalizing the problem, deconstructing mainstream narratives, and rewriting alternative stories. The therapist assists clients in separating themselves from the problem, externalizing it to enhance self-confidence and self-control, deconstructing negative mainstream narratives, and uncovering and reinforcing suppressed positive alternative discourses, ultimately creating richer and more empowering alternative life stories (Li, 2016).

#### Techniques

**Externalizing the Problem:** Separates the problem from the individual, treating the problem as an external, discussable entity rather than an intrinsic attribute. For example, changing “I have anxiety” to “Anxiety is affecting me.” This helps clients view themselves as struggling with the problem rather than as problematic individuals, thus enhancing their ability to cope with the issue and boosting their confidence.

**Deconstructing Mainstream Narratives:** Questions and challenges the mainstream negative narratives established by societal, cultural, and familial influences. By analyzing and discussing the formation and impact of these mainstream narratives, clients understand their limitations and biases, gradually diminishing their negative effects on the clients.

**Rewriting Alternative Stories:** Builds new, more positive life stories based on existing but underappreciated positive experiences and potentials of the client. These alternative stories aim to reshape the client's identity, enhance their sense of life meaning, and improve their ability to respond positively.

**Double Listening and “Witness Team” Techniques:** One significant feature of Narrative Therapy is double listening, where the therapist not only listens to the client's problem narrative but also attends to hints of hope and success in their narrative. Additionally, the “witness team” technique involves inviting significant others to witness the formation and growth of the client's new story, thereby reinforcing their new identity and social support.

### Purpose

Narrative Therapy is suitable for various psychological issues, including depression, anxiety, post-traumatic stress disorder (PTSD), and complex family relationship problems. Its primary goal is psychological reconstruction through deconstructing problems, rebuilding meaning, and redefining identity, rather than merely symptom relief or diagnostic labeling (Yuan, 2019). In practice, Narrative Therapy also emphasizes an egalitarian relationship between the therapist and the client, encouraging clients to narrate and explore their life stories to activate their internal potential and wisdom, thereby constructing a new, more powerful story (Li, 2016).

### Uniqueness and Differences

As a postmodern psychotherapy method, Narrative Therapy differs significantly from traditional therapies and is even seen as revolutionary in some respects. First, it views psychological issues by separating "the problem" from "the person," rather than focusing on the individual. Second, it opposes the therapist's expert stance over the client, favoring an egalitarian, accepting approach that actively listens and stimulates the client's confidence and potential. Finally, Narrative Therapy places more emphasis on psychological reconstruction and enriching meaning, rather than merely diagnosing or labeling (Li, 2016).

## 4.3.5 Art Therapy

### Concept

Art therapy is a therapeutic approach that utilizes the process of creating art to promote mental health. Through various art forms such as dance, music, painting, sculpture, and calligraphy, clients can express their inner emotions and thoughts, helping them to cope with psychological distress and enhance self-

awareness. Rooted in psychological theories, particularly humanistic psychology, art therapy emphasizes emotional processing and psychological healing through creative and visual expression (Kramer, 1971). Dance therapy promotes mental and emotional health through physical movement and dance expression, based on the close connection between the body and emotions, believing that dance can help individuals explore inner feelings and improve psychological well-being (Levy, 1988). Music therapy uses the creation, performance, and listening of music to promote psychological and emotional health. Music can influence emotions, behavior, and physiological responses, making it a useful tool for improving mental states and managing psychological issues (Bruscia, 2014).

#### Techniques:

**Free Painting:** Encourages clients to create freely and express emotions and thoughts without specific guidance. This approach helps clients relax and release inner feelings.

**Group Dance:** Engages in dance activities within a group to enhance social interaction and support. Promotes social skills and group cohesion through teamwork.

**Free Dance:** Encourages clients to dance freely, express inner emotions, and relieve stress. This method helps clients relax and explore internal emotions and bodily sensations.

**Music Listening:** Uses music listening to influence mood and mental state, selecting specific types of music to achieve relaxation or motivation.

#### Objectives:

**Enhance Social Interaction:** Improves social adaptability by strengthening social interactions and support through group dance.

**Self-Exploration and Awareness** Promotes a deeper understanding of personal emotions and thought patterns through artistic creation and analysis.

**Build Confidence and Self-Efficacy:** Provides creative avenues to help clients build confidence and enhance their sense of self-efficacy and personal achievement.

**Psychological Recovery and Support:** As part of psychotherapy, art therapy helps alleviate symptoms of anxiety, depression, and other conditions, supporting the individual's psychological recovery process.

**Emotional Regulation and Release:** Uses music to help clients regulate emotions, relieve stress, and reduce anxiety.

**Enhance Emotional Expression:** Provides music as a means for emotional expression, supporting individuals in exploring and understanding their emotional experiences.

Integrated group counseling has been widely used in many fields, including mental health, education, and social work. Studies have shown that integrated group counseling plays a positive role in improving mood, improving social ability, and enhancing mental toughness. Combined with art therapy and integrative group counseling theory, self-image and mental toughness are strengthened.

**Provide opportunities for non-verbal expression:**

Art therapy provides non-verbal opportunities for expression through artistic creation, enabling individuals to bypass the restrictions of language and freely express their inner emotions, conflicts, and desires. This helps individuals to know themselves more deeply and enhance their self-image.

**Promote group interaction and sharing:**

In integrated group consultation, interaction and sharing among members are the core link. Through group activities in art therapy, members can create, discuss, and share their feelings and experiences together. This interaction helps to increase trust and support among members, which in turn increases mental toughness.

**Enhance emotional management and coping skills:**

Through the process of artistic creation, art therapy helps individuals to deal with and express emotions and improve their emotional management ability. At

the same time, activities such as role-playing and situational simulation in integrated group counseling can also help individuals learn strategies to cope with pressure and challenges, and further enhance Mental toughness.

Promote self-identity and creativity:

Art therapy encourages individual freedom of expression, which helps individuals to discover and affirm their uniqueness and enhance their self-identity. At the same time, artistic creation itself is a creative process, which helps to stimulate individual creativity and imagination and further promote personal growth.

#### **4.4 Design of Integrated Group Counseling**

In designing integrated group counseling, I have referenced the theoretical framework proposed by Jacobs et al. in their book *\*Integrated group counseling Strategies and Skills\** (Jacobs, Masson, Harvill, & Schimmel, 2011) and the perspectives outlined by Fan Fumin in *\*Group Psychological Counseling\**. Based on these theories, the integrated group counseling activity is divided into four phases, each with specific goals and tasks (Fan, 2022).

##### **4.4.1 Relationship-Building phase (Requires 1-2 Sessions)**

In this phase, the core psychological need of group members is to gain a sense of security. The primary task of the facilitator is to help members become acquainted with each other and enhance mutual understanding. This includes organizing various interactive activities and discussions to help members get to know each other's backgrounds and expectations. Additionally, the facilitator needs to clarify the group's goals and establish clear group norms to ensure smooth progress of the activities. Through these measures, members can gradually build relationships in a safe and trusting environment.

##### **4.4.2 Transition phase (Requires 1-2 Sessions)**

During this phase, the most important psychological need of group members is to feel truly accepted and experience a sense of belonging. To achieve this,

the facilitator must create an environment conducive to building trust. This may involve designing activities aimed at fostering mutual understanding and support among members. The facilitator also needs to address members' anxieties and expectations, helping them express negative emotions and conflicts clearly. By doing so, the facilitator can reveal the true meaning of conflicts and assist members in understanding their underlying causes. When facing members' challenges, the facilitator should model non-defensive behavior, reduce members' dependence on the facilitator, and encourage them to express their feelings and reactions towards the group.

#### **4.4.3 Working phase (Requires 3-4 Sessions)**

In this phase, the primary need of group members is to utilize the group's power to address their issues. The facilitator's main task is to assist members in solving problems. The facilitator should not only demonstrate how to handle personal attitudes, feelings, and behaviors but also effectively use group resources to create an atmosphere of trust, understanding, and sincerity. In such an environment, the facilitator encourages members to explore their attitudes, feelings, and behaviors, deepening self-awareness. Through group interaction and support, members can transform their insights into actions, further strengthening mutual support and assistance. The facilitator also encourages members to try new behaviors to promote personal growth and development.

#### **4.4.4 Termination phase (Requires 1-2 Sessions)**

In this phase, group members need to summarize their experiences in the group and say goodbye. The facilitator's main task is to help members face the impending separation and provide psychological support. Additionally, the facilitator assists members in organizing and summarizing what they have learned in the group,

affirming their growth and progress, and boosting their confidence. Through this, the facilitator helps members apply what they have learned to their daily lives, ensuring that change and growth continue. The termination phase is not only a summary of the group activities but also an affirmation and encouragement of individual growth.

#### **4.5 Application of Integrated group counseling to improve university Students' Anxiety**

Integrated group counseling is particularly advantageous for addressing anxiety among university students. Effective planning of counseling programs is crucial for ensuring successful outcomes (Jian, 2023). Research indicates that group-based interventions have a significant positive effect on enhancing university students' self-confidence (Hu, 2014; Wang, 2020). Integrated group counseling, as a professional psychological support technique, offers both therapeutic and educational benefits for personality development and the prevention of psychological issues. Theoretical frameworks such as rational emotive theory, group dynamics theory, interpersonal theory, and social learning theory all support the effectiveness of group interventions, which are widely recognized both domestically and internationally. According to American counseling educator Gladding, integrated group counseling is not only a cost-effective method but also an effective one.

Research by He Zhitao and colleagues has found that the greatest advantage of group psychological counseling lies in its diverse resources. While any educator's experience is limited, the group approach can offer more resources, allowing educators to tailor group programs to students' real-life situations, providing a richer reference background (Zhang, 2023). Therefore, when designing psychological health activities for university students, expanding the scope of psychological counseling with engaging elements like psychological games can be effective. For example, activities such as psychological empowerment group training, psychological treasure hunts, forest aerobic relaxation, and DIY psychological artwork can attract students' attention, stimulate their curiosity and motivation, and enhance the impact and benefits of educational activities (Zhang, 2022).

#### 4.6 Current Status of Integrated Group Counseling Research Domestically and Internationally

Integrated group counseling has a rich history of development and application. In 1905, American internist Pratt pioneered the use of integrated group counseling by forming a group of over 20 hospitalized tuberculosis patients. Through lectures, personal testimonials, and discussions, he successfully inspired patients to overcome their illness. In the 1940s, British psychiatrist Foulkes introduced the concept of collective analytic therapy, encouraging members to freely express their concerns, difficulties, and thoughts. These were then guided and interpreted by the therapist to eliminate patients' habitual criticisms and resistance to these issues. By the 1960s, humanistic psychology emerged, and the format of social groups for personal growth and communication began to appear in psychological counseling. These groups focused on experiential learning with goals directed towards psychological growth and development. Since the 1970s, clinical psychologists and educators have widely applied integrated group counseling to correct adolescent psychological disorders and prevent psychological and behavioral issues among adolescents. In the context of China, integrated group counseling has developed rapidly in Hong Kong and Taiwan. In Taiwan, integrated group counseling and psychotherapy have a history of over 20 years, with a high application rate of 88% in schools. In Hong Kong, integrated group counseling aimed at developing adolescents' sound personalities began in the 1920s, and every university has counseling centers providing individual, group, and career counseling services (Zheng, 2006). Research by Chinese scholars, such as Li Xianzhong and colleagues, has investigated the impact of group psychological counseling on university students' inferiority complex. Their experimental study showed a significant reduction in anxiety during public speaking and notable improvements in self-evaluation, especially in oral expression, public speaking, optimism, and social skills, indicating that group psychological training has a significant effect on reducing inferiority (Li, 2004).

Sun, Fan, and Liu (2000) also studied the effects of group psychological counseling on improving university students' self-confidence. By analyzing scale measurements and other qualitative research methods, they found that group psychological counseling effectively enhances self-confidence among university students and is effective in achieving developmental goals. This research provides valuable insights for future studies and applications of group psychological counseling. Additionally, they explored the effectiveness of integrated group counseling in treating depression among university students using cognitive behavioral therapy, including rational emotive therapy. The results indicated that group psychological therapy significantly alleviates depression in university students.

#### 5. The theories and methods employed in the Phase 1

As a qualitative method for exploring shared psychological experiences within groups, focus group interviews have their theoretical foundation established by Kitzinger's (1995) study in the *British Medical Journal*, which points out that group interaction can effectively elicit implicit cognition that individuals find difficult to express independently. In empirical application, Smith et al. (2022) conducted thematic coding analysis on 6 focus groups (involving 48 adolescents aged 14-17) and revealed the dynamic association between "like feedback" in social media use and the construction of adolescents' self-identity in the *Journal of Adolescent Mental Health*, fully demonstrating the advantage of this method in capturing details of subjective experiences.

Semi-structured interviews, characterized by "predefined framework + flexible follow-up questions", have become an important tool in clinical psychology research. Brinkmann (2014) emphasized in the *Encyclopedia of Critical Psychology* that this method can effectively explore the subjective meaning system of clients. Lee et al. (2021) further verified its value through a study on 32 individuals with post-traumatic growth: using the constant comparison method, they clarified the interaction path of "cognitive restructuring → perceived social support → enhanced self-efficacy" after trauma, and the relevant findings were published in the *Journal of Clinical Psychology*.

Descriptive statistics serve as the foundation for presenting data in psychological research, and the cross-cultural study by McCrae and Costa (1997) in the *American Psychologist* is a typical example. Based on samples from 50 cultural groups, this study clearly demonstrated the cultural distribution differences in the Big Five personality traits through precise mean values (e.g., mean score of neuroticism dimension  $M=2.87$ , mean score of extraversion dimension  $M=3.52$ ) and standard deviation data ( $SD=0.61-0.73$ ), laying a solid foundation for subsequent analyses.

Analysis of Variance (ANOVA) is a classic statistical tool for testing inter-group differences. The study by Hofmann et al. (2012) in *Cognitive Therapy and Research* demonstrated its application value in experiments. In this study, 180 depressed patients were randomly assigned to the Cognitive Behavioral Therapy (CBT) group, Acceptance and Commitment Therapy (ACT) group, and control group. Through repeated-measures ANOVA, it was found that the score of the depression scale in the CBT group was significantly lower than that in the other two groups after 12 weeks ( $F=8.72$ ,  $p<0.001$ ,  $\eta^2=0.19$ ), clearly confirming the differences in intervention effects.

Correlational analysis is used to explore the strength of associations between variables. Rosenberg (1965) was the first to verify its value in the research on the development of the Self-Esteem Scale, finding that self-esteem scores were significantly positively correlated with academic self-efficacy ( $r=0.43$ ,  $p<0.01$ ). A recent study by Wang et al. (2023) in *Mindfulness* further expanded its application scenario: based on a sample of 528 adults, it was found that the frequency of daily mindfulness practice was significantly negatively correlated with trait anxiety scores ( $r=-0.38$ ,  $p<0.001$ ), and the association remained stable even after controlling for demographic variables (partial  $r=-0.35$ ,  $p<0.001$ ).

Regression analysis is used to reveal the predictive relationships between variables. The diary study by Miller et al. (2019) in the *Journal of Sleep Research* demonstrated the application value of basic regression. Through 14-day tracking data, this study confirmed that daily sleep duration could significantly and positively predict

the level of next-day positive affect ( $\beta=0.29$ ,  $p<0.01$ ,  $R^2=0.08$ ), and the effect remained stable even after excluding the confounding factor of sleep quality.

Multiple regression analysis can handle multiple predictive variables simultaneously. In their study published in the Chinese Journal of Clinical Psychology, Zhang et al. (2020) constructed a predictive model for depressive symptoms in college students, incorporating three variables: social support, negative coping styles, and frequency of life events. The results showed that the total explanatory power of the model reached 39.6% ( $R^2=0.396$ ,  $p<0.001$ ), among which negative coping styles had the strongest predictive effect ( $\beta=0.31$ ). This finding confirms the advantage of capturing "multi-factor interactions" emphasized by Hair et al. (2017) in Multivariate Data Analysis.

## 6. Theories and methods applied in group counseling in the Phase 2

### 1. Cognitive Behavioral Therapy (CBT): Core Theory and Empirical Foundation

Centered on the "cognition-emotion-behavior" interaction model, CBT emphasizes improving psychological symptoms by identifying and modifying negative automatic thoughts and adjusting maladaptive behaviors. Its empirical effectiveness has been confirmed by numerous studies. Hofmann et al. (2012) published a meta-analysis in *Cognitive Therapy and Research*, which included 119 studies ( $n=10,806$ ). The results showed that CBT had a significantly better intervention effect on 10 types of psychological problems (including anxiety disorders, depressive disorders, and substance abuse) than the waitlist control group (effect size  $g=0.75$ ,  $p<0.001$ ), and the symptom recurrence rate during the 6-12 month follow-up was 23% lower than that of other therapies. Beck (1979) proposed the "cognitive triad" (negative cognition about the self, the world, and the future) theory in his classic work *Cognitive Therapy of Depression*, laying the framework for CBT in treating depression. A subsequent study by Hollon et al. (2014) in *American Journal of Psychiatry* further verified that CBT had a comparable effect to antidepressants in alleviating major depression (response rates were 62% and 58%, respectively), and the CBT group showed better maintenance effects after discontinuing treatment.

## 2.Relevant treatment methods for cognitive behavior

As the core technical system of CBT, Cognitive Restructuring Therapy focuses on the intervention process of "identifying automatic thoughts - testing cognitive biases - constructing adaptive cognition," with its theory directly derived from Beck's cognitive model; Beck et al. (1985) proposed techniques like "Socratic questioning" and "evidence testing" in *Cognitive Therapy of Anxiety Disorders*, while a study by Hofmann (2008) in *Clinical Psychology Review* showed that removing the cognitive restructuring module reduced CBT's intervention effect size for anxiety disorders from 0.82 to 0.45 ( $p < 0.01$ ), and a long-term study by Hollon et al. (2020) in *Journal of Consulting and Clinical Psychology* confirmed clients mastering this skill had a 40% lower depression recurrence rate than those who did not, highlighting its role in maintaining CBT's effects.

Emotion Recognition and Regulation Therapy (e.g., the emotion regulation module of Dialectical Behavior Therapy, DBT), which focuses on emotion awareness and management, is often integrated with CBT's cognitive intervention; Linehan (1993) noted in *Skills Training Manual for Treating Borderline Personality Disorder* that DBT's "emotion labeling exercises" and "mindful breathing regulation" can address CBT's insufficiency in intervening in "emotion-driven cognitive biases" (e.g., stabilizing anger first before cognitive testing increases the success rate of cognitive modification by 28%), and a study by Mennin et al. (2015) in *Behavior Therapy* found "CBT + emotion regulation training" had a better effect on generalized anxiety disorder ( $g = 0.89$ ) than CBT alone ( $g = 0.67$ ), especially in improving "cognitive rigidity caused by emotional rumination."

Growth Mindset Theory, proposed by Dweck (2006) in *Mindset: The New Psychology of Success* (distinguishing "growth mindset"—believing abilities improve with effort—and "fixed mindset"—believing abilities are fixed), provides a new perspective for CBT's cognitive intervention (strengthening growth mindset by modifying "fixed mindset biases" like "I am inherently bad at socializing"); Burnette et al. (2013)'s meta-analysis of 63 studies in *Psychological Bulletin* showed "CBT + growth mindset training" had a significant effect on depressive symptoms from academic anxiety or career setbacks ( $g = 0.68$ ), with growth mindset mediating CBT's effect on "self-efficacy"

(mediation effect size=0.32,  $p<0.001$ ), and Yeager et al. (2019)'s study in *Science* confirmed "CBT cognitive restructuring + growth mindset feedback" reduced adolescents' academic stress-related anxiety incidence by 31%. Mindfulness-Based Cognitive Therapy (MBCT), developed by Segal, Williams, and Teasdale (1992), integrates CBT with mindfulness techniques (enhancing awareness of automatic thoughts via exercises like body scans and mindful breathing before modifying negative cognition with CBT tools); Segal et al. (2013)'s study in *The Lancet* (844 recurrent depression patients) showed MBCT was comparable to maintenance antidepressants in preventing recurrence (12-month rate: 24% vs. 27%) and better than CBT alone (37%), especially for those with "cognitive rumination," and Kuyken et al. (2016)'s study in *Journal of Consulting and Clinical Psychology* verified MBCT extended CBT's long-term effect to 24 months via "cognitive defusion," reducing recurrence by an additional 15%. Additionally, Positive Psychotherapy, a positive-oriented extension of CBT that aims to enhance individual strengths and positive emotions (drawing on CBT's structured intervention logic), sees Seligman (2006) propose in *Authentic Happiness* that its "Three Good Things" and "strengths-based exercises" can combine with CBT's "cognitive recording" to shift clients from "modifying negative cognition" to "strengthening positive cognition"; Sin and Lyubomirsky (2009)'s meta-analysis of 51 studies in *Annual Review of Clinical Psychology* found programs integrating CBT techniques (e.g., "positive cognitive restructuring") had a better effect on alleviating depressive symptoms ( $g=0.64$ ) than pure positive psychological exercises ( $g=0.41$ ), with the effective duration for preventing depression recurrence extended to 18 months.

### 3. Person-Centered Therapy: Research on Complementarity with CBT

Founded by Rogers, Person-Centered Therapy, which incorporates Existential Theory, centers on "empathy, unconditional positive regard, and authenticity" while embracing Existential Theory's focus on core human issues like "death anxiety,

freedom and responsibility, loneliness, and the meaning of life"; together, it forms a dual complement to CBT's "structured, problem-oriented cognitive intervention" — on one hand, as Greenberg (2015) noted in a review in the *Journal of Humanistic Psychology*, although CBT excels at quickly modifying specific cognitive biases, it falls short in addressing deep-seated experiences such as "lack of self-worth," whereas the empathy techniques of Person-Centered Therapy help clients build a secure connection, laying a trust foundation for CBT's cognitive restructuring, and Elliott et al. (2018) further supported this through a meta-analysis of 86 integrated therapy studies, showing that the intervention effect size of "CBT + Person-Centered empathy training" for social anxiety disorder ( $g=0.91$ ) was significantly higher than that of CBT alone ( $g=0.72$ ), especially in improving "social self-denial" cognition ( $p<0.05$ ); on the other hand, Existential Theory within Person-Centered Therapy complements CBT's focus on solving specific cognitive and behavioral problems by helping clients explore the deep meaning of life and alleviate cognitive conflicts arising from a lack of meaning — Yalom (2009) proposed in *The Gift of Therapy* that existential "meaning exploration" can serve as a supplementary module for CBT, and particularly for patients with chronic psychological issues (e.g., long-term depression), integrating existential dialogue after CBT modifies negative cognition can reduce the recurrence risk caused by "symptom relief but lack of meaning," while a study by Schneider (2016) in the *Journal of Existential Psychology and Psychotherapy* demonstrated that "CBT + existential meaning exploration" had a significantly better effect on anxiety and depression in patients with advanced cancer ( $g=0.83$ ) than CBT alone ( $g=0.59$ ), with the increase in patients' scores on the "Meaning in Life Scale" positively correlated with symptom improvement ( $r=0.41$ ,  $p<0.01$ ).

#### 4. Rational Emotive Behavior Therapy (REBT): Theoretical Predecessor and Practical Supplement to CBT

Founded by Ellis (1955), REBT is an important theoretical origin of CBT. Its "ABC theory" (Event A - Belief B - Emotional Consequence C) provides a core framework for CBT's cognitive intervention. Ellis (1994) emphasized in *Reason and Emotion in Psychotherapy* that REBT focuses more on "disputing (D) irrational beliefs", while

modern CBT has added techniques such as behavioral experiments and exposure exercises on this basis. David et al. (2018) conducted a study in *Journal of Rational-Emotive & Cognitive-Behavior Therapy* comparing the intervention effects of REBT and CBT on social anxiety. The results showed no significant difference in short-term effects between the two ( $g=0.78$  vs.  $0.81$ ), but REBT was more efficient in "quickly identifying absolutist beliefs (e.g., 'I must be approved by everyone')" and could be used as a preliminary intervention module for CBT.

#### 5. Client-Centered Therapy: Research on Integration with CBT

Client-Centered Therapy emphasizes "non-directiveness" and advocates that clients explore problems independently, forming a dialectical relationship with CBT's "directive cognitive intervention". Norcross (2011) pointed out in a review in *Psychotherapy Integration* that modern CBT has gradually integrated the "empathic response" technique of Client-Centered Therapy — for example, confirming the client's emotional experience through "reflective listening" before cognitive restructuring can increase the acceptance rate of cognitive modification by 35%. Empirically, Castonguay et al. (2013) analyzed 62 integrated therapy studies and found that "Client-Centered relationship building + CBT cognitive intervention" had a significantly better effect on personality disorders ( $g=0.69$ ) than CBT alone ( $g=0.53$ ), especially in improving "interpersonal cognitive biases".

#### 6. Art therapy

Within the framework of Cognitive Behavioral Theory (CBT), art therapy forms a theoretical complement to CBT through three mechanisms: "cognitive externalization, emotional regulation, and behavioral reinforcement." Artistic creation can transform abstract automatic thoughts into visual symbols (e.g., colors and lines in paintings), reducing the cognitive load of verbal expression and forming a synergy with CBT's "thought recording" technique. Moreover, the prefrontal-amygdala regulatory pathway activated by artistic activities and the immediate feedback during the creation process are consistent with the neural mechanisms and core logic of CBT's cognitive restructuring and behavioral activation principles, respectively (Cuijpers et al., 2023). At

the empirical level, the effectiveness of this integrated model has been verified in the intervention of various psychological issues: a meta-analysis on adolescent depression (PubMed, 2015) showed that; for patients with Post-Traumatic Stress Disorder (PTSD), art-integrated CBT exposure techniques can bypass verbal defense through symbolic expression, improving treatment adherence, and the degree of symptom relief after 6 weeks was significantly higher than that of the CBT-only group ( $p < 0.01$ ); a study on left-behind children (Liu, 2025) also confirmed that the combination of "identifying cognitive biases via House-Tree-Person painting + CBT restructuring" could increase self-efficacy by more than 30% and improve the efficiency of interpersonal support construction by 45%. In practice, the two approaches are often integrated through pathways such as "visualization of automatic thoughts" and "artistic behavioral experiments." In the future, large-sample randomized controlled trials (RCTs) are needed to compare differences in effect sizes, explore the compatibility between different art forms and CBT, and verify differences in brain mechanisms in combination with neuroimaging, so as to further refine this integrated model.

## 7. Conceptual Framework

### 7.1 The First Stage

The conceptual framework includes the first stage of testing how self-image and mental toughness affect anxiety and how they influence anxiety. The scale used, the Body Self-Image Questionnaire (BSIQ), is employed to measure the body image of young people. It was initially developed in 1999 (Rowe & Benson, 1999). The MTQ48 scale is a measurement tool used to assess an individual's ability to maintain a positive attitude, adapt, and recover in the face of challenges, stress, or adversity. Developed by Clough et al. (2007), this tool quantifies an individual's mental toughness level when facing stress and challenges. The Self-Rating Anxiety Scale (SAS) was developed by W. K. Zung in 1971. By analyzing these factors, this framework aims to determine how self-image and mental toughness affect anxiety.

### **Phase1:**

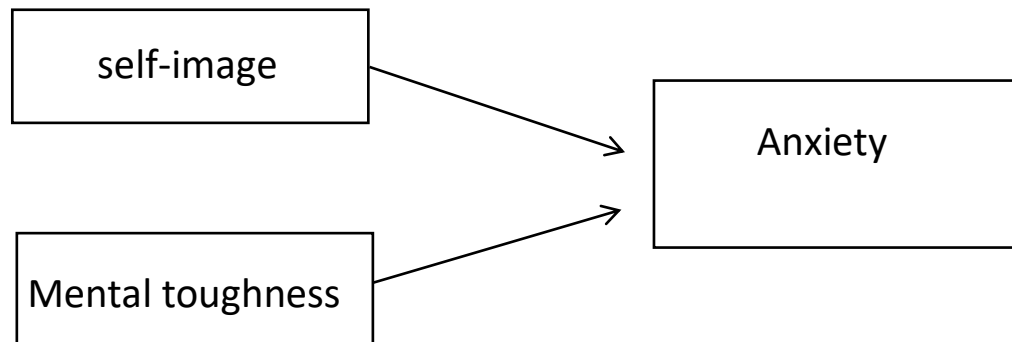


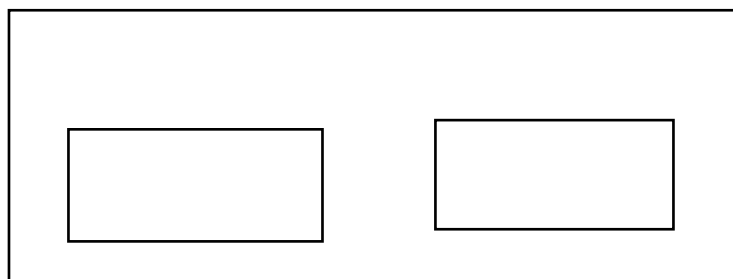
Figure 2 Phase 1 conceptual frame diagram

Phase 1 : Quantitative data collection was conducted through stratified random sampling to explore the influence of self-image and mental toughness on anxiety among Chinese college students

### 7.2 The Second Stage

The conceptual framework of the second stage involves designing and implementing integrated group counseling activities to enhance self-image and mental toughness. These activities aim to improve the self-image and mental toughness of the guidance group members, thereby reducing anxiety. Additionally, participants will learn to enhance their self-image and utilize mental toughness techniques to manage and adapt to adverse events in their daily lives. The ultimate goal is to reduce the anxiety level of college students and improve their overall mental health and quality of life.

**Phase2:**



**Integrated group counseling** → **anxiety**

Figure 3 Phase 2 conceptual frame diagram

Phase 2: Reduce the anxiety of Chinese college students by conducting integrated group counseling and consultation.

### 8. Research Hypotheses

This study aims to explore how self-image and mental toughness affect anxiety among Chinese university students, and to assess the effectiveness of an integrated group counseling program in alleviating anxiety.

#### Phase 1

Hypothesis 1: Self-image and Mental toughness are related to anxiety. Higher levels of self-image and Mental toughness may be associated with lower levels of anxiety.

Hypothesis 2: Determine which of self-image and Mental toughness is the most influential predictor of anxiety.

#### Phase 2

Hypothesis 3: After participating in the integrated group counselling project, compared with before the project, the most influential anxiety predictor will reduce anxiety.

Hypothesis 4: There are significant differences in the experimental results between the experimental group and the control group.

## CHAPTER 3

### METHODOLOGY

This research is divided into two phases and adopts a mixed method. Quantitative data were collected through questionnaires, and qualitative data were collected through records and interviews. This study adopts an explanatory sequence design. Firstly, quantitative research is conducted to obtain quantitative data, and then participants are selected from the quantitative samples for qualitative research to explain the quantitative results.

The purpose of the first phase is to study the mental toughness and self-image of Chinese college students, and the effect of the scale on Chinese college students was tested in terms of anxiety, mental toughness, and self-image. The second phase aims to design an integrative group counseling intervention to enhance the most influential anxiety predictors identified in the first phase, which may include mental toughness and self-image, and to examine whether anxiety is reduced after the intervention. Compare the scores of the most influential predictors and anxiety scores before and after integrative group counseling in the experimental group, and compare the scores of the most influential predictors and anxiety scores between the experimental group and the control group. The contents of this chapter are as follows:

1.Phase 1: Exploring the Impact of Self-Image and Mental Toughness on Anxiety

1.1 Population and Sample

2.Research Instruments

2.1 Self-rating Anxiety Scale (SAS)

2.2 Mental Toughness (MTQ48)

2.3 Self-Image – Body Self-Image Questionnaire (BSIQ-SF)

3. Data collection

3.1 Collection Procedure

4. Research procedures

5. Data Analyses

## 6.Phase 2:Reducing Anxiety through Integrated Group Counseling

- 6.1 Population Sample
- 6.2 Research Design
- 6.3 Research Instruments
- 6.4 Research Steps
- 6.5 Data Collection
- 6.6 Data Analysis

## 1.Phase 1: Exploring the Impact of Self-Image and Mental Toughness on Anxiety

### 1.1 Population and Sample

#### 1.1.1 Phase 1

Subjects: 3874 students from the first to fourth years of undergraduate studies in 7 universities in Wuhan, China.

Sampling principle: Based on the Taro-Yamane method and with an expected margin of error (e) of 0.05, the calculation shows that a minimum sample size of 364 people, or 10.3% of the total population, is required to scale the number of people to 10.3% for each grade in 7 universities to obtain the corresponding number.

Sampling method: In the first phase, 400 students were randomly selected from 7 universities and 4 grades according to a particular proportion, considering that there would be students who withdrew for other reasons and would be invalid due to incomplete questionnaires.

Table 2 Sample Collection Situation Table

university	Grade	The number of students	Sample size
College of art			
	1	69	7
	2	82	9
	3	73	7
	4	70	7

Table 2 (Continued)

university	Grade	The number of students	Sample size
Film and Television College			
	1	86	9
	2	97	10
	3	89	9
	4	83	9
Grammar school			
	1	111	11
	2	121	12
	3	113	12
	4	102	11
College of Nursing			
	1	124	13
	2	133	14
	3	119	12
	4	116	12
School of Business,			
	1	143	15
	2	127	13
	3	130	13
	4	121	12
Institute of Urban Construction			
	1	155	16
	2	169	17
	3	145	15
	4	141	15

Table 2 (Continued)

university	Grade	The number of students	Sample size
<b>Institute of Artificial Intelligence</b>			
	1	202	21
	2	318	33
	3	315	33
	4	320	33
<b>Total amount</b>			<b>400</b>

Description: The total number of students in the first grade is 890, taking 10.3% to get 92, and the number of randomly selected students from 7 University is indicated in the table.

## 2. Research Instruments

### 2.1 Self-rating Anxiety Scale (SAS)

The Self-Rating Anxiety Scale (SAS) was developed by W. K. Zung in 1971. SAS uses a 4-level score to evaluate the frequency of symptoms. The standard is: "1" means no or very little time; "2" means sometimes there is; "3" means yes, most of the time; 4 indicates most or all of the time. Out of the 20 items, 15 are stated in negative words and graded in the order of 1 to 4 above. The remaining five items (Nos. 5, 9, 13, 17, 19) marked with \* are stated in positive words and are scored in reverse order from 4 to 1. The primary statistical indicator of SAS is the total score. Add the scores of each of the 20 items to obtain a rough score. Then, multiply the rough score by 1.25 and take the integral part to get the standard score. Alternatively, you can refer to the table for the exact conversion.

### 2.1.1 Application Scope

This scale can assess the severity of anxiety symptoms and their changes in treatment, and is suitable for adults with anxiety symptoms. It is mainly used for the evaluation of efficacy and cannot be used for diagnosis.

### 2.1.2 Test Procedure

(1) Before the self-assessment, it is necessary to let the subjects understand the filling method of the entire scale and the meaning of each question, and then make an independent self-assessment that is not affected by anyone. The scoring criteria are: "1" means no or very little time; "2" is a small amount of time; "3" is quite a lot of time to have; "4" is most or all of the time.

(2) The time frame of the rating is the actual feeling of the self-rated person in the past week.

(3) If the reviewer is too poorly educated to understand or read the SAS questions, the staff can read them to him, so that the reviewer can make his own assessment.

(4) During the evaluation, the self-evaluator should be asked to understand the questions of the reverse score. SAS has 5 reverse items; if they cannot understand them, it will directly affect the statistical results.

(5) At the end of the evaluation, the staff should carefully check the evaluation results and remind the self-evaluators not to miss an item or repeat the evaluation on the same item.

### 2.1.3 Test score

If it is a positive scoring question, the rough score is 1, 2, 3, and 4 points in turn; Reverse scoring questions (with wooden marks below) are rated 4, 3, 2, and 1. As with SDS -, the score of 20 items is added to obtain a rough score (X), which is converted by the formula, that is, the rough score is multiplied by 1.25 and then the integer part is taken to obtain a standard score (Y).

### 2.1.4 Interpretation of results

According to the Chinese norm results, the cutoff score for the SAS standard score is 50, with 50-59 indicating mild anxiety, 60-69 indicating moderate anxiety, and scores above 69 indicating severe anxiety. (Since its inception, this scale has been widely used among the general population.)

After receiving all the IOC forms filled out by the experts, calculate the item-objective Consistency (IOC) score to assess the consistency between each sentence, phrase, question, and its operational definition. Based on the expert comments and the IOC, all the questions in this questionnaire score between 0.6 - 1, which is consistent with the objective truth.

Table 3 Partial Anxiety Test Table

Questions	1	2	3	4
1.I feel more nervous and anxious (anxious) than usual.				
2.I feel afraid for no reason at all (fear).				
3.I tend to get upset or panic.				
4.I think I might go crazy.				
5.I think everything is fine and nothing bad is going to happen.*				

Note:\* Indicates reverse-scored items

With little or no time (1 )

Sometimes (2)

Most of the time (3)

Most or all of the time. (4)

## 2.2 Mental Toughness (MTQ48)

The MTQ48 scale is a measurement tool used to assess an individual's ability to maintain a positive attitude, adapt, and recover in the face of challenges, stress, or adversity. It measures the psychological adaptability and resilience of individuals in the face of life pressures, setbacks, and hardships. This resilience enables individuals to effectively respond to and adapt to these challenges, maintain their health, and achieve success. The scale is widely used in sports, education, the military, and other fields to assess the level of individual mental toughness.

The MTQ48 scale content usually contains multiple dimensions or subscales to assess an individual's mental toughness. These dimensions may include, but are not limited to:

Challenge: An individual's attitude and response to a challenge.

Commitment: An individual's level of commitment to a goal or task.

Control: The ability of an individual to manage their own actions and emotions.

Self-confidence: An individual's confidence in his or her own abilities and worth.

Resilience: The ability of an individual to recover and grow after a setback.

Each dimension has a series of specific items or questions that the subject is asked to answer based on their actual situation. These responses were then used to calculate an individual's mental toughness score.

### 2.2.1 Purpose of the Scale

The purpose of this scale is to assess an individual's mental toughness, measuring their performance and coping ability when facing stress, challenges, and uncertainty. Mental toughness is defined as the ability to maintain a positive attitude and high performance in the face of adversity.

Scale Structure

Each dimension contains 5 items, for a total of 20 items. Each item is rated on a 4-point Likert scale (1 = Strongly Disagree, 4 = Strongly Agree).

Table 4 part of mental toughness (MTQ48) scale (adaptation)

Dimension	Item Number	Description	Rating (1-4)
Control	1	I feel that I am in control of most things in my life.	
	2	Even when facing difficulties, I can decide how to respond to them.	
	3	I believe I can set and achieve personal goals.	
	4	I am able to stay calm and composed under pressure.	
	5	When emotions fluctuate, I can quickly recover and refocus on the task.	
Commitment	6	I always set clear goals and take action to achieve them.	
	7	I set specific goals for my work and continuously evaluate progress.	
	8	Even when facing challenges or setbacks, I persist in pursuing my goals.	
	9	I have a strong sense of responsibility to ensure I fulfill my commitments.	

## 2.2.2 Scoring and Interpretation

Each item on the scale is rated from 1 to 4, indicating varying degrees of agreement or disagreement:

1 = Strongly Disagree

2 = Neutral or Unsure

3 = Agree

4= Strongly Agree

### 2.2.2.1 Dimension Scoring Interpretation

Main Dimension	Item Range	Score Range	Low Level	Moderate Level	High Level
Control	Items 1-3	3-12	Score 3-5: Lacks a sense of control over life events; often feels out of mastery when confronting life issues.	Score 6-8: Can maintain a sense of control in certain situations but may show instability or hesitation when facing challenges.	Score 9-12: Generally feels in control in most scenarios; believes in one's ability to influence life events.
	Items 4-5	2-8	Score 2-3: Tends to lose composure easily; experiences significant	Score 4-6: Can partially stay composed under stress but still suffers from emotional	Score 7-8: Able to quickly regain composure and manage emotions

Main Dimension	Item Range	Score Range	Low Level	Moderate Level	High Level
Commitment			emotional fluctuations when encountering stress and negative emotions.	instability.	effectively in tense or stressful situations.
	Items 6-7	2-8	Score 2-3: Lacks clear goals; may have insufficient motivation and direction.	Score 4-6: Can set goals but may lack specificity or consistency in implementation.	Score 7-8: Sets clear and specific goals; takes effective actions to achieve them.
	Items 8-10	3-12	Score 3-5: Tends to give up easily; lacks sustained effort when facing difficulties.	Score 6-8: Can maintain commitment to goals in some cases but may waver under challenging conditions.	Score 9-12: Maintains motivation and commitment to pursue goals despite setbacks.
Challenge	Items	2-8	Score 2-3: Feels anxious	Score 4-6: Holds a neutral attitude	Score 7-8: Embraces

Main Dimension	Item Range	Score Range	Low Level	Moderate Level	High Level
Confidence	11-12		or fearful about change; dislikes uncertainty.	toward change—neither rejecting nor particularly welcoming it.	change and views it as an opportunity for growth and learning.
	Items 13-15	3-12	Score 3-5: Feels uneasy about risks; avoids trying new things or facing uncertainties.	Score 6-8: Takes a cautious approach to risks but may attempt to confront risks in specific situations.	Score 9-12: Actively accepts risks and gains growth and learning from them.
	Items 16-17	2-8	Score 2-3: Lacks confidence in one's skills; tends to have self-doubt.	Score 4-6: Has some confidence when facing challenges but is easily influenced by situational factors.	Score 7-8: Believes in one's capacity to handle most challenges and tasks.
	Items 18-20	3-12	Score 3-5: Feels nervous, uneasy, or self-doubtful in social	Score 6-8: Can express confidence in simple social scenarios but	Score 9-12: Can confidently and clearly express

Main Dimension	Item Range	Score Range	Low Level	Moderate Level	High Level
			situations.	feels uneasy in more complex interpersonal contexts.	oneself in various social situations; capable of managing complex interpersonal relationships.

Notes: Scoring Logic Explanation: The "Score Range" in the table is derived based on the number of items and the single-item scoring rule (Likert 4-point scoring, e.g., 1-4 points; please refer to the actual questionnaire's scoring standards for confirmation). A higher score indicates a stronger level of mental toughness in the corresponding dimension.

#### 2.2.2.2 Overall Mental Toughness Score Interpretation

Overall Score Calculation: The total score is calculated by summing the scores from each dimension, with a score range of 20-80.

Score 20-30: Low level of mental toughness, indicating that the respondent tends to feel anxious, lacks confidence, or struggles to maintain a positive attitude when facing stress, challenges, and uncertainties.

Score 31-60: Moderate level of mental toughness, suggesting that the respondent can maintain a certain degree of resilience in most situations, but may require additional support or training when confronted with significant challenges or prolonged stress

Score 61-80: High level of mental toughness, demonstrating that the respondent generally maintains a positive attitude, confidence, and adaptability when

facing various challenges and stressors, exhibiting strong Mental toughness and self-efficacy.

### 2.2.3 Recommendations and Applications

For Low Scorers: Consider interventions such as psychological training, cognitive restructuring, or other methods to enhance mental toughness.

For Moderate Scorers: Engage in additional practice and psychological skill training to strengthen specific dimensions of resilience.

For High Scorers: Maintain current coping strategies and continue to develop mental toughness through new challenges.

In summary, the MTQ48 is a valuable psychological measurement tool. The adapted version of this scale measures each dimension's score, reflecting the individual's level of mental toughness in control, commitment, challenge, and confidence. The combined scores from these dimensions provide an overall assessment of mental toughness, helping to identify individual strengths and areas for improvement. The scale is used to evaluate an individual's psychological adaptability and resilience when facing challenges, stress, or adversity. By applying this scale, we can gain a better understanding of individual psychological qualities and stress resilience, providing valuable insights for selection, training, and counseling in related fields.

After receiving all the IOC forms filled out by the experts, calculate the item-objective Consistency (IOC) score to assess the consistency between each sentence, phrase, question, and its operational definition. Based on the expert comments and the IOC, all the questions in this questionnaire score between 0.6 to 1, which is consistent with the objective truth.

### 2.3 Self-Image – Body Self-Image Questionnaire (BSIQ-SF)

The BSIQ-SF (Body Self-Image Questionnaire - Short Form) was reported in a 2005 ACSM conference poster presentation, which included the factor validity and cross-validation of the adolescent body self-image scale (Rowe, 2005). This presentation took place at the American University of Sports Medicine National Conference in Nashville, Tennessee.

The BSIQ-SF is a validated and reliable measurement tool that provides a theoretically and empirically supported questionnaire to assess nine dimensions of body image, each with three items. In extensive sample structural equation modeling studies, the BSIQ-SF has demonstrated practical advantages over the 51-item version by reducing response burden, which can lead to poor response rates, lower completion rates, and reduced data quality (Rolstad, 2011).

After receiving all the IOC forms filled out by the experts, calculate the item-objective Consistency (IOC) score to assess the consistency between each sentence, phrase, question, and its operational definition. Based on the expert comments and the IOC, all the questions in this questionnaire score between 0.6 to 1, which is consistent with the objective truth.

The BSIQ-SF includes 9 factors, with a total of 27 items, as follows:

Overall Appearance Evaluation

Health and Fitness Impact

Ideal Investment

Health and Fitness Evaluation

Grooming Attention

Height Dissatisfaction

Weight Evaluation

Negative Impact

Social Dependence

Items are rated on a scale from 1 to 5, where a = 1, b = 2, c = 3, d = 4, e = 5. Note that the score for "Overall Body Image" should not be used. Each subscale score ranges from a minimum of 3 to a maximum of 15. For Item 1, reverse scoring should be applied, where a = 5, b = 4, c = 3, d = 2, and e = 1.

Table 5 Partial Self-Image Scale

STATEMENTS	<u>Not at</u> all (a)	<u>Slightly</u> (b)	<u>About</u> <u>Halfway</u> (c)	<u>Mostly</u> (d)	<u>Completely</u> (e)
<b>OAE:Overall Appearance Evaluation</b>					
1.I think my body is unattractive.					
2.I look good in clothes.					
3.My body looks good.					
<b>HFI : Health Fitness Influence</b>					
1.How well my body is functioning influences the way I feel about my body					
2.I feel better about my body when I'm fitter.					
3.The way I feel about my body improves when I exercise regularly.					
<b>II : Investment in Ideals</b>					
1.Having a well-proportioned body is important to me.					
2.Body size matters to me.					
3.I care about how well-shaped my legs are.					

## 2.4 Method Evaluation and Detection(IOC)

Before the finalization of the document, it was reviewed by two Chinese experts and three Thai experts in the fields of psychology and guidance. These experts evaluated the content validity of these tools to ensure that these projects effectively captured the expected structure. The Index of Item-Objective Congruence (IOC) method was adopted to assess the consistency between the project and the operation definitions, further improving the validity of the tool. Improvement and verification: Any differences or issues identified during the expert inspection stage are addressed through further enhancements. Ultimately, ensure its validity and reliability when measuring the target variable. Through these meticulous steps, research instruments are carefully developed, refined, and verified to ensure their effectiveness in accurately measuring the variables of interest in the research. The criteria for expert opinions are as follows:

Score +1 means Sure, that the question indicates what the instrument measures.

Score 0 means not sure that the question indicates what the 100 instrument measures.

Score -1 means Sure that the question does NOT indicate what the instrument measures.

After receiving all the IOC forms filled out by the experts, it was concluded that all the problems were rated as +1 points, proving that the designed problems can well reflect the validity and reliability when measuring the target variables.

## 3. Data collection

### 3.1 Collection Procedure

After receiving ethical review approval, the researchers submitted collection applications to seven University in grades 1-4 in Wuhan, China, explaining how to send questionnaires to participants and what to pay attention to, and describing various requirements for data collection and possible contingencies. This researcher will

personally conduct the data collection process and adopt the method of proportional stratified sampling and random selection for sampling.

### 3.1.1 Stratified Sampling

The Phase I sampling population was based on the Taro-Yamane method, and with an expected margin of error ( $e$ ) of 0.05, calculations indicated that a minimum sample size of 364 people, or 10.3% of the total population, was required. It accounts for 10.3% of the population. The total number of students was 3874 in 7 University and 4 grades. The number of students in the first grade is 890, the second grade is 1,047, the third grade is 984, and the fourth grade is 953. The corresponding number of students in each of the seven University is converted by a ratio of 10.3%.

### 3.1.2 Proportional Stratified Sampling

According to the first grade, for example,  $890 \times 10.3\% = 92$  people, each grade has 7 universities, each university each grade corresponding to 10.3 of % sample, and so on.

## 4. Research procedures

Before conducting a questionnaire survey on 400 students, it is necessary to explain how to operate, the measurement time, and possible questions related to the questionnaire. Students can conduct the test by scanning the two-dimensional code. After completing the test online, the measured data will be exported, sorted out, and saved, and students will be asked to exit in an orderly manner.

Before administering the questionnaire test to 400 students, the effects of self-image and Mental Toughness regulation on anxiety were first examined. Subsequently, the Self-Rating Anxiety Scale (SAS), Mental Toughness Scale (MTQ48), and Body Image Self-Rating Scale (BISS) were used to obtain corresponding scores. Questionnaires were collected for subsequent analysis.

## 5. Data Analyses

In this study, computer software was used for data analysis, including descriptive statistics, analysis of variance, correlation analysis, and regression analysis, aiming to integratively explore the correlation between self-image, Mental Toughness, and anxiety. In the part of correlation analysis, the Pearson correlation coefficient is used to quantify the degree of linear correlation among the variables, so as to deeply explore the specific relationship between self-image and each dimension of Mental Toughness and anxiety. The interpretation of the correlation coefficient is the focus of the analysis, emphasizing not only its statistical significance but also its explanatory power in practical application, so as to accurately judge the actual value of the observed correlation strength.

Then, multiple regression analysis was used to analyze further the integrative effects of self-image and mental toughness on anxiety. In this process, the dimensions of self-image and mental toughness were clearly set as predictive variables, and anxiety was taken as the dependent variable. Through rigorous statistical data processing, the explanatory strength of each dimension of self-image and mental toughness on anxiety was analyzed and quantified.

Finally, the results of correlation analysis and multiple regression analysis are systematically integrated and deeply interpreted, in order to integratively and profoundly reveal the complex relationship between self-image, mental toughness, and anxiety.

## 6. Phase 2: Reducing Anxiety through Integrated Group Counseling

### 6.1 Population Sample

#### 6.1.1 Experimental Sample

In the second phase, targeted sampling is carried out based on the sampling results of the first phase. Among the 400 people sampled in the first phase, the purposive sampling method was adopted to select research samples according to the research objectives. Each group should have approximately eight members, one leader, and one recorder for optimal size (Corey, 2016). However, in consideration of the possibility that members might drop out during the group consultation process, 10

participants were initially carefully selected. In addition, 20 students with anxiety scores ranging from 50 to 69 were randomly divided into two groups of 10, one as the experimental group and the other as the control group. Integrated group counseling intervention was performed for the experimental group, while no intervention was performed for the control group.

### 6.1.2 Focus Group Interview Sample

After the comprehensive group tutoring is completed, follow-up interviews will be conducted with 10 students in the experimental group one month later. The content of the interview aims to pose four questions each for mental toughness and anxiety, covering whether the enhancement of mental toughness is continuous after a period of adjustment in response to the questions, and whether anxiety has remained at a low level for a long time. This study will adopt a combination of quantitative and qualitative methods to comprehensively explore the influence of self-image and mental toughness on college students' anxiety, as well as the effectiveness of integrated group counselling intervention.

Quantitative methods: A large amount of data is collected and analyzed through methods such as surveys and statistical analysis to quantify the relationship among self-image, mental toughness and anxiety. Qualitative method: Focus group interviews will gain a deeper understanding of students' personal experiences, feelings and attitudes, providing more comprehensive and detailed insights. By combining these two methods, this study aims to gain a deeper understanding of the complexity and diversity of college students' anxiety and provide strong support for formulating effective intervention measures. The experimental group

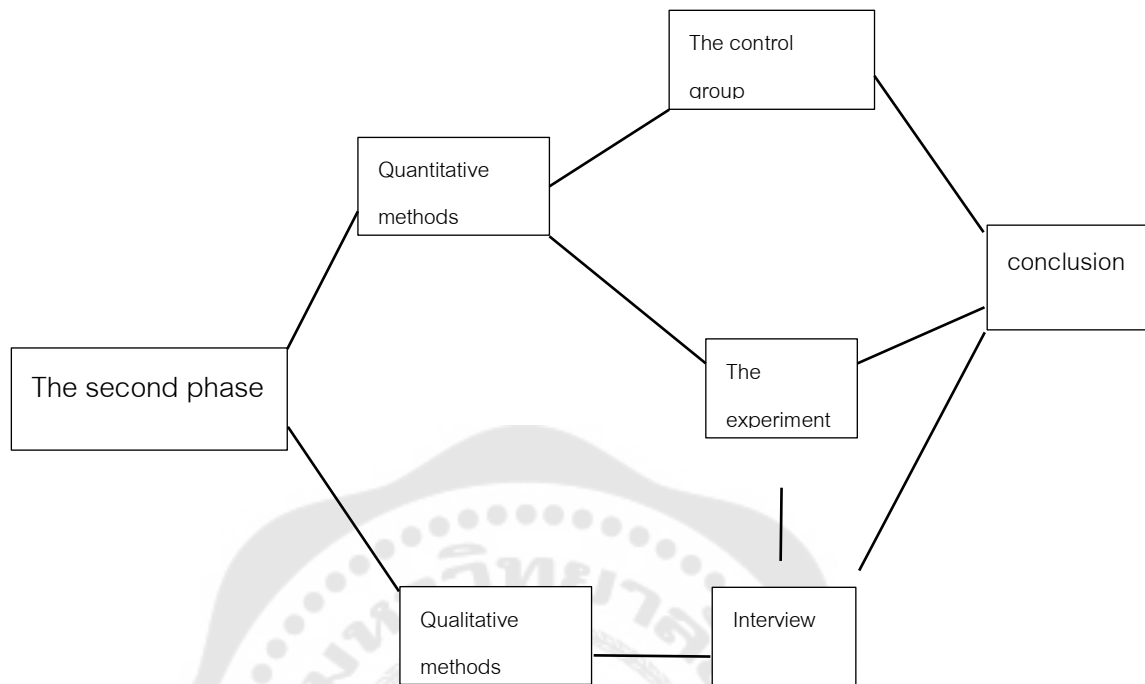


Figure 4 Mind map for the phase 2

## 6.2 Research Design

This stage adopted a quasi experimental design, including a control group, pretest and posttest plus follow up, and two dependent variables (Pamungkas et al., 2020). The focus was on the development and implementation of an integrated group counselling intervention to enhance mental toughness (dependent variable 1) and reduce anxiety (dependent variable 2). The experimental group received integrated group counselling on the basis of counseling therapy (combining counseling therapy with cognitive behavioral therapy (CBT) and mindfulness-based cognitive therapy (MBCT), with integrated group counselling as the intervention prerequisite. A follow-up was conducted one month later to observe the sustainability of the results. In comparison, the control group did not receive integrated group counseling.

E	O <sub>1</sub>	X	O <sub>2</sub>	O <sub>3</sub>
C	O <sub>1</sub>	–	O <sub>2</sub>	O <sub>3</sub>

The experiment was designed with a control group and pretest and post-test, including a follow-up

E for experimental group

C for control group

O<sub>1</sub> indicates post-test

O<sub>2</sub> indicates the rear side

O<sub>3</sub> Follow-up

X for treatment

Implement integrative group counseling for the experimental group and provide the intervention. The control group will not receive any intervention. After completing the integrative group counseling for the experimental group, follow up with the experimental group and conduct interviews with the entire group.

### 6.3 Research Instruments

#### 6.3.1 Self-Rating Anxiety Scale (SAS)

This scale will be used to assess anxiety levels after the integrative group counseling.

#### 6.3.2 Integrative Group Counseling Design Plan

The plan involves utilizing core concepts and operational modes of integrated group counseling to design an integrative group counseling program aimed at alleviating anxiety among university students. This program will focus on improving self-image and mental toughness to reduce anxiety. Anxiety is often closely related to an individual's self-perception and mental toughness. Through integrated group counseling, university students can reassess and reconstruct their self-image in a safe

and supportive environment, thereby developing a more positive and healthy self-perception. Improving self-image can help students boost their confidence, reduce anxiety, and support personal growth and development, ultimately enhancing psychological well-being.

1) Name and Nature of the Integrative Group

Group Name: "Away from Anxiety, Happy Life" integrated group counseling Training Camp

Group Nature: Closed, structured, and developmental group

2) Frequency and Duration of Integrative Group Counseling

Total Sessions: 10 sessions, two a week, 90min per session

3) Integrative Group Counseling Plan

Although integrated group counseling has been relatively recent in China, significant research achievements have been made in recent years. Some scholars have developed targeted, integrated group counseling plans tailored to the specific needs of Chinese university students and evaluated their effectiveness through empirical studies. This program aims to reduce social anxiety among university students and improve interpersonal skills.

Integrative group counseling employs various psychological theories and techniques to guide group members in interactive participation. Members build trust and emotional connections through mutual understanding activities, identify personal shortcomings, and use theoretical techniques to enhance self-image recognition and mental toughness. This helps regulate anxiety levels. Each group session should include a review and summary of the activity's gains, provide positive feedback to reinforce members' positive behaviors, and conclude with homework assignments to extend the positive changes into everyday life.

Table 6 Integrative Group Counseling Program

Session numbers	Theme
Session #1(Beginning phase)	Icebreaking Session: Building Rapport and Familiarity
Session #2(Working stage)	Self-confidence - Identify and activate your strengths
Session #3(Working phase)	Self-confidence - Self-affirmation and persistence in the face of challenges
Session #4(Working stage)	Challenges - actively face difficulties and improve the ability to cope
Session #5(Working phase)	Challenge - Cultivate growth thinking and improve resilience
Session #6(Working stage)	Control - Develop emotional regulation
Session #7(Working phase)	Control - Develop problem-solving skills
Session #8(Working stage)	Commitment - Building goal orientation and persistence
Session #9(Working phase)	Commitment - Discover intrinsic value and increase your sense of purpose
Session #10(Ending steps)	Integration and Prospect: the practice and continuation of Mental toughness

### 6.3.3 Group Study Recording Forms

Group Observation Sheet: The observer is responsible for recording each activity.

Phase Group Feedback Form: Members complete this form at the end of each unit activity.

This study evaluated the pre-process through the evaluation of group observers and the self-evaluation of group instructors. In each activity, there are two fixed observers to observe the behavior of the group leader and members, and fill in the group observation record form. After the activity, they exchange opinions and suggestions with the instructor, which is conducive to the next activity.

### 6.4 Research Steps

The study used the experimental group, the control group, before and after, and two weeks after the completion of counseling to maintain the measurement for the experimental design. This intervention study is divided into the following phases, and the process of each phase is arranged as follows:

1. The scale was used to measure the members of the experimental group and the control group before integrated group counseling.

2. In order to ensure the standard operation of group activities, before the start of integrated group counseling, carefully study the professional ethics guide of group counselors, master the operation skills of integrated group counseling, master the operation process of various activities, and inform the students about the activities.

3. According to the integrated group counseling program, the experimental group of students will implement anxiety feelings intervention. The group instructor will lead students in conducting integrated group counseling training twice a week, for approximately 90 minutes each session, over a period of 5 weeks, totaling 15 hours. The control group was developed in a natural setting without any integrated group counseling or experiments.

4. The experimental group and the control group were tested again with the above scale immediately after the end of the total group auxiliary experiment.

Because of the retention of the results of the experimental group and the control group after the integrated group counseling, we will meet and talk with the students two weeks after the end of the integrated group counseling activity to understand the students' recent situation and feelings of anxiety. After the conversation, the student psychological counseling center will organize and implement a post-test to determine the retention effect after receiving integrated group counseling.

### **6.5 Data Collection**

For pre- and post-measurements, both the experimental and control groups participated in the questionnaires used in integrated group counseling before and after phase 1. After the consultation program, semi-structured interviews were conducted with the experimental group members.

### **6.6 Data Analysis**

#### **6.6.1 Quantitative Analysis**

In this study, with the help of a professional computer software platform, we conducted systematic coding and detailed quantitative analysis of the collected data. To ensure the accuracy and scientific validity of the analysis results, we employed repeated measures (ANOVA) as a core tool to explore potential differences between the experimental and control groups, as well as between different phases of the study process. Through ANOVA, we can analyze the variability in the data in detail and determine whether these differences are statistically significant, thus providing solid data support for the research conclusion.

#### **6.6.2 Qualitative Analysis**

After completing a series of semi-structured interviews, conducting content analysis, and focusing on evaluating the effectiveness of the integrated group counselling program in alleviating anxiety symptoms, we then carried out in-depth qualitative data analysis. These interview data, as a direct reflection of the participants' personal experiences and feelings, provide us with rich qualitative resources. Through

Careful sorting and in-depth interpretation of the interview content, one can not only deeply understand the personal experiences, emotional changes, and intuitive feelings of the participants towards the counseling intervention, but also comprehensively grasp the multi-dimensional impact of the counseling intervention measures in practice. This process not only deepened our understanding of anxiety symptoms and their intervention mechanisms but also provided valuable references and inspirations for subsequent research.



## CHAPTER 4

### RESULTS

This research topic, "self-image and the effect of mental toughness of Chinese college students' anxiety and by group integrative guidance to alleviate anxiety," is divided into two phases. The first phase is the purpose of the investigation and discussion on self-image (BS) and mental toughness (MT) impact on Chinese college students anxiety (sas). The second phase involves designing a integrative group counseling aimed at reducing anxiety (sas) program, to improve the determined after the first phase of the most influential predictors, mental toughness, this phase and in the case of the experimental group and control group receiving the combination of group counseling (SA) anxiety level difference between the inspection, The tests of the most influential predictors and anxiety were analyzed and compared respectively with those of the experimental group and the control group in the integrative group counseling before the test, after the test and during the follow-up test phases.

Table 7 The symbols used in data analysis

symbol	Meaning
n	Sample quantity
M	Mean value
S.D.	Standard deviation
b	Linear regression coefficient of the original score
S.E.	Standard error
SS	Sum of squares
$\beta$	Standard score linear regression coefficient
Df	Degree of freedom
B	Non-standardized coefficient
F	F-test value
t	t-test value

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p	p value
MS	Mean square
M.D.	Mean difference
BS	Self-image
MT	Mental Toughness
SA	Anxiety

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## 1.Phase I: The Impact of Body Self-Image and Mental Toughness on Anxiety Among Chinese University Students

### 1.1 Quantitative Analysis of Variables Using Empirical Data

This study analyzed the collected data. The results are presented in the following five sections:

- 1.1.1 Demographic Characteristics of the Sample
- 1.1.2 Descriptive Statistics of the Variables
- 1.1.3 Correlation Analysis Among Variables
- 1.1.4 Regression Equation of Variables
- 1.1.5 Regression Model Diagram and Path Explanation Suggestions

#### 1.1.1 Demographic Characteristics of the Sample

The participants in this study were mainly students from Wuchang Institute of Technology. The questionnaires were distributed randomly across various academic years and majors using the online platform Wenjuanxing (Questionnaire Star). A total of 1,096 questionnaires were collected online. After screening for abnormally short response times or incomplete answers, 1,009 valid questionnaires were retained, yielding a valid response rate of 92.06%.The table below presents the general demographic characteristics of the Chinese university student participants (n = 1009):

Table 8 Demographic characteristics of the sample (n = 1009)

General data of Chinese students	Frequency(n)	Percentage(%)
<b>1. Gender</b>		
Male	323	32.01
Female	686	67.99
<b>2. Education</b>		
Freshman(Y1)	454	45.00
Sophomore(Y2)	487	48.27
Junior(Y3)	8	0.79
Senior(Y4)	60	5.95
<b>3. How many brothers and sisters do you have?</b>		
Have no brothers or sisters	373	36.97
A sibling	462	45.79
Two siblings	116	11.5
Three or more	58	5.75
<b>4. Usually Live</b>		
City	556	55.1
Town	175	17.34
County	182	18.04
Village	96	9.51
<b>5. Monthly Expenses</b>		
500 to 1000 RMB	89	8.82
1001 to 2000 RMB	595	58.97
2001 to 3000 RMB	52	24.58
Above 3001 RMB	25	5.15

Table 8 (Continued)

General data of Chinese students	Frequency(n)	Percentage(%)
<b>6. Does your college have a Counseling Center</b>		
Yes, I have counseling before.	149	14.77
Yes, I haven't had counseling before.	478	47.37
No	346	34.29
I haven't heard of it	36	3.57
<b>7. Professional</b>		
College of Art and Design	79	7.85
College of Film and Television Media	104	10.33
College of Literature and Law	118	11.76
College of Nursing	129	12.79
Business School	148	14.69
College of Urban Construction	170	16.69
School of Artificial Intelligence	261	25.89
Total	1009	100.00

It can be seen from Table 8 that among the valid sample data, females account for the majority, at 67.99%, and males account for 32.01%. In terms of educational qualifications, the proportion of freshmen is 45.00%, that of sophomores is 48.27%, that of juniors is 0.79%, and that of seniors is 5.95%. In terms of family structure, only children account for 36.97%, those with one sibling account for 45.79%, those with two siblings account for 11.5%, and those with three siblings account for 5.75%. Among the permanent residents, 55.1% live in cities, followed by county towns at 18.04%, towns at 17.34%, and rural areas at 9.51%. The proportion of those spending between 1,001 and 2,000 yuan per month was the highest (58.97%), followed by those spending between 2,001 and 3,000 yuan (24.58%), 500 and 1,000 yuan (8.82%), and over 3,000

yuan (5.15%). In terms of psychological counseling experience, 47.37% of the people have never been to a psychological counseling center, 34.29% said that there is no psychological counseling center in the school, 14.77% have received psychological counseling, and 3.57% have never heard of psychological counseling.

Participation by college was as follows: 7.85% from the School of Art and Design, 10.33% from the School of Film and Media, 11.76% from the School of Literature and Law, 12.79% from the School of Nursing, 14.69% from the Business School, 16.69% from the School of Urban Construction, and 25.89% from the School of Artificial Intelligence.

In terms of survey results, the proportion of female participants was relatively high. Most participants were first- and second-year students, and a majority came from families with siblings. This demographic distribution provides a foundation for further analysis and may help in understanding students' psychological and behavioral patterns across different backgrounds. In particular, variables such as gender, grade level, and whether a student is an only child may affect their levels of anxiety (SA), mental toughness (MT), and body self-image (BS), which warrants further exploration in future research. In the first phase, the Taro Yamane formula was used to determine the sampling population, and the expected error range ( $e$ ) was set to 0.05. Calculations show that the minimum sample size is 364 people, accounting for 10.3% of the total population. Therefore, among the 1,009 valid questionnaires collected, 10.3% of the valid questionnaires from each college were randomly selected. The final sample size after aggregating the number of people was set at 400.

### 1.1.2 Descriptive Analysis of Variables

Descriptive statistics on the impact of Chinese college students' body self-image (BS) and mental toughness (MT) on anxiety (SA).

The following table presents the means and standard deviations of BS and MT in relation to SA among Chinese university students.

Mean and Standard Deviation of BS and MT on SA among Chinese College Students ( $n = 400$ )

Table 9 Descriptive statistics of the variables under study

Variable name	M	S.D	Level
Mental toughness (MT)	61.14	11.343	Medium
Self-image(BS)	96.37	8.844	high
Anxiety(SA)	27.63	3.766	Low

Can show from the table 9, all variables have a sample size of 400, indicating complete data with strong statistical representativeness. The standard deviation for the three variables ranges from 3.8 to 11.3, showing no extreme dispersion. This suggests high data quality, and the distribution is likely close to normal (pending further verification), meeting the prerequisites for subsequent regression analysis and correlation testing.

Analysis of Anxiety (SA), Mean = 27.63. According to standardized anxiety measurement tools, this score is relatively low, indicating that most students fall within a normal range. Standard Deviation = 3.766. This shows that the students' anxiety levels are relatively concentrated, without extreme outliers (very high or very low scores). Analysis of Mental Toughness (MT), Mean = 61.14. This suggests that the average level of mental toughness in the sample is above average. Standard Deviation = 11.343. The degree of variation is moderate, indicating noticeable differences in mental toughness among students. Analysis of Body Self-Image (BS), Mean = 96.37. This indicates that most students generally have a positive evaluation of their physical self-image. Standard Deviation = 8.844. This suggests that evaluations of body image are relatively concentrated, though individual differences still exist.

In summary, Mental toughness is an indicator of one's resilience to stress and ability to recover emotionally. A mean of 61.14 with a standard deviation of 11.34 may suggest that while the average is relatively high, individual differences are substantial—some students may still be relatively vulnerable and would benefit from

mental toughness enhancement programs. A high level of self-image may be associated with lower anxiety levels (see correlation analysis). Although overall body self-image is positive, variations remain, potentially influenced by gender, culture, or physical health. Extreme perceptions of self-image could also affect emotional stability. The overall anxiety level is low, indicating a generally healthy psychological state among the group. However, the potential presence of a subgroup experiencing mild anxiety should not be overlooked.

### 1.1.3 Correlation Analysis of Variables

The researchers examined the relationships among body self-image (BS), mental toughness (MT), and anxiety (SA) in Chinese college students using Pearson product-moment correlation coefficients. The goal was to explore how BS and MT influence SA.

The following table presents the correlation coefficients between BS, MT, and SA among Chinese university students ( $n = 400$ ).

Table 10 anxiety and mental toughness and Pearson correlation result of self-image ( $n = 400$ )

Variable	SA	MT	BS
SA(anxiety)	1.00		
MT(mental toughness)	-0.396**	1.00	
BS(self-image)	-0.225**	0.381**	1.00

\*\* . Correlation is significant at the 0.01 level (two-tailed).

As shown in Table 10, physical self-image and mental toughness were significantly positively correlated, with a correlation coefficient of  $r = 0.381$ ,  $p < 0.001$ . This suggests that the stronger the mental toughness of people tend to own more positive self-image. Between anxiety and mental toughness is also a significant moderate negative correlation ( $r = 0.396$ ,  $p < 0.001$ ), indicating that the higher the mental

toughness, the smaller the possibility of individual anxiety. Anxiety was significantly but relatively weakly negatively correlated with body self-image ( $r = -0.225$ ,  $p < 0.001$ ), that is, the more positive an individual's body image was, the lower the level of anxiety.

In summary, mental toughness plays a critical role in alleviating anxiety, while body self-image also has a certain degree of influence on anxiety levels. These findings provide theoretical support for the development of group counseling interventions aimed at enhancing mental toughness, as well as for building multivariate regression models.

#### 1.1.4 Regression Model of Variables

To further explore the effects of body self-image and mental toughness on anxiety levels, a multiple linear regression analysis was conducted. Anxiety (SA) was set as the dependent variable, while mental toughness (MT) and body self-image (BS) were used as independent variables in the regression model. The results are as follows:

Table 11 Summary of the regression model of Mental toughness, self-image and Anxiety factors(n = 400)

Model	SS	df	MS	F	p
regression	925.369	2	462.684	38.802*	0.001
Residual error	4733.871	397	11.924		
total	5659.240	399			

a. Dependent variable : SA

b. Independent variables (Constant) : MT, BS

Note: Bold values indicate significant at \* $p < 0.001$

From Table 11, we can see that the overall model is statistically significant,  $F(2,397) = 38.802$ ,  $p < 0.001$ , indicating a strong predictive ability. Mental toughness and physical self-image together account for 16.4% of the anxiety variance.

Table 12 Mental Toughness and Self-Image ANOVA table(n = 400)

Variable	B	SE	$\beta$	t	p
Constant	38.541	1.906	—	20.223*	0.001
BS	-0.037	0.021	-0.086	-1.732	0.084
MT	-0.121	0.016	-0.364	-7.325	0.001

Note: Bold values indicate significant at \*p < 0.001

As can be seen in Table 12, anxiety has a significant predictive effect on mental toughness; the standardized regression coefficient was 0.364 ( $p < 0.001$ ), is a strong negative predictor of anxiety. The standardized regression coefficient of body self-image was -0.086, which was not statistically significant ( $p = 0.084$ ), indicating that the influence of anxiety was relatively small.

Raw score regression equation:

$$SA_{(Anxiety)} = 38.541 - 0.121 \times MT_{(Mental\ Toughness)} - 0.037 \times BS_{(Self-Image)}$$

Standardized regression equation:

$$zSA_{(Anxiety)} = -0.364 \times zMT_{(Mental\ Toughness)} - 0.086 \times zBS_{(Self-Image)}$$

Final regression model:

$$SA_{(Anxiety)} = 38.541 - 0.121 \times MT_{(Mental\ Toughness)} - 0.037 \times BS_{(Self-Image)}$$

In summary, mental toughness is an important predictor of anxiety levels and holds substantial practical value in future interventions and psychological training aimed at anxiety reduction.

A multicollinearity diagnostic was conducted on the dataset. Although the study did not report specific values for Tolerance and the Variance Inflation Factor (VIF), the correlation coefficient between mental toughness and body self-image ( $r = 0.381$ ) was well below the commonly accepted threshold of 0.80. Therefore, according to conventional standards, there is no evidence of severe multicollinearity between the predictors.

### 1.1.5 Regression Model Diagram and Path Explanation Suggestions

The regression path relationships in this study can be simplified as follows:

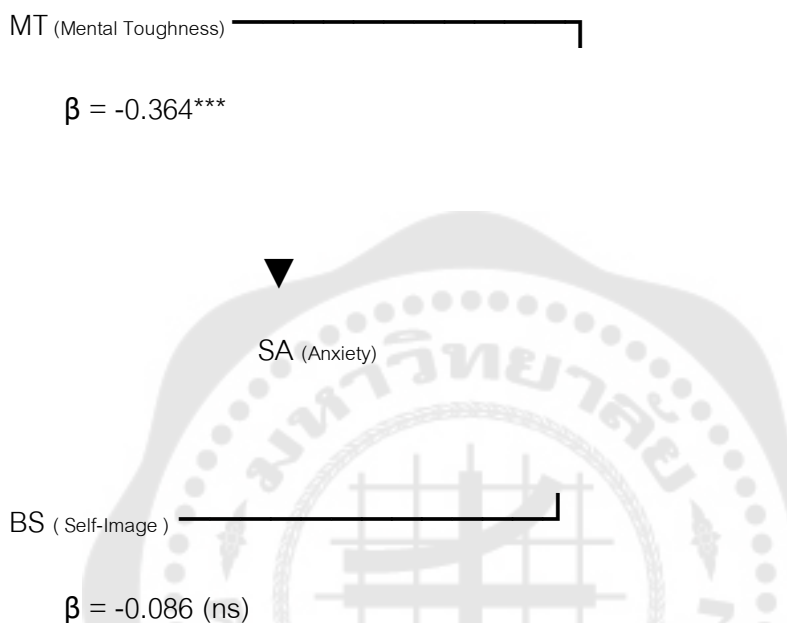


Figure 5 The regression path relationship can simplify the graph

As shown, although the mental toughness and self-image are negative predictors of anxiety, the influence of the mental toughness effect is more significant; the impact of the self-image effect is not apparent. Therefore, this model effectively explains the psychological structure that affects anxiety and provides a theoretical basis for subsequent intervention design.

### 1.2 Qualitative Analysis of Variables Using Empirical Data

This study aimed to gain an in-depth understanding of how Chinese university students experience and interpret body self-image and mental toughness in situations involving stress and anxiety, using qualitative methods. By examining individuals' subjective narratives, the study sought to uncover the interactions and underlying psychological mechanisms among these three variables, thereby providing a

practical basis for subsequent intervention strategies. In the first phase, semi-structured interviews were adopted as the primary qualitative research method. From the 1,009 valid questionnaires in the quantitative dataset, five students with anxiety scores between 50 and 69 were randomly selected for individual interviews. A stratified coding method was used for empirical analysis. The interview questions focused on three main themes: body self-image (BS), mental toughness (MT), and anxiety (SA). These questions aimed to achieve the following three goals:

To complement the quantitative findings. For instance, to elaborate on the strength of the influence of known variables (mental toughness and body self-image) on anxiety. To further interpret the results derived from quantitative analysis. This includes exploring participants' self-regulation ability and performance under high-pressure situations to reflect their level of mental toughness, understanding the cognitive evaluation of self-image and its emotional reactions, and examining their roles in stress regulation. Concrete case narratives were used to reconstruct the process of anxiety, providing primary material for analyzing its sources and coping mechanisms. To validate the critical factors identified in the quantitative phase.

The collected data were analyzed using NVivo 11 qualitative software. Thematic coding and inductive analysis were conducted to extract themes and representative descriptions related to body self-image, mental toughness, and anxiety. Through three levels of coding, selective core codes were eventually developed.

In total, five students with anxiety scores ranging from 50 to 69 were selected for individual interviews in the first phase of the qualitative study.

The following table shows the personal interview information for the first phase. The qualitative research was based on three variables (i.e., three themes: mental toughness, body self-image, and anxiety) to develop the interview questions, which were then broken down into sub-factors under each theme. The specific design of the interview questions is as follows:

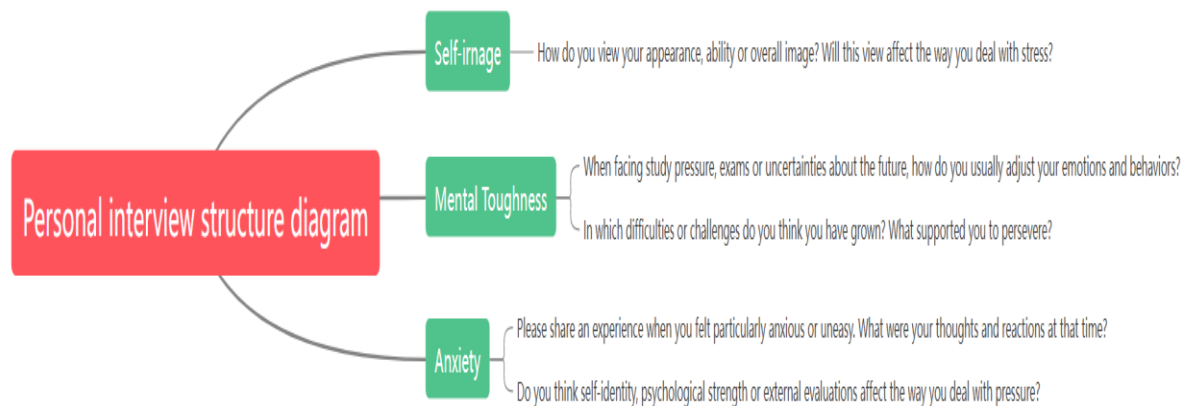


Figure 6 The first phase qualitative problem diagram

We collected the records of a total of 5 respondents, 4 females and 1 male, who were freshmen to seniors aged 19 to 22 Q1. How do you usually regulate your emotions and behavior when facing academic stress, exams, or an uncertain future?

Student 1 : I usually make a plan and write down the tasks I need to do, then complete them one by one. When I feel too anxious, I go for a run or listen to music to distract myself. It doesn't always work, but I try not to let my emotions hold me back.

Student2 : When I'm stressed, I try to stay calm and not get emotional. Exercise and writing in a journal help a lot. Sometimes I feel better after writing things down.

Student3 : I usually set goals—like how many words to write each day when working on my thesis. But honestly, when the pressure gets too much, I sometimes “check out” and take a few days to rest.

Student4 : I break big tasks into smaller parts and reward myself after finishing each—like buying milk tea. I hate bottling up stress; it gives me headaches.

Student5 : I don't show much emotion. Even if I'm anxious, I deal with it myself. I work out or play video games to decompress.

Q2. In what challenges have you grown, and what helped you persist?

Student1 : My senior year of high school was really stressful. I broke down after failing a mock exam. My mom told me, "You can be sad, but you can't give up." I cried all night but went back to class the next day. Looking back, I guess that was my mental toughness at work.

Student2 : Last year I ran for student council. I didn't win, but I realized I'm not as shy as I thought. I used to tremble when nervous, but this time I didn't back down.

Student3 : My first year in college was tough—everything felt unfamiliar. What helped me was telling myself, "You're not in high school anymore. You need to rely on yourself." It was that inner drive that helped me through.

Student4 : I changed majors in high school and felt totally lost at first. But I stuck with it because I kept telling myself, "Adaptability is a skill."

Student5 : I've played basketball since middle school and have been injured during training, but quitting never crossed my mind. That "try again" mindset also helps with academic stress.

Q3. How do you perceive your appearance, abilities, or overall self-image? Does this perception affect how you handle stress?

Student1 : I don't think I'm very pretty, but I'm not ugly either. My abilities are okay, but I sometimes lack confidence, especially when I see others doing really well. When I doubt myself, I get more anxious—like I won't perform as well as others.

Student2 : I've always felt I wasn't attractive enough, so I paid a lot of attention to appearance. But now I focus more on my abilities. When I feel confident, I face problems more directly.

Student3 : Others see me as quiet, but I know I'm prone to anxiety. People's expectations sometimes add more pressure—I feel like I can't let them down.

Student4 : I don't think I'm very pretty, but I believe in my communication skills. Acknowledging my strengths gives me confidence in complex situations.

Student5 : I don't care much about my looks, but I care about whether others think I'm "tough." There's an expectation that men must be strong, so I often suppress emotions.

Q4. Share an experience where you felt especially anxious or uneasy. What were your thoughts and reactions?

Student1 : Before the CET-4 English test, I had insomnia for days. I felt like nothing I studied would stick. The anxiety felt like something stuck in my throat—I couldn't eat or smile. I forced myself to study, but my efficiency was really low.

Student2 : The most anxious time was during my second semester finals in freshman year. I had four major exams and almost collapsed from the pressure. I barely slept for several nights and even considered dropping some classes.

Student3 : Preparing for my graduate school interview was the worst. I kept thinking, "Am I good enough?" I almost gave up. I couldn't sleep or eat properly.

Student4 : Last semester, I was asked to present unexpectedly. My palms were sweaty, and I felt exhausted afterward. That anxiety felt like being shoved into the spotlight.

Student5 : Last semester, I stayed up several nights in a row to finish papers. I was super anxious and irritable but didn't tell anyone—didn't want to seem weak.

Q5. Do you think self-identity, inner strength, or external evaluations affect how you deal with stress?

Student1 : Yes, definitely. If I feel I'm "good enough," I can adjust my mindset. But if others keep denying me, I feel completely discouraged. A lot of stress isn't from events themselves, but from how you see yourself.

Student2 : Self-identity is very important. I've realized that as long as I believe in myself, others' opinions matter less. That belief helps me keep going during tough times.

Student3 : Yes, a lot. When I lack self-identity, I tend to avoid problems. But when I believe in myself, I look for solutions instead.

Student4 : Definitely. If a teacher praises me, I'm more motivated. Encouragement boosts my action; criticism makes me doubt myself.

Student5 : Yes, self-identity is very important to me—especially since my dad always says, “Be a man.” I now manage pressure more maturely, like preparing in advance.

### 1.3 Summary of Phase One Results

#### 1.3.1 Quantitative Research Findings

This study first cross-sectional questionnaire data on mental toughness, self image and the relationship between anxiety level has carried on the multiple linear regression analysis. The results show that the mental toughness plays a significant role in relieving anxiety, standardized regression coefficients for beta = - 0.364 ( $t = 7.325$ ,  $p < 0.001$ ), the stronger the mental toughness, the lower the anxiety level, are highly significant. Although self-image also showed a negative predictive trend ( $\beta = -0.086$ ,  $t = -1.732$ ), it did not reach the significance level ( $p = 0.084$ ), indicating that its independent predictive effect on anxiety was relatively weak. The overall interpretation of regression model of anxiety level is good, support mental toughness in the main position in the anxiety adjustment.

#### 1.3.2 Qualitative Research Findings

To gain a deeper understanding of the relationships among variables, the study was supplemented by semi-structured interviews to analyze students' subjective experiences. It was found that when students were confronted with anxiety experiences, they often first attempted to apply self-regulation and positive coping

strategies, demonstrating a certain degree of Mental toughness. If the strategy is ineffective, some students will choose to evade or passively avoid to temporarily relieve the stress. Furthermore, in children's families, the positive role of family support (such as role model parents) in their early phase of college adaptation is more often mentioned, especially when facing academic challenges.

Most respondents said that they were aware that the school provided psychological counseling services, but when actually encountering real pressure, they were less likely to actively seek professional help. Instead, they preferred to relieve their emotions and problems through physical exercise, communicating with peers or relying on communication with others. Students generally recognize the importance in their studies and future employment. At the same time, they also point out that the complexity of studies and the continuous pressure brought by changes in task volume remain the main causes of their anxiety.

To sum up, the integrative quantitative and qualitative results, mental toughness is the key to reduce anxiety variables, and the influence of self-image through indirect path or play a role in a particular situation. When students are confronted with anxiety related to interpersonal communication and academic studies, although they have certain coping abilities, there is still room for improvement in the utilization of professional assistance and emotional counseling, providing a practical basis for the subsequent design of group intervention.

## **2 Phase Two: An Integrative Group Counseling Program to Alleviate Anxiety Among Chinese University Students**

### **2.1 Quantitative Analysis of the Group Counseling Program for Reducing Anxiety**

Based on the results from the first phase, it was found that mental toughness and self-image had an impact on anxiety. Mental toughness emerged as a significant negative predictor of anxiety ( $p < 0.001$ ), while self-image showed a weaker

predictive effect, approaching significance ( $p = 0.084$ ). According to the findings from the first phase, the structural equation model is as follows:

$$SA(\text{Anxiety}) = -0.086 \times BS(\text{Self-Image}) - 0.364 \times MT (\text{Mental Toughness})$$

In the second phase, an integrative group counseling program was developed to reduce anxiety among Chinese college students. The objective was to design an intervention to enhance mental toughness and reduce anxiety-related behaviors. Psychological assessments of mental toughness and anxiety were conducted for both the experimental and control groups at three phases: pre-test, post-test, and follow-up. The following sections provide both quantitative and qualitative analyses.

This phase consists of four steps:

1. Based on the review of relevant literature, an integrative group counseling intervention program was designed. The program focused on strengthening the most influential predictor identified in Phase One—mental toughness. It was structured around the four core components of mental toughness: Confidence, Challenge, Control, and Commitment, which serve as focal points to reduce anxiety. The program incorporated principles from Person-Centered Therapy, Cognitive Behavioral Therapy (CBT), Positive Psychotherapy, Rational Emotive Behavior Therapy (REBT), and Reality Therapy.

2. A full 10-session group counseling program was developed, with each session lasting 90 minutes. The focus was on enhancing the four aspects of mental toughness in order to reduce anxiety.

Sessions 2–3: Aimed to improve confidence by helping students identify and activate their strengths, reinforce self-affirmation, and build behavioral persistence in the face of challenges.

Sessions 4–5: Focused on improving challenge orientation by encouraging proactive coping with difficulties, strengthening problem-solving abilities, and cultivating a growth mindset to enhance frustration tolerance.

Sessions 6–7: Aimed to develop control by building emotional regulation and problem-solving skills to mitigate anxiety.

Sessions 8–9: Focused on enhancing commitment by promoting goal orientation, persistence, and the discovery of intrinsic values to boost a sense of purpose and reduce anxiety.

Session numbers	Theme	Objectives	Procedures	Theory	Technique
Session #1(Beginning phase)	Icebreaking Session: Building Rapport and Familiarity	1. Promote mutual understanding and trust among members. 2. Students will understand what it means to participate in this program to learn about anxiety and resilience and their importance. 3. Mobilize	1. Ice mini game: "My Tag". 2. Take a mental toughness test. 3. Map your life's challenges. 4. Set personal growth goals.	Person-Centered Therapy	Unconditional positive regard, genuineness, and positive feedback

		the enthusiasm of members, enhance group cohesion, and develop personal growth plans.			
Session #2(Working stage)	Self-confidence - Identify and activate your strengths	1. Help members identify personal strengths and enhance mental toughness. 2. Use an external perspective to stimulate self-identity and reduce anxiety. 3. Develop confidence in	1. Warm-up activity: "Flash yourself" game 2. Advantage Recognition activity: "My Hidden Skill Pack" 3. Mirroring exercise: "How Others see Me" 4. Confidence expression training: "Confidence reconstruction	Cognitive Behavioral Theory (CBT), Cognitive reconstruction therapy, emotion recognition and regulation therapy	Advantage recognition, mirror feedback, role play, positive expression

		expressing yourself in groups.	" role play		
Session #3(Working phase)	Self-confidence - Self-affirmation and persistence in the face of challenges	1. Strengthen your ability to maintain confidence and act in the face of challenges. 2. Train expressions of assertive behavior. 3. Build sustainable habits of assertive behavior that lead to sustained lower anxiety.	1. Guide: "Things I want to try" share. 2. Affirmations training: "Encourage yourself to say it." 3. Assertive behavior Challenge task: "I do what I'm afraid of." 4. Confidence habit building: "Stick to what I said." 5. "Light Up Your Confidence Badge" ceremony	Cognitive Behavioral Theory (CBT), Cognitive reconstruction therapy, positive training therapy	Positive self-talk, behavioral task training, public commitment
Session	Challenge	1. Let	1. Review and	Cognitive	Emotion

#4(Working stage)	s - actively face difficulties and improve the ability to cope	members experience their emotions and reactions to a challenge. (Produces anxiety) 2. Learn how to deal with challenges through teamwork. (Reduces or lowers anxiety) 3. Develop a personalized challenge response strategy.	discuss the previous section. 2. Challenge to play the game: "Mission Impossible". 3. Challenge analysis and team discussion 4. Develop personal challenge coping strategies.	Behavioral Therapy (CBT), Cognitive reconstruction therapy, emotion recognition training therapy	recognition, cognitive reconstruction, positive feedback
Session #5(Working phase)	Challenge - Cultivate growth thinking and improve	1. Help members identify their own belief patterns about	1. Warm up 2. "Theatre of Failure" experience 3. Thinking	Growth Thinking Theory (Dweck, 2006)	Cognitive reconstruction, role playing, positive psychological

	resilience	failures and challenges. 2. Guide members to understand and initially practice the core concepts of growth thinking. 3. Cultivate the ability to accept failure situations, improve psychological endurance, and reduce anxiety caused by challenges.	Transformation Workshop  4. "Future Me" Growth Action Plan		suggestion, peer support
Session #6(Working stage)	Control - Develop emotional regulation	1. Enhance members' ability to identify and understand	1. Emotional regulation strategy learning and practical	Cognitive Behavioral Therapy , Cognitive reconstruction	Mindfulness practice, cognitive reconstruction, breathing

		<p>emotions.</p> <p>2. Have basic emotion regulation strategies in the face of anxiety, frustration, anger and other emotions.</p> <p>3. Create a personalized emotional coping plan.</p>	<p>operation training</p> <p>2. Emotion identification and discussion</p> <p>3. Emotional Regulation Experience: "Emotional Ninja Challenge"</p>	<p>n therapy, emotion recognition training therapy</p>	<p>regulation, body awareness, situational simulation</p>
Session #7(Working phase)	Control - Develop problem solving skills	<p>1. Cultivate members' ability to react calmly in stressful situations.</p> <p>2. Master the problem-solving process of the system.</p> <p>3. Develop a</p>	<p>1. Review emotional management strategies.</p> <p>2. Situational simulation game: "Decision-making under pressure" problem solving method</p>	<p>Cognitive behavioral therapy , Cognitive reconstruction therapy, emotion recognition training therapy</p>	<p>Logical thinking training, situation simulation, decision making, behavior practice</p>

		personalized problem response plan and give it action.	learning and practice.  3. Develop coping strategies for personal problems.		
Session #8(Working stage)	Commitment - Building goal orientation and persistence	1. Assist members to clarify their personal values and identify their truly important goals. 2. Guide members to recognize when they are vulnerable to wavering in the face of difficulties and temptations. 3. Experience	1. "What is the goal?" Value clarification activity 2. Group collaboration Game: "Persistence Challenge" 3. Map your goals and frustrations 4. Create a personal persistence action plan	Humanistic theory, Enhanced autonomous consciousness therapy	Value clarification, task decomposition, positive feedback

		<p>the psychological and behavioral process of "persistence" through tasks, improve frustration resistance and willpower to continuously resist anxiety.</p>			
<p>Session #9(Working phase)</p>	<p>Commitment - Discover intrinsic value and increase your sense of purpose</p>	<p>1. Help members explore their own core values and enhance their awareness of "why they work" to enhance resilience. 2. Guide</p>	<p>1. Previous section review + warm-up guide 2. "My Value Ranking Card" 3. Meaningful dialogue: "Why am I here?" 4. Inner goal</p>	<p>Existentialism theory, Humanism theory, Expressive humanistic therapy</p>	<p>Value clarification, meaning focus, self-exploration, symbolic expression</p>

		<p>members to understand their multiple roles in life and clarify their intrinsic motivations.</p> <p>3. Combat anxiety through experiential activities that enhance the emotional connection of the target and stimulate internal commitment.</p>	<p>description exercise</p>		
Session #10(Ending steps)	Integration and Prospect: the practice and	<p>1. Review and integrate the core skills of mental toughness</p>	<p>1. The Growth Time machine: Review and integration</p> <p>2. Mental Toughness:</p>	<p>Cognitive Behavioral Therapy (CBT), Emotion Regulation</p>	<p>Growth review, future planning, emotional connection, group</p>

<p>continuation of Mental toughness</p>	<p>training (challenge coping, emotion regulation, goal commitment, confident expression).          2. Develop a personalized resilience plan to reduce anxiety.          3. Deepen the emotional connection of the group and establish a sustainable mutual assistance network.          4. Reinforce the core belief that I</p>	<p>My future practice plan          3. The connection of hearts:          Farewell and blessing</p>	<p>training therapy</p>	<p>empowerment</p>
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		am capable of handling challenges and continuously combat anxiety.			
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3.Evaluation by Experts: The program was reviewed by five psychology experts—one from China and four from Thailand—who assessed the quality and appropriateness of the intervention.

4.Program Refinement: The counseling plan was revised based on the experts' feedback and finalized for implementation.

#### Implementation of the Group Counseling Program:

The revised intervention program consisted of 10 sessions, each lasting 90 minutes. The experimental group received the intervention from April to May 2025, with sessions held twice a week, over five weeks. Classes were scheduled every Tuesday and Thursday from 18:30 to 20:00.

The data collected from the quantitative study were analyzed using computer software and divided into the following five sections:

- 1.Demographic Data of the Control and Experimental Groups
- 2.Descriptive Statistics of Variables for the Experimental and Control Groups (Pre-test, Post-test, and Follow-up)
- 3.Repeated Measures ANOVA Showing Differences Between the Experimental and Control Groups Across Various Variables
- 4.Simple Effects Repeated Measures Analysis of Anxiety
- 5.Simple Effects Repeated Measures Analysis of Mental Toughness

### 2.1.1 Demographic Characteristics of Participants in the Control and Experimental Groups

In the first phase of the study, a sample of 20 students with anxiety scores ranging from 50 to 69 was randomly selected from 400 students who completed the questionnaire. All participants voluntarily took part in this quasi-experimental study. The 20 students were then randomly assigned to two groups: an experimental group (10 students) and a control group (10 students). Detailed demographic information for the experimental group is presented in the table below.

A total of 20 students voluntarily participated in this research. Among them, 20% are men and 80% are women. Ten percent of people are the only child in their families, and 90% have two or more siblings. Eighty percent of these students have never sought psychological counseling services. In terms of academic background, 10% are from the School of Art and Design, 20% from the School of Film and Media, 10% from the School of Law and Literature, 30% from the School of Nursing, and 30% from the Business School. Ultimately, they were randomly divided into two groups: the control group and the experimental group, with 10 people in each group.

### 2.1.2 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 and control groups completed the Anxiety, Mental Toughness, and Self-Image Scales during the pre-test, post-test, and follow-up phases.*

Table 13 Description and statistics of anxiety, Mental toughness and self-image in the experimental group (n =10) before the test, after the test and during the follow-up period.

Variable	Pretest			Post-test			Follow-up		
	M	S.D.	Levels	M	S.D.	Levels	M	S.D.	Levels
Anxiety	3.54	0.51	Moderate	2.40	0.45	low	2.46	0.54	low
Mental toughness	1.89	0.67	low	3.23	0.28	Moderate	3.13	0.37	Moderate
Self-image	2.89	0.32	high	2.98	0.36	high	2.43	0.48	Moderate

The results in Table 15 show that the average anxiety scores of the subjects in the experimental group at the three phases of before the test, after the test and follow-up were as follows: medium level before the test (M=3.54), significantly decreased to a relatively low level after the test (M=2.40), slightly rebounded after the test (M=2.46), but still remained at a relatively low level. The average scores of mental toughness is: before the test is low (M = 1.89), significantly increased after the measurement to medium (M = 3.23), follow-up stable (M = 3.13). In terms of self-image, the average scores of the three phases were as follows: slightly increased from before the test to after the test (M=2.89→2.98), maintaining a relatively high level, and then significantly decreased during the follow-up (M=2.43), shifting from a relatively high level to a medium level.

Next, we will conduct a descriptive statistical analysis of the control group across the same time points.

Table 14 Anxiety, Mental toughness and self-image description and statistics of the control group (n =10) before the test, after the test and during the follow-up period.

Variable	Pretest			Post-test			Follow-up		
	M	S.D.	Levels	M	S.D.	Levels	M	S.D.	Levels
Anxiety	3.34	0.27	Moderate	3.22	0.22	Moderate	3.26	0.24	Moderate
Mental toughness	2.88	0.35	Moderate	2.68	0.68	Moderate	2.56	0.31	Moderate
Self-image	3.15	0.46	high	3.21	0.21	high	2.92	0.35	high

Can be seen from the table in the 15, the control group in anxiety, mental toughness and physical self image of the three measuring variables had no obvious change. The anxiety level remained at a moderate level in all three measurement phases (M = 3.34 before measurement, M = 3.22 after measurement, and M = 3.26 during follow-up), indicating that anxiety was not effectively alleviated. Mental toughness in the intervention immediately after a slight decline (M = 2.68), but in the follow-up phase back to slightly higher than the baseline (M = 2.56), suggesting the certain natural fluctuations. Throughout the entire research period, the body's self-image remained at a very high level (M > 2.9) and was not significantly affected by the passage of time or the lack of intervention.

### 2.1.3 Repeated Measures Analysis of Differences Across Pre-test, Post-test, and Follow-up Phases

Table 15 Significant results of between-subject and within-subject effects of pretest, post-test, and follow-up related factors in the experimental group and control group.

	Effect	Value	F	Df		P	$\eta^2$
				(hypothesis)	(error)		
	Intercept						
Between-Subjects	Pillai's Trace	0.998	10522.681	2.000	17.000	0.001	0.998
	Wilks' Lambda	0.002	10522.681	2.000	17.000	0.000	0.998
	Hotelling's Trace	1238.198	10522.681	2.000	17.000	0.000	0.998
	Roy's Largest Root	1238.198	10522.681	2.000	17.000	0.000	0.998
	Group						
	Pillai's Trace	0.895	72.448	2.000	17.000	0.000	0.895
	Wilks' Lambda	0.105	72.448	2.000	17.000	0.000	0.895
	Hotelling's Trace	10.013	72.448	2.000	17.000	0.000	0.895
	Roy's Largest Root	10.013	72.448	2.000	17.000	0.000	0.895

Table 15 ( Continued)

	Effect	Value	F	Df (hypothesis) (error)		P	$\eta^2$
	Time						
	Pillai's Trace	0.953	82.371	4.000	15.000	0.000	0.953
	Wilks' Lambda	0.047	82.371	4.000	15.000	0.000	0.953
	Hotelling's Trace	22.230	82.371	4.000	15.000	0.000	0.953
Within-Subjects	Roy's Largest Root	22.230	82.371	4.000	15.000	0.000	0.953
	Time*						
	Pillai's Trace	0.962	95.714	4.000	15.000	0.000	0.962
	GroupWilks' Lambda	0.038	95.714	4.000	15.000	0.000	0.962
	Hotelling's Trace	26.159	95.714	4.000	15.000	0.000	0.962
	Roy's Largest Root	26.159	95.714	4.000	15.000	0.000	0.962

It can be concluded from Table 16 that in this study, repeated measures multivariate analysis of variance was adopted. MANOVA) to test the experimental group and control group at three time points (before the test, after testing and follow-up) aims to improve mental toughness and reduce anxiety (AS) the integrated performance differences after the group counseling intervention. Before the analysis, the hypotheses such as Box's M test were evaluated to ensure that the data met the requirements of multivariate analysis, including normality and the equality of the covariance matrix. The results confirmed these hypotheses, and no significant differences were found between the two groups in the pre-test phase, proving that the use of further analysis of variance procedures is reasonable.

First, regarding the overall model, the multivariate test table showed that the intercept was significant across both mental toughness and anxiety variables, as indicated by all four statistics: Pillai's Trace, Wilks's Lambda, Hotelling's Trace, and Roy's Largest Root (all  $p < 0.001$ ). This suggests the model had strong explanatory power for the variability in the dependent variables.

For the main effect of Group, significant differences were found in both variables: mental toughness (Pillai's Trace = 0.920, Wilks's Lambda = 0.080, Hotelling's Trace = 11.436, Roy's Largest Root = 11.436,  $p < 0.001$ ,  $\eta^2 = 0.920$ ) and anxiety (Pillai's Trace = 0.895, Wilks's Lambda = 0.105, Hotelling's Trace = 10.013, Roy's Largest Root = 10.013,  $p < 0.001$ ,  $\eta^2 = 0.895$ ). These results indicate that the experimental and control groups showed stable and significant differences in both outcomes, reflecting a clear distinction resulting from the intervention.

For the main effect of Time, both variables also showed significant changes across time: mental toughness (Pillai's Trace = 0.960, Wilks's Lambda = 0.040, Hotelling's Trace = 24.153, Roy's Largest Root = 24.153,  $p < 0.001$ ,  $\eta^2 = 0.960$ ) and anxiety (Pillai's Trace = 0.953, Wilks's Lambda = 0.047, Hotelling's Trace = 22.230, Roy's Largest Root = 22.230,  $p < 0.001$ ,  $\eta^2 = 0.953$ ). These results indicate significant variation across the three measurement points, highlighting the impact of the intervention on overall trends over time.

More critically, significant Time  $\times$  Group interaction effects were observed in both mental toughness (Pillai's Trace = 0.966, Wilks's Lambda = 0.034, Hotelling's Trace = 28.758, Roy's Largest Root = 28.758,  $p < 0.001$ ,  $\eta^2 = 0.966$ ) and anxiety (Pillai's Trace = 0.962, Wilks's Lambda = 0.038, Hotelling's Trace = 26.159, Roy's Largest Root = 26.159,  $p < 0.001$ ,  $\eta^2 = 0.962$ ). These results suggest that the patterns of change over time differed significantly between the two groups. The large effect sizes ( $\eta^2$  values exceeding 0.96) further support the sustained impact of the intervention across time.

In summary, the results of the repeated measures MANOVA indicate that the integrative group counseling intervention significantly improved participants' mental

toughness and effectively reduced their anxiety levels. The experimental group consistently outperformed the control group in the post-test and follow-up stages, confirming both the immediate and lasting effects of the intervention. The significant interaction effects also indicate the need for further simple effects analysis to explore specific group differences at each time point.

#### 2.1.4 Simple Effect Analysis of Mental Toughness Between the Experimental and Control Groups

Table 16 Comparison of Mental toughness at each time point in each group

Variable	Time	Group	Group	M.D.	S.E.	P
Mental toughness	Pretest	EG	CG	0.10	1.431	0.927
	Post-test	EG	CG	<b>6.50*</b>	0.795	0.001
	Follow-up	EG	CG	<b>9.70*</b>	0.869	0.001

Note: Bold values indicate significant at \* $p < 0.001$

As can be seen from the table 17, the experimental group and control group before the test, after testing, mental toughness in the follow-up of three time points two comparison results. This analysis aims to test intervention on mental toughness continues to affect, and to reveal how it changes over time.

At the pretest phase, there was no significant difference in mental toughness between the two groups (M.D. = 0.10,  $p = 0.927$ ), indicating that both groups were at a similar level before the intervention.

However, in the post-test, the experimental group scored significantly higher in mental toughness than the control group (M.D. = 6.50,  $p < 0.001$ ), suggesting a substantial improvement due to the intervention.

This difference further increased at the follow-up phase (M.D. = 9.70,  $p = 0.000$ ), demonstrating that the positive effect of the intervention was not only significant but also long-lasting.

Overall, the intervention significantly enhanced the mental toughness of the experimental group, and this improvement was sustained and reinforced over time.

### 2.1.5 Simple Effect Analysis of Anxiety Levels Between the Experimental and Control Groups

Table 17 Comparison of anxiety levels at each time point in each group

Variable	Time	Group	Group	M.D.	S.E.	P
Anxiety	Pretest	EG	CG	0.170	0.849	0.867
	Post-test	EG	CG	-8.70*	1.371	0.001
	Follow-up	EG	CG	-13.400*	1.231	0.001

Note: Bold values indicate significant at \* $p < 0.001$

It can be seen from Table 18 that the differences in anxiety levels between the experimental group and the control group at different time points aim to evaluate the short-term and long-term effects of the intervention on anxiety reduction. At the pretest phase, there was no significant difference in anxiety levels between the two groups (M.D. = 0.170,  $p = 0.867$ ), indicating a similar baseline level of anxiety before the intervention.

In the post-test, the experimental group reported significantly lower anxiety compared to the control group (M.D. = -8.70,  $p < 0.001$ ), demonstrating the effectiveness of the intervention in reducing anxiety.

At the follow-up phase, the difference became even more pronounced (M.D. = -13.400,  $p = 0.000$ ), suggesting that the anti-anxiety effect of the intervention was not only significant but also sustained and possibly strengthened over time.

In conclusion, the intervention significantly and durably reduced anxiety levels in the experimental group, showing clear advantages over the control group.

### 2.1.6 Simple Effects Repeated Measures Analysis of Anxiety

The table below shows the comparisons of anxiety levels across different time points for the experimental and control groups. The aim is to identify any significant differences between the post-test and follow-up phases compared to the previous phases, in order to determine the effectiveness of the intervention applied to the experimental group.

Table 18 shows the differences in anxiety and its influencing factors before the test, after the test and during the follow-up period (pairwise comparisons across time periods).

Variable	Group	Period	M.D.	S.E.	t	p
Anxiety	EG	Post-test-Pretest	-1.14	0.128	-8.91*	0.001
		Follow-up-Pretest	-2.08	0.244	-8.52*	0.001
		Follow-up-Posttest	+0.06	0.114	+0.52	0.610
	CG	Post-test-Pretest	-0.12	0.110	-1.04	0.304
		Follow-up-Pretest	-0.08	0.113	-0.69	0.498
		Follow-up-Posttest	+0.04	0.101	+0.39	0.699

Note: Bold values indicate significant at \* $p < 0.001$

The results in Table 19 show that in the experimental group, the posttest vs. pretest: the average reduction was 1.14 points ( $t = -8.91$ ,  $p < 0.001$ ), indicating a significant decrease in anxiety levels after the intervention. Follow-up test vs. pretest: The average reduction was 2.08 points ( $t = -8.52$ ,  $p < 0.001$ ), and the intervention effect continued and deepened during the follow-up. Follow-up test vs. post-test: No significant change (M.D. = +0.06,  $p = 0.610$ ), and the effect of anxiety improvement was maintained. There were no significant differences among the three time points in the control group ( $p > 0.05$ ), indicating that there was no obvious change in anxiety levels in the control group that did not receive intervention.

The results of this study show that the anxiety level of the experimental group decreased significantly after receiving the intervention, and the improvement effect was maintained and enhanced in the follow-up test, indicating that the intervention measures have a significant and sustained effect in reducing anxiety. On the contrary, the anxiety level of the control group did not change significantly throughout the process, further verifying the effectiveness of the intervention.

### 2.1.7 Simple Effects Repeated Measures Analysis of Mental Toughness

The table below presents the paired comparison data of mental toughness across different phases for both the experimental and control groups. The focus is on determining whether there are significant differences between the post-test and follow-up phases compared to the previous phases, in order to verify the effectiveness of the intervention applied to the experimental group.

Table 19 shows the differences in Mental toughness before the test, after the test and during the follow-up period, as well as their influencing factors (pairwise comparisons across time periods).

Variable	Group	Period	M.D.	S.E.	t	p
Mental toughness	EG	Post-test-Pretest	+1.34	0.126	+10.63*	0.001
		Follow-up-Pretest	+2.24	0.136	+16.47*	0.001
		Follow-up-Posttest	-0.10	0.096	-1.02	0.315
	CG	Post-test-Pretest	-0.20	0.118	-1.60	0.115
		Follow-up-Pretest	+0.15	0.132	+1.12	0.271
		Follow-up-Posttest	+0.35	0.106	+3.00	0.004

Note: Bold values indicate significant at \* $p < 0.001$

As can be seen from the results in Table 20, the posttest and pretest of the experimental group: the average increase was 1.34 points,  $t=10.63$ ,  $p=0.001$ , which was significant. Mental toughness obviously increased after intervention. Tracking and

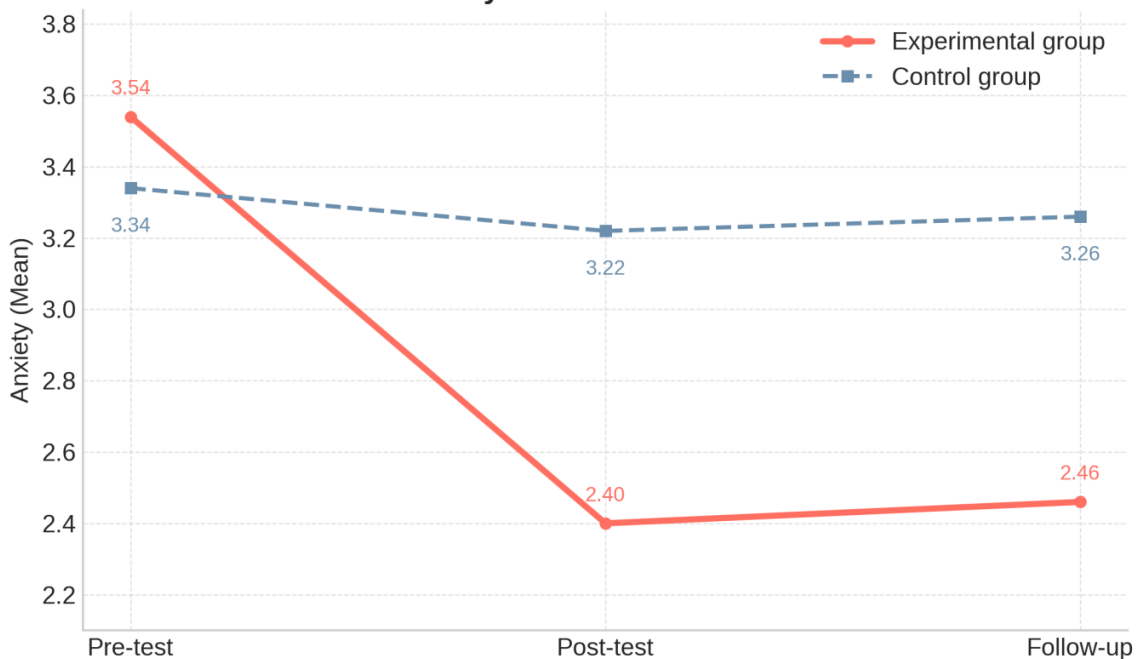
pre-test: Average improvement of 2.24 points,  $t=16.47$ ,  $p=0.001$ , significant; This indicates that in the subsequent tests (follow-up), the intervention effect remained significant. Post-tracking vs test: Difference -0.10 points,  $p=0.315$ , not significant. After the intervention and the subsequent follow-up period, mental toughness significantly enhanced, and enhance level during the follow-up period.

In the control group, after and before the test: slightly decreased by 0.20 points,  $p=0.115$ , not significant. Tracking compared to before the test: slightly increased by 0.15 points,  $p=0.271$ , not significant. Tracking vs post-test: Improved by 0.35 points,  $t=3.00$ ,  $p=0.004$ , significant; Overall, there was no significant difference between the pre - and post-tests and the follow-up test and the pre-test. Compared with the post-test group, the follow-up group only had a slight and significant increase, but the effect size and stability were much lower than those of the experimental group.

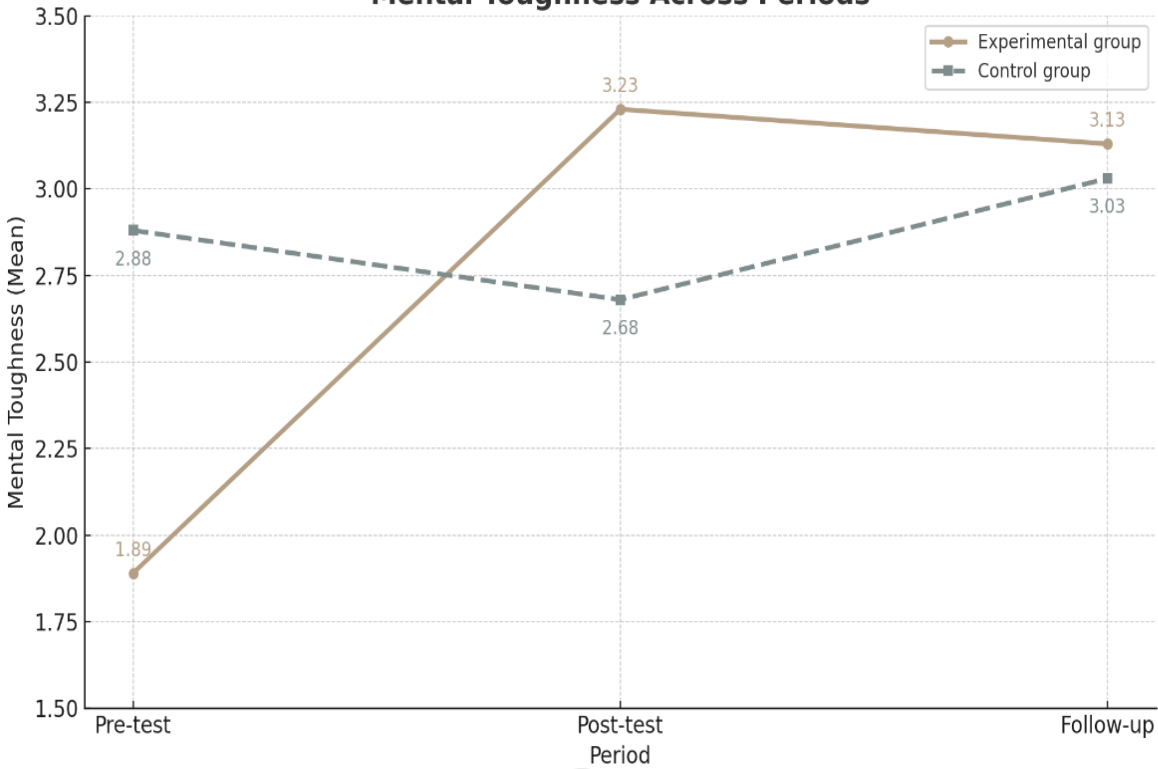
The experimental results show that the intervention has the significant effect on the improve mental toughness. The experimental group was significantly higher than the pretest in both the posttest and the follow-up test, and the improvement effect after the intervention remained unchanged. However, the control group showed no significant changes at different measurement time points and only slightly improved during the follow-up period. Therefore, can be concluded that interventions to enhance mental toughness has a positive and lasting impact

Comparisons of anxiety and mental toughness between the experimental and control groups at the pre-test, post-test, and follow-up phases are shown in Figures 1–2 below.

**Anxiety Level Across Periods**



**Mental Toughness Across Periods**



## 2.2 Qualitative Analysis of Focus Group Interviews

A qualitative study was conducted involving 10 students selected from the experimental group who participated in focus group interviews. The interview questions centered on the students' experiences and changes following the group counseling intervention. A structured coding methodology was applied to analyze the data using empirical techniques.

The first objective of the interviews was to assess whether participants experienced a reduction in anxiety after receiving the group counseling intervention, which targeted factors such as confidence, challenge, control, and commitment. Students were asked to describe their states before and after the intervention in relation to these four dimensions.

Secondly, the interviews sought to verify the nature of perceived changes post-intervention. Students were asked to identify the causes of anxiety prior to counseling and whether their perceptions or responses had shifted afterward.

The interview audio was transcribed into text and analyzed using qualitative data analysis software. Initial data review and organization were followed by thematic coding, through which the data was hierarchically structured. Both inductive and deductive methods were employed to cluster and refine categories and explore the relationships among them. This process enabled a deeper understanding of changes in anxiety levels, mental toughness, and self-image after students received the intervention.

### Theme 1: Mental toughness

1. When you are faced with an event that makes you feel stressed or upset before going to group coaching, how do you usually deal with it? How would you adjust your state?

Before participating in the integrated group counseling, students all believed that they had low Mental toughness and lacked confidence in their ability to overcome difficulties.

Student 1: Before participating in the group counseling, the most stressful thing for me was preparing for the final exam. Especially when you feel your mind is completely blank after staying up late for several consecutive days. What I usually do is throw my mobile phone under the bed and force myself to sit at the desk and do exercises. But to be honest, the "persistence" back then was actually quite mechanical. I often cry while watching and sometimes even think of avoiding exams. The main methods to adjust one's state are listening to music or going for a run, but the effect is unstable. Sometimes, the more one runs, the more sad it becomes.

Student 3: I used to be very anxious every internship application season. Seeing that all my classmates around me have got interview opportunities, but I'm still revising my resume, I feel extremely anxious. My way of coping is to "pretend everything is fine", bury myself in the library, and go crazy watching TV series and browsing social media platforms. But doing so couldn't relieve my anxiety at all; instead, it made me even more exhausted. I often shed tears alone at night, thinking of many scenes of "what if I fail?"

Student 7: When I first entered university, I was particularly afraid of unfamiliar environments. The first time a group activity was to be organized in the dormitory, I hesitated for three whole days and didn't participate. My most common reaction is to "pretend not to see the group message", and then hide alone in the library. In fact, deep down I long to be accepted, but I'm also afraid of being rejected if I don't perform well. Back then, "adjusting my state" meant repeatedly keeping a diary for me, but it was actually of no use. My mood was still very depressed, and I often had a stomachache whenever I thought about it.

2. Before group counseling, would you share an experience where you encountered a major challenge or failure but eventually persisted? How do you think you managed to do it?

Participants said that their Mental toughness had basically changed after participating in the Integrated group counseling, and there was also a significant improvement through observation.

Student 3: I failed the teacher qualification examination twice in a row. During that period, I was really skeptical about life and wondered if I was simply not cut out to be a teacher. But in the end, I still decided to try again because I really love teaching. The third time, I got up early every day to read aloud for 20 minutes and tested questions with my friends. I persisted for a full 40 days. Finally, I passed smoothly. I think it was "taking passion as faith" that kept me going.

Student 5: I was once the main creator of a design in an architectural competition, but my first draft was rejected. My supervisor commented that it "lacked logic and spatial sense". I once thought of quitting, but later a team member told me, "You are the soul of this project. No matter what the outcome is, we want you to lead us through it." That sentence made me grit my teeth and carry on. We stayed up all night to revise the plan later. Although we didn't win the award in the end, I felt that it was the first time I had completed a work that truly belonged to our team. The reason why I persisted is very simple - not because I'm strong, but because I don't want to disappoint those who support me.

Student 9: In the first semester of my freshman year, I applied for a student psychological counseling volunteer program and was rejected in the first round. At that time, I was really shocked because I felt that I "couldn't even do well in studying psychology". But later I decided to attend a public lecture and take the initiative to ask questions to the lecturer. She told me, "To be a helper, one must first take good care of one's own boundaries and emotions." I began to understand that "failure is not a matter of ability, but a space for growth", so I readjust my state and continued to participate in another campus psychological service project, persisting until now.

3. After participating in group counseling, when you feel like giving up while achieving a goal, how do you usually keep yourself going?

Participants said that the various techniques used in Integrated group counseling were effective in enhancing their Mental toughness, and different people felt in different ways.

Student 1: Group counseling made me realize that not all goals can be achieved by "forcing oneself to do it". Now I will stop first, give myself five minutes to take deep breaths, and then re-examine what this goal means to me. I will write down "Why did you start in the first place?" and stick it in front of the desk. Once, I was preparing to review for the College English Test Band 4 until the early hours of the morning. I really wanted to give up, but when I saw the sentence "I want to apply for an exchange", I sat down again. Now I know better how to encourage myself in a gentle yet firm way rather than push myself.

Student 4: Now I prefer to use the "segmented goal" method, breaking down large tasks into several easy-to-handle small pieces. For instance, in model design, I would divide it into three parts: "Shell design", "internal structure wiring", and "structural verification". After completing each piece, I would give myself a positive feedback. Sometimes I also review the voice clips of everyone encouraging each other during group activities. Those encouragements make me feel that it's not possible to keep going just by fighting alone.

Student 6: Now when I want to give up, I "stop". Instead of continuing immediately, I think in a different way: Why did I start this goal? What does it mean to me? I will mark "traces of persistence" on the calendar, such as checking in to complete a certain model or passing the initial review of a plan. These visual progress can allow me to see how much I have advanced. I would also share my feelings during the stuttering phase with my group members. The feedback they gave me often reignited my motivation.

4. After participating in group counseling, what factors do you think can best help a person enhance their Mental toughness? Do you intentionally cultivate these traits of yours?

Participants hope that the enhancement of Mental toughness will improve their ability to independently solve difficulties, and enable them to better design their goals and adopt a more positive attitude to overcome challenges in daily life.

Student 3: I think it's "accepting emotions and taking continuous actions". We are always taught to be strong and adjust quickly, but the tutoring made me realize that being able to walk while crying is also a kind of strength. Now I record "My mood today + what I did" every day. Sometimes when I'm very anxious but still complete a small task, I will give myself a thumbs up. This kind of "seeing my own efforts" has made me walk more and more steadily.

Student 7: I think it's "finding the source of one's own sense of security". For me, it's "expression" and "being understood". In the group, I shared for the first time my experience of being criticized in public by the teacher when I was a child. To my surprise, everyone listened very attentively and said that I was very brave. Since then, I have started to write the "Peace of Mind Notebook", recording the things that make me feel at ease every day, such as a compliment or a chat. Now I insist on writing three "emotional Gratitude" every day, which has gradually given me more stable inner strength.

Student 10: I think it's "true self-expression" and "the experience of being understood". For the first time in the group, I boldly shared my feelings of being ignored in my family when I was a child. At first, I was very afraid that everyone would think I was being overly sentimental, but everyone listened very attentively. Some even said, "I have had similar experiences too." At that moment, I felt that I wasn't an isolated island. Now I practice expressing "feelings + needs" every day, such as "I feel tired today and need to rest", which makes my relationship with myself closer and also gives me more strength.

## **Theme 2: Anxiety**

5. In what situations are you most likely to feel anxious before participating in group counseling? What specific effects will this kind of anxiety have on you?

Before participating in group counseling, students' anxiety was mainly manifested in their studies, employment, interpersonal communication and body image. Their concerns about employment prospects, being judged by peers and poor academic performance lead to excessive pressure on them, which causes them to avoid social interaction and thus generates anxiety.

Student 5: I'm particularly afraid of public speaking, especially when introducing myself or answering questions on the spot. The feeling that "everyone is looking at you" made me tremble with nervousness. Once in a class, I was interrupted by the teacher for stuttering. After that, I spent the whole day recalling that scene. At night, I even dreamed that everyone was laughing at me. This anxiety made me become silent later on. I would avoid speaking in class if possible, which seriously affected my sense of participation.

Student 8: The situation that makes me most anxious is public expression, especially in English. Once when I was called on to answer a question in an English class, I made a mistake in saying a legal provision. After that day, I changed that class to "auditing" because I really didn't dare to speak anymore. That sense of anxiety is like a hand choking my throat, making me constantly assume "I'm bound to fail". This kind of emotion often keeps me awake all night and causes me to have repeated diarrhea. In severe cases, it affects my study schedule for the entire week.

Student 10: What I'm most anxious about is being misunderstood or judged by others. I once put forward a viewpoint in a group discussion. A classmate refuted me and I was at a loss for words on the spot. After that, I kept wondering for several consecutive days whether that sentence was wrong. This anxiety made me reluctant to speak in class and also made me spend a lot of time "wasting time" - debating with others in my mind, only to find that these conversations didn't occur in reality at all.

6. After participating in the Integrated group counseling, do you feel that your anxiety has changed? If so, what exactly is the way?

After participating in the Integrated group consultation, the students said that their anxiety had significantly decreased, especially in terms of mental stress. Many students feel more confident in expressing themselves in interpersonal communication. Their communication skills have also improved. In group discussions, they have become more relaxed and willing to participate, and are more motivated.

Student 2: The changes are quite big. Previously, I would fight anxiety by avoiding it. Now, I have learned to face it. I remember that in our group class, we did an exercise called "Anxiety Map", which enabled me to systematically sort out for the first time "Where does anxiety come from and what can I do". Now, before each group meeting, I do a small review and breathing practice in advance. I also communicate more with my teammates to confirm the content and reduce uncertainty. The anxiety hasn't completely disappeared, but it no longer controls me.

Student 6: Now I'm more proactive in dealing with anxiety. Before the presentation, I will prepare three sentences for myself, such as "You have prepared", "The judges are listening to your ideas instead of finding faults", and "Mistakes don't define you". This kind of self-dialogue is really effective. Moreover, the "improvisational expression training" in the group made me realize that expression is not recitation, but the presentation of one's own thoughts. Anxiety is no longer an obstacle to "whether to speak or not", but has become the driving force for "how can I speak more freely".

Student 7: There have been great changes. Group counseling enabled me to face up to my anxiety for the first time instead of just thinking "I'm too bad". We have learned a tool called "Emotion Thermometer". At the beginning of each activity, we would say our "anxiety temperature", and gradually I could sense the ups and downs of emotions. There was a class practice of "word-for-word expression practice". I read a short passage from the lines. Although my voice was very low, everyone applauded for me. Since then, I have begun to practice raising my hand to speak in class, starting with one sentence and doing it slowly.

7. In group counseling, which activities or techniques do you think are the most effective in reducing your foreign language anxiety? Why?

Students generally believe that the specific psychological techniques adopted in the Integrated group counseling process play a crucial role in alleviating anxiety. In particular, the ABC theoretical model and cognitive reconstruction techniques in cognitive behavioral therapy (CBT) have been pointed out by many participants as "the most practical and direct intervention tools".

Student 2: I think the most effective one is "role substitution expression training". That time, each of us played from someone else's perspective, such as "If you were your future mentor, how would you evaluate yourself now?" I originally thought I would be criticized, but my companion who was playing my role said, "He was still willing to prepare hard in the midst of nervousness, and this in itself is worthy of affirmation." For the first time, I realized that I also had aspects worthy of affirmation. After that, I no longer regarded anxiety as a weakness but a process.

Student 4: The most effective one is the "Anxiety Profiling Chart" exercise. That time, the teacher asked us to draw an experience that made us anxious, connecting emotions, thoughts and behaviors with arrows. For the first time, I realized that it wasn't that I was afraid of saying the wrong thing at that time, but that I was afraid of being laughed at by my classmates. This awareness made me understand that my true fear came from "the collapse of my self-image", rather than the task itself. Since then, I have begun to practice "exposure therapy", such as deliberately speaking in the group and not avoiding it even if I make mistakes.

Student 9: For me, it's the "Failure Reconstruction Group Sharing" activity. At that time, each of us had to talk about a failure experience and state three points we learned from it. I talked about my failure. My hands were shaking halfway through, but everyone listened very attentively. Some even told me, "I've experienced it too." That was the first time I felt that after failure was spoken out, it was no longer so terrifying. For the first time, I also realized that sharing is a kind of release rather than exposing weaknesses.

8. What do you think are the long-term impacts of group counseling on your future life and study anxiety management?

Students believe that this group counseling will have a significant long-term impact on their future anxiety management. Most participants believe that the key psychological skills learned in the counseling, such as the ABC model in cognitive behavioral therapy (CBT), cognitive restructuring, and thought recording exercises, not

only effectively alleviate anxiety at present but will also continue to play a role in their future studies and lives.

Student 4: I think the biggest change is that I'm better at "predicting anxiety and preparing in advance". For instance, before the interview, I will do mock questions and answers to scout the way in advance and minimize uncertainties as much as possible. At the same time, I am also more daring to seek help. Before, I wanted to handle everything alone. Now, I will ask senior students for advice or cooperate with my teammates. I believe these changes will make me more resilient in the workplace in the future and no longer be easily defeated by anxiety.

Student 6: I think the influence is very long-term. I used to think that "withstanding pressure" meant completing tasks independently. Now I understand the importance of "connection and regulation". I will continue to apply the emotion management skills I learned in the coaching and also want to bring this approach into my future team, such as organizing regular emotion reviews and mutual evaluation feedback when doing projects. I hope that in the future, whether I enter a construction company or open a studio, I can always maintain a mindset that "can both catch up with myself and others".

Student 8: I believe this group experience will become a very important part of my life. It taught me to "let emotions flow instead of getting stuck". I also plan to bring some of the skills learned in the group into my internship life, such as making emotional predictions before meetings, organizing key expressions, and setting mental preparations for "accepting failure". I am already considering becoming a college counselor in the future, hoping to convey this concept centered on "acceptance and self-help" to more students.

In summary, the feedback and behaviors of students reflected in the group interview materials demonstrate significant changes in their emotional experiences and coping strategies after participating in group counseling. The results indicate that, through systematic participation, students experienced a notable reduction in subjective stress and fear, especially in previously vulnerable situations

such as public speaking, classroom presentations, or examinations. By learning and applying various cognitive regulation techniques—particularly the ABC model and cognitive restructuring from Cognitive Behavioral Therapy (CBT)—their cognitive recognition abilities improved substantially. These skills enabled them to better identify and modify irrational thoughts, regulate their emotions, and build a positive self-awareness framework.

Furthermore, during the counseling process, students' focus shifted from "avoiding mistakes" to "focusing on the learning and challenge process," demonstrating increased Mental Toughness and adaptability. They became more relaxed, confident, and actively engaged in group activities and role-playing. This fostered a safer, more inclusive, and supportive group environment, effectively reducing previous avoidance behaviors. Their approaches to anxiety management also improved positively, and their overall psychological coping abilities continued to strengthen. These findings highlight the vital role that group counseling plays in enhancing emotional regulation and Mental Toughness, providing students with a solid psychological foundation for future challenges and stress management.

### 2.3 Summary of Phase II Results

This phase of the study aimed to evaluate the effectiveness of a carefully designed, 10-session integrative group counseling program targeting anxiety reduction and the enhancement of mental toughness among Chinese university students. The program was grounded in prior research findings from Phase One, which identified mental toughness as a key protective factor inversely related to anxiety levels, with self-image exerting a weaker yet notable influence. The intervention was therefore structured to strengthen the core components of mental toughness—Confidence, Challenge, Control, and Commitment—with the overarching goal of reducing anxiety through mental toughness building.

The quantitative analysis demonstrated that the intervention yielded statistically significant improvements in the experimental group's mental toughness, which increased substantially from pre-test to post-test and maintained gains during the follow-up phase. The effect sizes were large, indicating that the intervention had a robust and sustainable impact on participants' mental toughness. Similarly, anxiety levels decreased markedly immediately following the intervention, and this reduction persisted or even intensified during the follow-up period, showing the intervention's lasting effects. These findings were supported by multivariate repeated measures analysis of variance (MANOVA) results, which confirmed significant differences across three time points in both mental toughness and anxiety, with interaction effects revealing the intervention's differential influence over time.

The demographic data indicated a diverse sample, including students from various academic disciplines, with both genders well represented. Most participants had not previously sought psychological counseling, highlighting the group program's role in providing accessible mental health support to a broad range of students. The participants' initial anxiety levels were moderate, and their baseline mental toughness scores were low, which provided a suitable context to observe the potential for meaningful change through targeted intervention.

In addition to the quantitative results, qualitative insights obtained through focus group interviews with 10 students from the experimental group enriched the understanding of how the intervention facilitated psychological change. Participants expressed that they experienced a noticeable reduction in anxiety, feeling more confident and capable of facing challenges in academic and social contexts. They reported that the program helped reshape their perception of challenges, fostering a growth mindset and enhancing their sense of control over emotional responses. Many students highlighted the importance of specific techniques learned during counseling, such as emotional regulation, cognitive restructuring, and goal-setting, which they believed could be applied beyond the group setting to manage future stressors.

Participants also described a positive shift in their self-image and overall outlook on life. They reported increased proactive behavior, such as engaging more actively in class discussions and social activities, and adopting healthier coping strategies. They emphasized that the skills acquired not only contributed to immediate reductions in anxiety but also improved their long-term resilience. Several students noted that their newfound confidence enabled them to tackle difficult situations with greater ease and persistence, aligning with the core principles of mental toughness.

Overall, the findings from this phase indicate that the integrated group counseling program was highly effective in fostering mental toughness and significantly reducing anxiety among Chinese university students. The combination of quantitative data and subjective feedback underscores the program's capacity to produce both immediate and sustained mental health benefits. This comprehensive approach demonstrates the potential for structured, theory-based group interventions to serve as scalable and accessible models to promote emotional well-being, resilience, and adaptive coping in university populations and potentially beyond. The positive outcomes observed in this study provide strong evidence supporting the continued use and refinement of such integrative psychological interventions as practical, impactful strategies for mental health promotion in educational settings.

## CHAPTER 5

### DISCUSSION AND SUGGESTIONS

This research focuses on the topic: "The Impact of Self-Image and Mental Toughness on Anxiety and the Reduction of Anxiety Among Chinese University Students Through an Integrated Group Counseling Program." The study encompasses three main objectives: Objective 1: To investigate the effects of self-image and mental toughness on anxiety among Chinese university students. Objective 2: To develop an integrated group counseling intervention aimed at reducing anxiety. Objective 3: To analyze the differences in anxiety scores between the experimental and control groups before and after participating in the counseling program, and to compare score changes related to anxiety. The study sample consisted of 1,009 Chinese university students, including participants from seven faculties at Wuchang Institute of Technology. A random stratified sampling method was adopted to ensure representativeness. Data were collected via online questionnaires, and after excluding responses with abnormal completion times or patterned answers, the final valid sample size was determined to be 400.

Accordingly, the research findings are summarized as follows:

1. Summary of Research Results
  - 1.1 Summary of Phase One Results
  - 1.2 Summary of Phase Two Results
2. Discussion
  - 2.1 Discussion of Phase One Results
  - 2.2 Discussion of Phase Two Results
3. Recommendations
  - 3.1 Recommendations from Theoretical and Practical Perspectives
    - 3.1.1 Theoretical Perspective
    - 3.1.2 Practical Perspective
  - 3.2 Suggestions for Future Research

## 1. Summary of Results

### 1.1 Summary of the First-phase Results

The results of this study are derived based on the following goals:

Hypothesis 1: Self-image and Mental toughness are related to anxiety. Higher levels of self-image and Mental toughness may be associated with lower levels of anxiety.

The results show that the resulting anxiety theoretical model is consistent with the empirical data.

The study explored the influence of Mental toughness and self-image on the anxiety level of Chinese college students through a combination of questionnaire surveys and qualitative interviews. The Pearson correlation results showed that Mental toughness and self-image were significantly negatively correlated with anxiety. Mental toughness was negatively correlated with anxiety ( $\beta = -0.364$ ,  $t = -7.325$ ,  $p < 0.001$ ), indicating that the higher the Mental toughness, the lower the anxiety level. Similarly, self-image was also significantly negatively correlated with anxiety ( $\beta = -0.086$ ,  $t = -1.732$ ), indicating that the higher the self-image, the lower the anxiety. These correlations confirm that anxiety tends to decrease with the improvement of Mental toughness and self-image, which is consistent with Hypothesis 1.

Hypothesis 2: Determine which of self-image and Mental toughness is the most influential predictor of anxiety.

The research results show that the empirical data support Hypothesis 2 proposed in this paper, and Mental toughness is the most important predictor of anxiety among Chinese college students. In the regression model, Mental toughness plays a key role in alleviating anxiety and is an important negative predictor of anxiety level ( $\beta = -0.364$ ,  $t = -7.325$ ,  $p < 0.001$ ). This finding is consistent with existing studies (Liu & Wang, 2022; Connor & Davidson, 2003; Ahmed & Julius, 2022). Although self-image was also negatively correlated with anxiety ( $\beta = -0.086$ ,  $t = -1.732$ ), it did not reach a significant level ( $p = 0.084$ ), and its explanatory power for anxiety was relatively weak.

The study suggests that the influence of self-image may exert more through indirect variables such as self-esteem and self-identity (Zhang & Lu, 2021; Beiter et al., 2015).

Furthermore, qualitative research further verified the trends revealed by the quantitative results. When students are confronted with anxious situations, they often demonstrate certain Mental toughness coping strategies. Once these strategies fail, some students turn to evasive responses. It is worth noting that respondents from ordinary families generally indicated that their parents or role models provided significant psychological support and technical adaptation assistance during their early college years.

Most students mentioned that the school is equipped with psychological counseling resources. However, when facing technological pressure, they are less inclined to actively seek professional help. Instead, they prefer to solve problems through physical exercise, leisure activities, or confiding in friends. Meanwhile, students generally recognize the importance of learning progress and also realize that they need to constantly improve their learning ability. However, the complexity of interpersonal communication and the pressure of studies and employment remain important sources of anxiety.

In conclusion, this stage of research has revealed the core role of Mental toughness in alleviating anxiety. It also points out that the coping styles adopted by current college students when facing anxiety still have deficiencies, and it is worth focusing on the improvement and transformation paths of their Mental toughness in subsequent interventions.

## 1.2 Summary of the Results of the Second Phase

Hypothesis 3: After participating in the Integrated group counseling program, compared with the scores before the program, the participants' anxiety scores will be lower, and their Mental toughness scores will be higher.

The results showed that the anxiety score of the experimental group was significantly lower than that of the control group, and it presented a significant downward trend after the intervention. Among them, the anxiety score of the

experimental group decreased significantly from the pretest ( $M = 3.54$ ,  $S.D. = 0.51$ , at a medium level) to the posttest ( $M = 2.40$ ,  $S.D. = 0.45$ , at a low level), and remained at a relatively low state during the follow-up stage ( $M = 2.46$ ,  $S.D. = 0.54$ , at a low level). It shows a good intervention maintenance effect. In contrast, the anxiety scores of the control group changed less at each stage and remained at a medium level overall, specifically in the pre-test ( $M = 3.34$ ,  $S.D. = 0.27$ ), post-test ( $M = 3.22$ ,  $S.D. = 0.22$ ), and follow-up stage ( $M = 3.26$ ,  $S.D. = 0.24$ ). These data indicate that the reduction in anxiety in the experimental group was significantly higher than that in the control group, verifying the first part of Hypothesis 3, that is, Integrated group counseling significantly reduced the anxiety levels of the participants.

In terms of Mental toughness, the score of the experimental group was also significantly better than that of the control group. The Mental toughness score of the experimental group increased dramatically from a lower level in the pretest ( $M = 1.89$ ,  $S.D. = 0.67$ ) to a medium level in the posttest ( $M = 3.23$ ,  $S.D. = 0.28$ ), and remained stable during the follow-up ( $M = 3.13$ ,  $S.D. = 0.37$ ). In contrast, the Mental toughness score of the control group remained basically unchanged. There was no significant improvement from the pre-test ( $M = 2.88$ ,  $S.D. = 0.35$ ) to the post-test ( $M = 2.68$ ,  $S.D. = 0.68$ ) and during the follow-up period ( $M = 2.56$ ,  $S.D. = 0.31$ ). This finding further supports another part of Hypothesis 3, namely that the Mental toughness of the experimental group was significantly higher than that of the control group after the intervention.

Hypothesis 4: The Mental toughness score of Chinese college students is relatively high. After participating in Integrated group counseling, the anxiety level should decrease.

Further analysis of the research indicates that the Mental toughness scores of the experimental group in the pre-test, post-test, and follow-up stages show continuous and significant growth. Specifically, the improvement of Mental toughness in the experimental group between the pretest and the posttest reached a statistically significant level ( $M.D. = 1.34$ ,  $p < 0.001$ ), indicating that the integrated intervention

effectively enhanced the Mental toughness of the participants in the short term. Furthermore, a significant increase was still observed from the pre-measurement period to the follow-up period (M.D. = 2.24,  $p < 0.001$ ), indicating that this intervention measure was not only effective in the short term but also had a long-term maintenance effect. In contrast to the fact that there was no significant change in the Mental toughness scores of the control group at the three time points, this further indicates that the promotion of Mental toughness in the experimental group by this project is significant and continuous.

The analysis of anxiety also shows positive effects. The anxiety level of the experimental group showed a significant decrease before and after the intervention (M.D. = -1.14,  $p < 0.001$ ), indicating that this Integrated group counseling has a direct and definite effect in alleviating the anxiety of the participants. Meanwhile, from the premeasurement stage to the follow-up stage, the anxiety score still showed a significant downward trend (M.D. = -2.08,  $p < 0.001$ ), indicating that the intervention effect was not only immediate and significant, but also maintained and consolidated after the intervention ended. In contrast, the anxiety level of the control group did not change significantly throughout the assessment cycle, once again confirming the effectiveness and persistence of this integrated counseling program in anxiety management.

To sum up, through the longitudinal comparative analysis of the experimental group and the control group in the two dimensions of Mental toughness and anxiety, it can be found that the Integrated group counseling project has a significant effect in enhancing the Mental toughness of college students and reducing their anxiety levels. The scores of the experimental group in the subsequent tests indicated that the improvement effect brought by the intervention not only emerged promptly but also remained maintained during the follow-up stage, demonstrating good intervention stability and practical value.

## 2. Discussion

### 2.1 Discussion of the Results of the First Phase

The first phase of this study aimed to test Hypotheses 1 and 2, namely: (H1) self-image and mental toughness are related to anxiety levels, and (H2) to determine which of the two variables is the stronger predictor of anxiety. The results from multiple regression analyses support Hypothesis 1, demonstrating that mental toughness (MTQZ) has a significant negative predictive relationship with anxiety ( $\beta = -0.364$ ,  $t = -7.325$ ,  $p < 0.001$ ). This finding corroborates previous studies indicating that individuals with higher mental toughness tend to exhibit lower levels of psychological distress and anxiety (Liu & Wang, 2022; Connor & Davidson, 2003; Gucciardi et al., 2015). Mental toughness serves as a critical psychological protective factor, enabling students to navigate academic, social, and future-oriented pressures with enhanced coping capacity.

Although self-image was also found to be negatively correlated with anxiety ( $\beta = -0.086$ ,  $t = -1.732$ ), this relationship did not reach statistical significance ( $p = 0.084$ ), consistent with the findings of Zhang & Lu (2021) and Beiter et al. (2015). These results suggest that the impact of self-image on anxiety may operate indirectly through mediators such as self-esteem or perceived social support (Orth & Robins, 2013; Sowislo & Orth, 2013). Qualitative interviews added to the quantitative results: mental toughness students showed more positive coping strategies, such as taking part in physical exercise, decomposition of academic tasks, and proper emotional expression. Conversely, those with low self-image tended to fall into maladaptive patterns such as social withdrawal, avoidance, and self-criticism.

The cultural context also appears to shape the experience of anxiety and self-image. Some participants emphasized the pressure stemming from societal expectations in Chinese culture, such as the pursuit of excellence, resilience, and appearance standards. Female participants in particular reported higher levels of self-doubt when simultaneously facing demands for academic success, social competence,

and physical attractiveness—findings that align with prior literature on appearance anxiety and gender-specific pressures (Jackson & Chen, 2015; Yu et al., 2020).

Notably, while self-image was negatively correlated with anxiety, its predictive effect was not significant in the regression model. This anxiety results in a similar pattern to that of the other, when the more recent psychological structure, such as self-efficacy (Najafzadeh et al., 2018), toughness (similar to mental toughness), and other structures, may not show strong prediction ability. It is also possible that high self-image acts more as a moderator or background variable rather than a direct predictor, depending on the cultural context and situational stressors faced by the students.

In addition to its overall construct, mental toughness can be further understood through its four core dimensions: challenge, commitment, control, and confidence (Clough et al., 2002). Each dimension contributes uniquely to how students handle stress and anxiety. The challenge dimension refers to viewing difficulties as opportunities for growth rather than threats. Students with high challenge scores are more likely to embrace academic and social obstacles as part of learning and self-improvement (Gucciardi et al., 2009). This orientation not only buffers anxiety but also promotes persistence in the face of uncertainty. Commitment reflects the ability to set goals and stick to them despite external stressors. Students who score higher on commitment tend to maintain consistent effort toward academic tasks, reducing anxiety caused by procrastination or lack of direction (Sheard & Golby, 2006). Control, especially emotional and life control, is critical in anxiety regulation. It encompasses one's belief in their ability to influence outcomes and manage emotions. Students with a strong sense of control are better at coping with unpredictability and staying calm under pressure (Crust & Clough, 2005).

Finally, confidence involves both interpersonal and task-related beliefs in one's capabilities. This dimension is strongly related to reduced social anxiety and enhanced performance confidence (Cowden, 2016). Students with greater confidence are less likely to doubt themselves in evaluative contexts, such as exams or presentations.

These four dimensions interact synergistically to form a resilient mindset that buffers against anxiety-provoking situations. Interventions aiming to build mental toughness should address all four components to yield optimal outcomes. Recent evidence supports this multidimensional approach; for instance, Stamp et al. (2021) found that group-based interventions that addressed goal-setting (commitment), emotion regulation (control), reappraisal of challenges (challenge), and self-affirmation (confidence) led to significant improvements in mental health outcomes among university students.

Overall, the evidence strongly supports Hypothesis 1 and partially supports Hypothesis 2, suggesting that mental toughness is a significantly stronger predictor of anxiety than self-image. These findings highlight the importance of prioritizing mental toughness enhancement in university mental health programs. While self-image is also relevant, targeted strategies such as cognitive restructuring, self-compassion training, and emotion-focused interventions may be necessary to address its subtler and more context-sensitive influences (Erbe & Lohmann, 2015; Turner et al., 2016).

## 2.2 Discussion of the Results of Phase 2

This study's second phase addressed Hypothesis 3, which posited that participation in an integrative group counseling program would result in lower anxiety scores and higher mental toughness scores compared to pre-intervention levels. Further, it was hypothesized that the intervention would enhance the inherent high-level mental toughness already present in Chinese college students, leading to a subsequent decline in anxiety levels. Quantitative results strongly support Hypothesis 3. The experimental group demonstrated a significant reduction in anxiety scores from pre-test ( $M = 3.54$ ,  $SD = 0.51$ ) to post-test ( $M = 2.40$ ,  $SD = 0.45$ ), a finding that persisted during the follow-up phase ( $M = 2.46$ ,  $SD = 0.54$ ). This pattern indicates a stable and significant anxiolytic effect attributable to the integrative group counseling. Conversely, the control group exhibited minimal fluctuations in anxiety scores across the same time points (pre-test  $M = 3.34$ ,  $SD = 0.27$ ; post-test  $M = 3.22$ ,  $SD = 0.22$ ; follow-up  $M = 3.26$ ,

SD = 0.24), suggesting that the observed anxiety reduction was directly related to the intervention rather than other factors.

Moreover, the experimental group's mental toughness scores significantly increased, rising from  $M = 1.89$  (SD = 0.67) at pre-test to  $M = 3.23$  (SD = 0.28) at post-test and maintaining a relatively stable level at follow-up ( $M = 3.13$ , SD = 0.37). This signifies that the program effectively bolstered the students' capacity to cope with stress and adversity. Paired-samples t-tests confirmed the significance of these changes (pre- to post-test  $M.D. = 1.34$ ,  $p < 0.001$ ; pre-test to follow-up  $M.D. = 2.24$ ,  $p < 0.001$ ). This pattern directly validates Hypothesis 3, demonstrating that the integrative group counseling program effectively and sustainably enhanced the students' mental toughness. These quantitative findings were further illuminated by qualitative data gathered from focus group interviews. The interviews revealed that the participants developed a deeper awareness of their individual emotional patterns, and the development and mastery of new strategies and skills to express their feelings of vulnerability, but also their ability to manage stress effectively and adapt a new framework to cope with future emotional discomfort and anxiety (Chen et al., 2016). Specific techniques employed in the interventions also had a profound impact on participants' coping mechanisms, such as the ABC model of Cognitive Behavioral Therapy (CBT; Beck, 2011; Hofmann et al., 2012), cognitive restructuring, and thought record exercises, which were frequently cited as particularly impactful in managing anxiety. These results are in line with existing results on managing anxiety. CBT techniques are used as an effective framework for emotional regulation (Beck, 2011; Hofmann et al., 2012).

The integrative program incorporated CBT principles, mindfulness training, positive psychotherapy, and reality therapy to address students' academic, interpersonal, and emotional challenges. This multifaceted approach is supported by existing research showing that mindfulness enhances presence and reduces rumination and anxiety during challenging situations (Kim, 2021; Morgan & Katz, 2021) and reduces fear of mistakes and promotes enjoyment (Fallah, 2017; Kim, 2021).

Furthermore, the supportive environment of group counseling provided students with an opportunity to express themselves using a new range of tools, while also offering emotional support and compassion, which helps students feel validated and heard (Strauss et al., 2021). Also, this environment enhanced feelings of efficacy (Bandura, 1977; 2012). Overall, the group members learned to be better in touch with their feelings and to have a better understanding of how to manage future events that may provoke anxiety.

In conclusion, the findings of Phase 2 provide strong evidence for the effectiveness of integrative group counseling in both reducing anxiety and promoting mental toughness among Chinese university students. By combining evidence-based therapeutic techniques with a supportive group environment, this intervention offers a promising avenue for addressing the psychological challenges faced by this population.

### **3. Recommendations**

#### **3.1 Recommendations from Theoretical and Practical Perspectives**

##### **3.1.1 Theoretical Perspectives**

This study, through a combination of quantitative and qualitative approaches, empirically confirmed the critical role of mental toughness in the regulation of anxiety among university students. It enriches the localized application of mental toughness theory in the context of Chinese university students. It provides a valuable reference for the establishment of theoretical systems for psychological interventions in higher education institutions.

Although self-image did not significantly predict anxiety at a statistical level, qualitative findings suggest it may exert an indirect influence in areas such as cognitive appraisal, self-esteem formation, and coping strategy development. Future studies could explore this potential through mediation or moderation models.

Moreover, this study highlighted the mediating value of positive coping strategies (e.g., help-seeking and problem-solving) in the regulation of anxiety, providing theoretical support for psychological counseling practices. It also aligns with key tenets of emotional regulation theory and the conservation of resources model.

Additionally, the study acknowledged the positive role of digital tools—such as artificial intelligence (e.g., ChatGPT)—in alleviating technology-related stress, thereby expanding the scope of psychological research to include the integration of mental health and technological advancement, a perspective with significant forward-looking implications.

### 3.1.2 Practical Implications

Universities should systematically develop mental toughness enhancement systems, integrating cognitive-behavioral interventions and growth mindset strategies. Group counseling programs should be designed around the four core dimensions of mental toughness—Confidence, Challenge, Control, and Commitment—to help students cope with anxiety and academic stress. University counseling centers should intensify interventions on topics related to self-image, such as body image acceptance training and social confidence building, to mitigate negative emotions caused by appearance-related anxiety and identity denial. Educational administrators are encouraged to guide teachers to pay more attention to students' non-academic performance and help them construct a positive self-evaluation from diverse dimensions, thereby improving their overall Mental toughness. It is also recommended that universities establish interdisciplinary courses, such as "Digital Health and Psychological Adjustment" and "AI-Assisted Learning and Emotional Regulation", to enhance students' coping capacity in the face of technological stress and academic anxiety. Group counseling should emphasize a structured design combined with practical activities. Techniques such as mindfulness training, emotional labeling, and simulated decision-making scenarios should be incorporated to enhance the realism and effectiveness of interventions.

### 3.2 Recommendations for Future Research

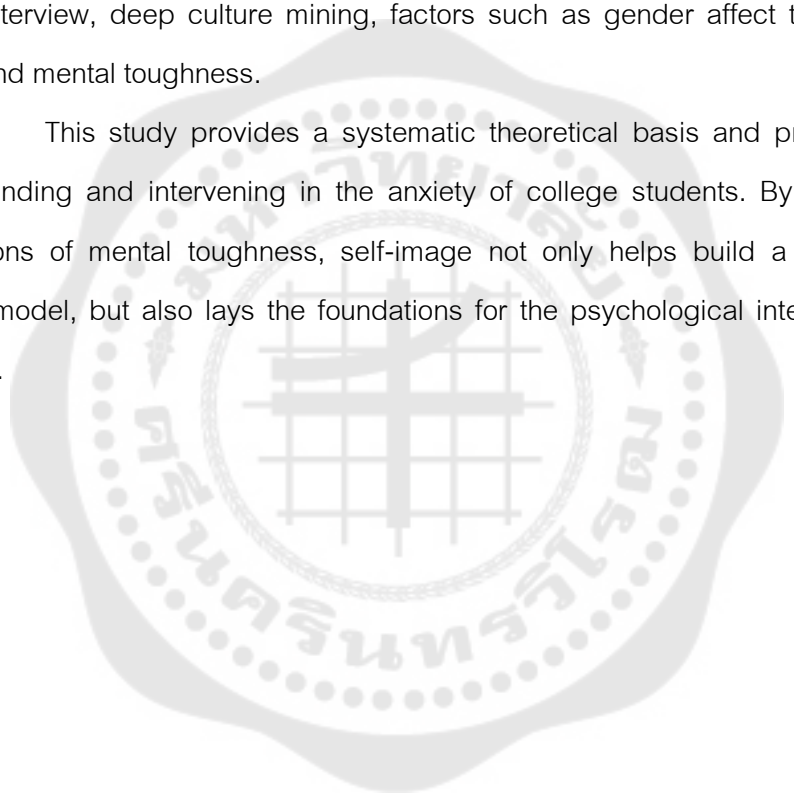
1. Expand the research sample to different regions, disciplines, and grades, and verify the adaptability and stability of the integrative group counseling intervention model.

2. To explore the mental toughness and self-image, and the possible intermediary between anxiety and regulating mechanism, variables such as social support, cognitive evaluation.

3. Adopt a longitudinal tracking design to evaluate the persistence of the intervention effect and the individual change trajectory, and enrich the dynamic explanatory power of the theoretical model.

4. Strengthen qualitative dimensions, further case studies, and the focus group interview, deep culture mining, factors such as gender affect the path of self-image and mental toughness.

This study provides a systematic theoretical basis and practical path for understanding and intervening in the anxiety of college students. By integrating two dimensions of mental toughness, self-image not only helps build a more complete anxiety model, but also lays the foundations for the psychological intervention design diversity.



## REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- An experimental study on the influence of group psychological counseling on inferiority complex of university students. (2004). *Journal of Hebei Normal University*, 6(4).
- Barker, P. (2003). *Psychiatric and mental health nursing: The craft of caring*. Edward Arnold.
- Benson, H. (1975). *The relaxation response*. William Morrow.
- Bouras, N., & Holt, G. (2007). *Psychiatric and behavioral disorders in intellectual and developmental disabilities* (2nd ed.). Cambridge University Press.
- Bruffaerts, R., Mortier, P., Kiekens, G., Auerbach, R. P., Cuijpers, P., Demyttenaere, K., . & Kessler, R. C. (2018). The prevalence of mental health problems and academic functioning in university freshmen. *Journal of Affective Disorders*, 225, 97–103.  
<https://doi.org/10.1016/j.jad.2017.07.044>
- Bruscia, K. E. (2014). *Defining music therapy*. Barcelona Publishers.
- Buelow, M. T., & Cayton, C. (2020). Relationships between the big five personality characteristics and performance on behavioral decision making tasks. *Personality and Individual Differences*, 160, 109931. <https://doi.org/10.1016/j.paid.2020.109931>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond* (2nd ed.). Guilford Press.
- Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders*, 173, 90–96.  
<https://doi.org/10.1016/j.jad.2014.10.054>
- Cai, F. (1995). Sullivan's theory of anxiety. *Journal of Jiangsu Institute of Education (Social Science Edition)*, (3), 74–76.
- Cai, F. (1998). A review of Jacobson's theory of anxiety. *Journal of Jiangsu Institute of Education (Social Science Edition)*, (3), 50–51.

- Cai, Y., Liang, B. Y., & Zhou, Y. J. (2010). The relationship between entrance exam stress, mental toughness, and stress disturbance in middle school students. *Chinese Journal of Clinical Psychology, (2)*, 4. <https://doi.org/10.3969/j.issn.1005-3611.2010.02.017>
- Cash, T. F. (2002). Cognitive-behavioral perspectives on body image. In T. F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp. 38–46). Guilford Press.
- Cain, D. J. (2010). *Person-centered therapy: The evolution of a revolution*. Routledge.
- Chinese Society of Psychiatry. (2001). *Chinese classification and diagnostic criteria for mental disorders (CCMD-3)*. People's Medical Publishing House.
- Chang, J., Yuan, Y., & Wang, D. (2020). Analysis of mental health status and influencing factors of university students in the context of novel coronavirus pneumonia. *Journal of Southern Medical University, 40*, 171–176. <https://doi.org/10.13239/j.cnki.jsmu.2020.02.003>
- Chang, S., Li, L., & He, C. (2018). Study on the effect of structural group psychotherapy on social function recovery of depression. *Journal of Advanced Nursing, 33*(7), 617–620. <https://doi.org/10.1111/jon.12682>
- Chen, G., Chen, M., & Zhang, Q. (2016). Clinical effect of group cognitive behavioral therapy on adolescent anxiety disorder. *International Journal of Psychiatry, 43*(4), 639–641, 661.
- Chen, G. (2006). Theoretical construction and practical exploration of group psychological counseling. *Journal of Zaozhuang University, 12*(6), 107–108.
- Chen, Y. (2006). Study on the intervention of group counseling technique in dysthymia of university students. *Journal of Medical Forum, 27*(24), 55–57.
- Cheng, L. (2024). *Growing in adversity: Enhancing athletic performance through mental toughness training*. China Academic Journal Electronic Publishing House. Copyright (C) 1994-2024. All rights reserved.
- Fu, X., & Zhang, K. (2023). *China's National Mental Health Development Report (2021-2022)*. Social Sciences Academic Press.
- Chinese Journal. (2006). *Chinese Journal, 18*(4), 79–82.

- Clough, P. J., Marchant, D. C., & Earle, K. (2007). *Mental Toughness Questionnaire 48: Technical manual*. AQR.
- Clough, P. J., & Strycharczyk, D. (2012). *Applying mental toughness: The 21st century toolkit*. Kogan Page.
- Clough, P. J., Earle, K., & Sewell, D. (2002). Mental toughness: Concepts and their management. In I. Cockerill (Ed.), *Sports psychology solutions* (pp. 32–45). Thomson Publishing.
- Corey, M. S., & Corey, G. (2016). *Becoming a helper* (7th ed.). Cengage Learning.
- Coulter, T. J., Mallett, C. J., & Gucciardi, D. F. (2010). Understanding the mental toughness of Australian football: Perspectives of players, parents, and coaches. *Journal of Sports Science*, 28(7), 699–716. <https://doi.org/10.1080/02640410903509880>
- Crnkovic, M., Boheme, A., Drnas, M., & Olar, D. (2023). The role of resilience in the relationships between the Big Five personality traits and life satisfaction and anxiety. *International Journal of Emotional Education*, 15, 86–102.
- Clough, P., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 32–43). Thomson Learning.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Cowden, R. G. (2016). Mental toughness and success in sport: A review and prospect. *The Open Sports Sciences Journal*, 9(1), 1–14. <https://doi.org/10.2174/1875399X01609010001>
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108(3), 593–623. <https://doi.org/10.1037/0033-295X.108.3.593>
- Crust, L., & Clough, P. J. (2005). Relationship between mental toughness and physical endurance. *Perceptual and Motor Skills*, 100(1), 192–194. <https://doi.org/10.2466/pms.100.1.192-194>
- Davis, M., Eshelman, E. R., & McKay, M. (2000). *The relaxation and stress reduction workbook*. New Harbinger.

- Ding, W. (2019). Application of group psychological counseling in mental health education of university students. *Education Modernization*, (93), 299.
- Dong, S., Zhang, L., Liu, Q., & Wang, T. (2011). Effect of group training on depression in university students. *Chinese Journal of Disease Control*, 15(9), 758–761.
- Dryden, W. (2012). *Rational emotive behaviour therapy: Distinctive features*. Routledge.
- Evans, D. L., Foa, E. B., Gur, R. E., Hendin, H., O'Brien, C. P., Seligman, M. E., & Walsh, B. T. (Eds.). (2005). *Treating and preventing adolescent mental health disorders: What we know and what we don't know. A research agenda for improving the mental health of our youth*. Oxford University Press.
- Ellis, A., & Dryden, W. (2007). *The practice of rational emotive behavior therapy*. Springer.
- Erbe, B., & Lohrmann, D. K. (2015). Mindfulness and health education. *American Journal of Health Education*, 46(5), 258–265. <https://doi.org/10.1080/19325037.2015.1055013>
- Fan, F., & He, J. (2020). *Group psychological counseling*. East China Normal University Press.
- Gai, N. (1999). Overview of cognitive factors of anxiety. *Journal of Shandong Normal University (Social Science Edition)*, (1), 55–57.
- Ghrouz, A. K., Noohu, M. M., Manzar, M. D., & Alshahrani, M. S. (2019). Physical activity and sleep quality in relation to mental health among university students. *Sleep & Breathing: Schlaf & Atmung*, 23(2), 627–634.
- Gu, S., Xi, X., Cheng, Z., & Xu, Q. (2014). The relationship between big five personality and mental health in university students. *Chinese Journal of Clinical Psychology*, 22(2), 354–356.
- Gucciardi, D. F., Gordon, S., & Dimmock, J. A. (2008). Understanding the mental toughness of American football. *Journal of Applied Sports Psychology*, 20(3), 261–281. <https://doi.org/10.1080/10413200801998556>
- Gucciardi, D. F. (2011). The relationship between developmental experiences and mental toughness in young cricketers. *Journal of Sports and Exercise Psychology*, 33(3), 370–393. <https://doi.org/10.1123/jsep.33.3.370>
- Gucciardi, D. F., & Gordon, S. (2009). Development and preliminary validation of the Cricket Mental Toughness Scale (CMTI). *Journal of Sports Science*, 27(12), 1293–1310.

<https://doi.org/10.1080/02640410903275440>

Golby, J., & Sheard, M. (2004). Mental toughness and hardiness at different levels of rugby league. *Journal of Sports Science*, 22(3), 291–299.

<https://doi.org/10.1080/02640410310001641465>

Gucciardi, D. F., Gordon, S., & Dimmock, J. A. (2009). Advancing mental toughness research and theory using personal construct psychology. *International Review of Sport and Exercise Psychology*, 2(1), 54–72.

<https://doi.org/10.1080/17509840802705938>

Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2015). The concept of mental toughness: Tests of dimensionality, nomological network, and traitness. *Journal of Personality*, 83(1), 26–44. <https://doi.org/10.1111/jopy.12079>

He, J., & Fan, F. (2010). The effect of group counseling on improving the mental health level of poor university students: Based on the theory of positive psychology. *Journal of Health Psychology*, (3), 397–399.

Hu, C., Liu, L., & Yang, Y. (2008). Investigation on influencing factors of university freshmen's test anxiety. *Chinese Journal of Health Psychology*, 16(11), 1207–1209.

Hu, M. (2014). A study on the intervention of positive psychological group counseling to improve the self-confidence level of university students. *Journal of Liuzhou Vocational and Technical University*, (5), 41–44.

Huang, H., Jiang, Q., Wu, Y., Jin, M., & Zhang, T. (2024). Clinical application and efficacy evaluation of dynamic group therapy in university students with social anxiety disorder. *Journal of Health Psychology*, (1).

Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The Efficacy of Cognitive Behavioral Therapy: A Review of Meta-analyses. *Cognitive Therapy and Research*, 36(5), 427–440. <https://doi.org/10.1007/s10608-012-9476-1>

Jones, G., Hanton, S., & Connaughton, D. (2002). What exactly is mental toughness? A survey of elite athletes. *Journal of Applied Sports Psychology*, 14(3), 205–218.

<https://doi.org/10.1080/10413200290103509>

Jones, G., Hanton, S., & Connaughton, D. (2007). A mental toughness framework for the

world's best athletes. *The Sport Psychologist*, 21(2), 243–264.

<https://doi.org/10.1123/tsp.21.2.243>

Jackson, T., & Chen, H. (2015). Risk factors for disordered eating during early and middle adolescence: Prospective relations with body image concerns and peer context.

*Journal of Youth and Adolescence*, 44(5), 1081–1096. <https://doi.org/10.1007/s10964-015-0274-7>

Kim, M. (2021). The role of trait mindfulness in foreign language anxiety and enjoyment: A mediation model through emotion regulation. *Asia Pacific Education Review*, 22, 557–571. <https://doi.org/10.1007/s12564-021-09698-y>

Li, B. (2017). An in-depth interview with adolescents with social anxiety. *Journal of Beijing Institute of Technology: Social Science Edition*, 6(6), 37–39.

Li, C. (2000). Study on psychophysiological reaction of patients with anxiety disorder. *Chinese Journal of Mental Health*, 14(5), 337.

Li, J. (2009). Review on employment anxiety of university students. *Journal of Nanjing Normal University*, 8(5), 99–104.

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

Liang, J. S., Zhang, S. S., & Wu, Z. (2019). Relationship between social anxiety, emotional abuse, and mental toughness of rural university students with left-behind experience. *Chinese Journal of Mental Health*. <https://doi.org/10.3969/j.issn.1000-6729.2019.03.010>

Lin, Y., Mutz, J., Clough, P. J., & Papageorgiou, K. A. (2017). Understanding the relationship between mental toughness, resilience, and emotional regulation in university students. *Frontiers in Psychology*, 8, 1345. <https://doi.org/10.3389/fpsyg.2017.01345>

Liu, J., & Qi, J. (2018). A study on the relationship between anxiety, depression, and A-B personality types among independent university graduates. *Education Modernization*, 5(28), 257–259.

Liu, J., Zhang, L., Yang, Y., & Huang, J. (2018). A survey of cognition and behavior of business graduate students on flipped classroom teaching effects: A study on the

- correlation between anxiety, depression, and A-B personality types of independent university graduates in employment. *Education Modernization*, 5(28), 251–253.
- Liu, W. (2019). Effect of psychological nursing intervention on sleep quality of patients with anxiety disorder. *Chinese Medical Guide*, 19(5), 157–158.
- Liu, Y. (2011). A study on the correlation between five-state personality and mental health of university students [Doctoral dissertation, Beijing University of Chinese Medicine]. Beijing University of Chinese Medicine.
- Lu, J. Y. (2019). Observe the effect of psychological nursing intervention on sleep quality of patients with anxiety disorder. *World Journal of Sleep Medicine*, 9(1), 117–119.
- Luo, M. (2003). Theoretical research on anxiety. *Journal of Health Psychology*, 11(3), 181–183.
- Liu, X., & Wang, H. (2022). The role of resilience and emotional regulation on anxiety among Chinese college students. *Frontiers in Psychology*, 13, 860752. <https://doi.org/10.3389/fpsyg.2022.860752>
- Ma, X. (2002). A review of Edelman's theory of anxiety. *Psychological Science*, 25(4), 499–500.
- Martin, A. J., Ginns, P., Brackett, M. A., & Neely, M. (2013). Academic buoyancy and psychological risk: Exploring reciprocal relationships. *Learning and Individual Differences*, 27, 128–133. <https://doi.org/10.1016/j.lindif.2013.07.014>
- McDermott, R. C., Fruh, S. M., Williams, S., & Smith, M. (2019). Nursing students' resilience, depression, well-being, and academic distress: Testing a moderated mediation model. *Journal of Advanced Nursing*, 76, 3385–3397. <https://doi.org/10.1111/jon.14945>
- Miceli, M., & Castelfranchi, C. (2014). *Expectancy and emotion*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780191509278.001.0001>
- Moran, A. P. (2012). *The psychology of sport and exercise: A critical introduction* (2nd ed.). Routledge.
- Morgan, B., & Katz, R. (2021). Mindfulness and language learning anxiety: A meta-analysis. *Mindfulness*, 12(3), 604–615. <https://doi.org/10.1007/s12671-020-01544-7>
- Najafzadeh, M., Ghanizadeh, A., & Jahedizadeh, S. (2018). The interplay among

- resilience, emotion regulation, and foreign language anxiety: A structural equation modeling approach. *Iranian Journal of Language Teaching Research*, 6(3), 89–106.
- Orth, U., & Robins, R. W. (2013). Understanding the link between low self-esteem and depression. *Current Directions in Psychological Science*, 22(6), 455–460.  
<https://doi.org/10.1177/0963721413492763>
- Ozdemir, E. D., & Papi, M. (2022). Understanding foreign language learning anxiety through Bandura's theory of self-efficacy. *Language Teaching Research*, 26(3), 424–442. <https://doi.org/10.1177/1362168820936876>
- Qiu, D. (2018). *Mathematical emotion*. CPC Central Party School Publishing House.
- Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology*, 88(3), 533–562. <https://doi.org/10.1111/joop.12102>
- Rowe, D. A. (2005). Factorial validity and cross-validation of the body self-image questionnaire (short form) in young adults. *Medicine and Science in Sports and Exercise*, 37(5), S148–S149. <https://doi.org/10.1249/01.MSS.0000162075.26626.4C>
- Rowe, D. A., Benson, J., & Baumgartner, T. A. (1999). Development of the body self-image questionnaire. *Measurement in Physical Education and Exercise Science*, 3(4), 223–247.  
[https://doi.org/10.1207/s15327841mpee0304\\_2](https://doi.org/10.1207/s15327841mpee0304_2)
- Pamungkas, R. A., Chamroonsawasdi, K., Charupoonphol, P., & Vatanasomboon, P. (2020). *A health-based coaching program for diabetes self-management (DSM) practice: A sequential exploratory mixed-method approach*. *Endocrinología, Diabetes y Nutrición*.  
<https://doi.org/10.1016/j.endinu.2020.07.010>
- Savage, D., Chan, H. F., Moy, N., & Chen, J. (2020). Personality and individual characteristics as indicators of lifetime climbing success among Everest climbers. *Learning and Individual Differences*, 160, 109931.  
<https://doi.org/10.1016/j.lindif.2020.109931>
- Spielberger, C. D., & Vagg, P. R. (2002). Treatment of test anxiety: A transactional process model. In R. Schwarzer, H. M. Van der Ploeg, & C. D. Spielberger (Eds.), *Advances in test anxiety research* (Vol. 5, pp. 179–186). Swets and Zeitlinger.

- Shedler, J. (2010). The efficacy of psychodynamic psychotherapy. *American Psychologist*, *65*(2), 98–109. <https://doi.org/10.1037/a0018378>
- Sun, J., Chen, R., & Xu, X. (2019). Study on the correlation between personality type and anxiety level of medical staff: The mediating effect of mental resilience. *Journal of Psychology*, *18*(15), 10–13.
- Sun, S., Fan, X., & Liu, W. (2000). Group psychotherapy for depression. *New Research in Psychology*, *20*(1), 52–54.
- Sun, T., Pang, R., & Lv, Y. (2019). Status quo of anxiety and depression and the mediating role of mental resilience in patients with thyroid cancer after surgery. *Chinese Journal of Clinical Research*, *36*(3), 475–480.
- Sun, X. (2021). The effect of psychological nursing intervention on sleep quality of patients with anxiety disorder. *World Journal of Sleep Medicine*, *8*(9), 1603–1604.
- Sheard, M., & Golby, J. (2006). Effect of a psychological skills training program on swimming performance and positive psychological development. *International Journal of Sport and Exercise Psychology*, *4*(2), 149–169. <https://doi.org/10.1080/1612197X.2006.9671790>
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, *139*(1), 213–240. <https://doi.org/10.1037/a0028931>
- Stamp, E., Crust, L., Swann, C., Perry, J., Clough, P., & Marchant, D. (2021). A systematic review of the effects of mental toughness training interventions. *The Sport Psychologist*, *35*(3), 213–223. <https://doi.org/10.1123/tsp.2020-0043>
- Turner, J., Holtzman, S., & Manser, L. (2016). Mindfulness-based stress reduction for university students: A systematic review. *Journal of American College Health*, *64*(7), 593–603. <https://doi.org/10.1080/07448481.2016.1154097>
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. American Psychological Association.
- Van Der Veen, D. C., Van Dijk, S. D. M., Comijs, H. C., et al. (2016). The importance of

- personality and life events in anxious depression: From trait to state. *Aging & Mental Health*, 21, 1177–1183. <https://doi.org/10.1080/13607863.2016.1162645>
- Wan, L. (2002). Emotional response and brain function of anxiety patients under stress. *Chinese Journal of Mental Health*, 16(6), 205.
- Wang, C., & Zhao, H. (2020). The impact of COVID-19 on anxiety in Chinese university students. *Frontiers in Psychology*, 11, 1168. <https://doi.org/10.3389/fpsyg.2020.01168>
- Wang, G. (2002). Review of Honi's anxiety theory. *Journal of Lingling Teachers University*, 23(3), 129–131.
- Wang, J. (2020). A survey of university students' self-confidence level and a study on swimming intervention [Doctoral dissertation, Nanjing Normal University].
- Wang, M., & Jiang, G. (2008). Research on party resistance in talks [Master's thesis, Central China Normal University].
- Wang, Y., & Chen, X. (2015). Stress and alcohol use in rural Chinese residents: A moderated mediation model examining the roles of resilience and negative emotions. *Drug and Alcohol Dependence*, 155, 76–82. <https://doi.org/10.1016/j.drugalcdep.2015.07.010>
- Wang, Y. (2004). Review on the relationship between social support and physical and mental health. *Psychological Science*, 27(5), 1175–1177.
- Wu, W., et al. (2002). *Group counseling*. National Air University Press.
- Xi, J.-Z., Zuo, Z.-H., & Wu, W. (2013). Approaches to research on resilience. *Advances in Psychological Science*, 20, 1426–1447. <https://doi.org/10.3724/SP.J.1042.2013.01426>
- Xu, J. (2010). The prevention and treatment of anxiety in university students. *Journal of Psychological Science*, 1001-7062(2010), 11–0867–02.
- Yang, S. (1999). *Searching for the true meaning of existence: Luo Luo Mei's existentialist psychology*. Hubei Education Press.
- Yang, Y. (1998). Research on values in the field of social psychology. *Social Sciences in China*, 1998(2), 82–93.
- Ye, H. S. (2004). Cultural patterns and their effects on psychology and behavior. *Psychological Science*, 27(5), 1032–1036.

- Ye, H., & Guo, B. (1998). *The history and system of Western psychology*. People's Education Press.
- Ye, H., & Li, M. (2006). Effect of group interpersonal psychotherapy on hospitalized patients with depression. *Chinese Journal of Mental Health*, 20(8), 524–526.
- Yuan, M. (2019). Retelling life stories: Narrative therapy, alternative memory, and communication empowerment. *Nanjing Social Sciences*, 2019(06), 109–115, 144.
- Yuan, X. (2019). *Postmodern approaches in psychotherapy*. East China Normal University Press.
- Yu, Z., Liu, Y., & Liu, J. (2020). Body image and peer influence among Chinese adolescents: A moderated mediation model. *Children and Youth Services Review*, 119, 105514. <https://doi.org/10.1016/j.childyouth.2020.105514>
- Zhai, X. (1998). The structure of Chinese social action: The end of individualism and collectivism. *Journal of Nanjing University (Philosophy, Human Sciences, Social Sciences Edition)*, (1), 19.
- Zhang, Q., Li, J., Ma, T., et al. (2020). Current situation and influencing factors of university students' social anxiety in Changchun. *Medicine and Society*, 33(3), 112–115. <https://doi.org/10.3969/j.issn.1003-5865.2020.03.012>
- Zhang, Q. (2022). Research on the application of group psychological counseling in university students' mental health education. *Journal of Jilin University of Agricultural Science and Technology*, 31(1), 53–56.
- Zhang, S., & Song, L. (2016). A study on the relationship between mental resilience and social anxiety in university students. *Modern Education Science*, (5), 70–74.
- Zhang, S. (2022). A study on the relationship between university students' parental rearing styles and evaluation of fear and social anxiety [Doctoral dissertation, Tianjin Normal University].
- Zhang, T. (2023). A study on the intervention of interpersonal relationship group psychological counseling on self-esteem of middle school students [Master's thesis, Yan'an University].
- Zhang, Y., & Ren, W. (2023). Medical students' post-graduate exam anxiety and its

- influencing factors. *Heilongjiang Science*, 14(23), 111–113.
- Zhang, Y., & Yao, D. (2011). Cross-regional verification and comparison of career anxiety questionnaires of university graduates. *Psychological and Behavioral Research*, 9(2), 120–124.
- Zhang, Y. (2005). An experimental study on career anxiety and psychological education of university graduates [Doctoral dissertation, Inner Mongolia Normal University].
- Zhao, L. (2020). Study on influencing factors and intervention of university students' social anxiety [Master's thesis, Tianjin Medical University].
- Zhao, L., & Shi, Q. (2003). Review of psychoanalytic anxiety theory. *Journal of Beijing University of Technology (Social Sciences Edition)*, 12(3), 75–78.
- Zhao, W., Yu, H., Zeng, W., et al. (2019). The mediating effect of mental resilience on the five personality traits, depression, anxiety, and stress in surface naval forces. *Journal of Occupational and Health*, 39(8), 1061–1065. <https://doi.org/10.3969/j.issn.1001-7485.2019.08.017>
- Zheng, W., Jin, T., Chen, R., et al. (2022). An analysis of the influence of anxiety on university students' internal examination behavior in the post-COVID-19 era: The mediating role of employment values. *Progress in Education*, 12(4), 918–926.
- Zheng, X. (2006). Discussion on the application and role of group psychological counseling in university mental health education. *Higher Education Research*, 6.
- Zhu, Y., & Xie, L. (2015). Investigation on the current situation of university students' graduate entrance examination anxiety (during and after the examination). *Intelligence*, 15(21), 103–104.
- Zhang, Y., & Lu, H. (2021). Body image and mental health in university students: The mediating role of self-esteem. *Journal of Affective Disorders*, 281, 780–786. <https://doi.org/10.1016/j.jad.2020.11.062>



APPENDIX



APPENDIX 1

Questionnaire

## 1. Basic information

Professional :

Student number :

## 2. What is your gender?

A.Male

B.Female

## 3.What grade are you in at university now? (Single Choice)

A.Freshman(Y1)

B.Sophomore(Y2)

C.Junior(Y3)

D.Senior(Y4)

## 4.How many brothers and sisters do you have? (Single Choice)

A.0

B.one

C.Two

D.Three or more

## 5.Where did you live before you came to university? (Single Choice)

A.City

B.Town

C.County

D.Village

6.How much is your monthly living expense? (Single Choice)

A.500 to 1000 RMB

B.1001 to 2000 RMB

C.2001 to 3000 RMB

D.Above 3000 RMB

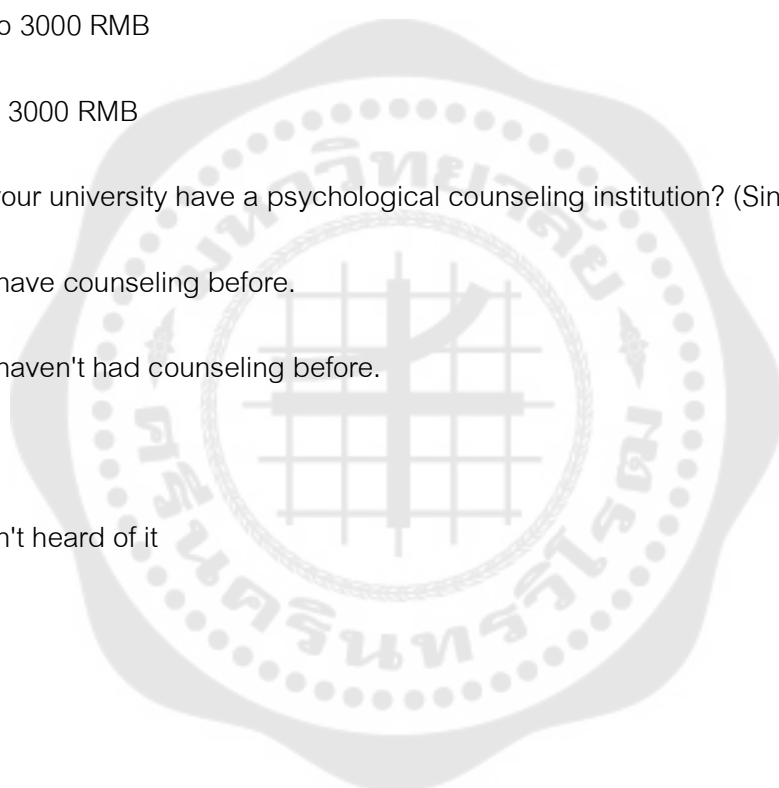
7.Does your university have a psychological counseling institution? (Single Choice)

A.Yes, I have counseling before.

B.Yes, I haven't had counseling before.

C.No

D.I haven't heard of it



### Self-rating Anxiety Scale (SAS)

Rating items	None or very few	Sometimes there is	Most of the time (often)	The vast majority Count the time There are
1. I feel more neurotic and anxious than usual	1	2	3	4
2. I'm worried for no reason	1	2	3	4
3. I get upset or panic easily	1	2	3	4
4. I feel as if my body is broken into pieces	1	2	3	4
*5. I feel that everything is going well and nothing bad will happen	4	3	2	1
6. My limbs shake and tremble	1	2	3	4
7. I'm bothered by headache, neck pain, and back pain	1	2	3	4
8. I feel weak and fatigued easily	1	2	3	4
*9. I feel calm and can sit down quietly	4	3	2	1
10. I feel my heart beat faster	1	2	3	4
11. I'm sick with bouts of vertigo	1	2	3	4
12. I feel like I'm going to faint	1	2	3	4
*13. I breathe in and out without effort	4	3	2	1
14. I feel numb and tingling in my fingers and toes	1	2	3	4
15. I am troubled by stomach ache and indigestion	1	2	3	4
16. I must urinate often	1	2	3	4

*17. My hands are always warm and dry	4	3	2	1
18. I feel my face flushed with fever	1	2	3	4
*19. I fall asleep easily and have a good night's rest	4	3	2	1
20. I have nightmares	1	2	3	4



## Body Self-Image Questionnaire – Short Form

STATEMENTS	<u>Not at all</u> True of Myself (1)	<u>Slightly</u> True of Myself (2)	<u>About</u> <u>Halfway</u> True of Myself (3)	<u>Mostly</u> True of Myself (4)	<u>Completely</u> True of Myself (5)
<b>OAE : Overall Appearance Evaluation</b>					
1.I think my body is unattractive.					
2.I look good in clothes.					
3.My body looks good.					
<b>HFI : Health Fitness Influence</b>					
1.How well my body is functioning influences the way I feel about my body					
2.I feel better about my body when I'm fitter.					
3.The way I feel about my body improves when I exercise regularly.					
<b>II : Investment in Ideals</b>					
1.Having a well-proportioned body is important to me.					
2.Body size matters to me.					
3.I care about how well-shaped my legs are.					
<b>HFE : Health-Fitness Evaluation</b>					

STATEMENTS	<u>Not at all</u> True of Myself (1)	<u>Slightly</u> True of Myself (2)	<u>About</u> <u>Halfway</u> True of Myself (3)	<u>Mostly</u> True of Myself (4)	<u>Completely</u> True of Myself (5)
1.My overall fitness level is high.					
2.My body is healthy.					
3.My body is in shape.					
<b>SD : Social Dependence</b>					
1.I compare my body to people I'm close to (friends, relatives, etc.).					
2.Being around good-looking people makes me feel bad about my body.					
3.I'm more aware of my body when I'm in social situations.					
<b>HD : Height Dissatisfaction</b>					
1.I've often wanted to be taller.					
2.I wish I were a different height.					
3.If I were a different height, I'd like my body better.					
<b>FE : Fatness Evaluation</b>					
1.I think my body looks fat in clothes.					
2.My body is overweight.					
3.I wish I were thinner.					
<b>NA : Negative Affect</b>					
1.My naked body makes me feel sad.					

STATEMENTS	<u>Not at all</u> True of Myself (1)	<u>Slightly</u> True of Myself (2)	<u>About</u> <u>Halfway</u> True of Myself (3)	<u>Mostly</u> True of Myself (4)	<u>Completely</u> True of Myself (5)
2.I feel depressed about my body.					
3.Most days I feel bad about my body.					
<b>AG : Attention to Grooming</b>					
1.I pay careful attention to my face and hair, so that I will look good.					
2.I'm usually well-dressed.					
3.I spend time making my appearance more attractive.					

## Mental Toughness (MTQ48) Scale (Adapted version)

Dimension	Oppose (1)	Neutral or uncertain (2)	Agree (3)	I completely agree (4)
<b>Control</b>				
1.I feel that I am in control of most things in my life.				
2.Even when facing difficulties, I can decide how to respond to them.				
3.I believe I can set and achieve personal goals.				
4.I am able to stay calm and composed under pressure.				
5.When emotions fluctuate, I can quickly recover and refocus on the task.				
<b>Commitment</b>				
6.I always set clear goals and take action to achieve them.				
7.I set specific goals for my work and				

continuously evaluate progress.				
8. Even when facing challenges or setbacks, I persist in pursuing my goals.				
9. I have a strong sense of responsibility to ensure I fulfill my commitments.				
10. I do not give up easily while working towards my goals.				
<b>Challenge</b>				
11. I enjoy taking on new challenges because they make me feel fulfilled.				
12. When facing unfamiliar situations, I feel excited rather than afraid.				
13. I am willing to try new things, even if they carry the risk of failure.				
14. I can learn from past failures and handle future challenges better.				
15. I view change as an opportunity for growth rather than a threat.				
<b>Confidence</b>				

16.I believe I have the ability to handle most of the challenges in life.				
17.When faced with difficult tasks, I am confident I can find a solution.				
18.I am able to confidently express my ideas in social settings.				
19.I feel capable of handling complex situations in interpersonal relationships.				
20.I can remain calm and confident even when speaking in public.				



APPENDIX 2

Interview Transcript

## Theme 1: Self-Image

Q1. How do you usually regulate your emotions and behavior when facing academic stress, exams, or an uncertain future?

Student 1: I usually make a plan and write down the tasks I need to do, then complete them one by one. When I feel too anxious, I go for a run or listen to music to distract myself. It doesn't always work, but I try not to let my emotions hold me back.

Student2: When I'm stressed, I try to stay calm and not get emotional. Exercise and writing in a journal help a lot. Sometimes I feel better after writing things down.

Student3: I usually set goals—like how many words to write each day when working on my thesis. But honestly, when the pressure gets too much, I sometimes “check out” and take a few days to rest.

Student4: I break big tasks into smaller parts and reward myself after finishing each—like buying milk tea. I hate bottling up stress; it gives me headaches.

Student5: I don't show much emotion. Even if I'm anxious, I deal with it myself. I work out or play video games to decompress.

## Theme 2: Mental Toughness

Q2. In what challenges have you grown, and what helped you persist?

Student1: My senior year of high school was really stressful. I broke down after failing a mock exam. My mom told me, "You can be sad, but you can't give up." I cried all night but went back to class the next day. Looking back, I guess that was my mental toughness at work.

Student2: Last year I ran for student council. I didn't win, but I realized I'm not as shy as I thought. I used to tremble when nervous, but this time I didn't back down.

Student3: My first year in college was tough—everything felt unfamiliar. What helped me was telling myself, "You're not in high school anymore. You need to rely on yourself." It was that inner drive that helped me through.

Student4: I changed majors in high school and felt totally lost at first. But I stuck with it because I kept telling myself, "Adaptability is a skill."

Student5: I've played basketball since middle school and have been injured during training, but quitting never crossed my mind. That "try again" mindset also helps with academic stress.

Q3. How do you perceive your appearance, abilities, or overall self-image? Does this perception affect how you handle stress?

Student1: I don't think I'm very pretty, but I'm not ugly either. My abilities are okay, but I sometimes lack confidence, especially when I see others doing really well. When I doubt myself, I get more anxious—like I won't perform as well as others.

Student2: I've always felt I wasn't attractive enough, so I paid a lot of attention to appearance. But now I focus more on my abilities. When I feel confident, I face problems more directly.

Student3: Others see me as quiet, but I know I'm prone to anxiety. People's expectations sometimes add more pressure—I feel like I can't let them down.

Student4: I don't think I'm very pretty, but I believe in my communication skills. Acknowledging my strengths gives me confidence in complex situations.

Student5: I don't care much about my looks, but I care about whether others think I'm "tough." There's an expectation that men must be strong, so I often suppress emotions.

### Theme 3:Anxiety

Q4. Share an experience where you felt especially anxious or uneasy. What were your thoughts and reactions?

Student1: Before the CET-4 English test, I had insomnia for days. I felt like nothing I studied would stick. The anxiety felt like something stuck in my throat—I couldn't eat or smile. I forced myself to study, but my efficiency was really low.

Student2: The most anxious time was during my second semester finals in freshman year. I had four major exams and almost collapsed from the pressure. I barely slept for several nights and even considered dropping some classes.

Student3: Preparing for my graduate school interview was the worst. I kept thinking, "Am I good enough?" I almost gave up. I couldn't sleep or eat properly.

Student4: Last semester, I was asked to present unexpectedly. My palms were sweaty, and I felt exhausted afterward. That anxiety felt like being shoved into the spotlight.

Student5: Last semester, I stayed up several nights in a row to finish papers. I was super anxious and irritable but didn't tell anyone—didn't want to seem weak.

Q5. Do you think self-identity, inner strength, or external evaluations affect how you deal with stress?

Student1: Yes, definitely. If I feel I'm "good enough," I can adjust my mindset. But if others keep denying me, I feel completely discouraged. A lot of stress isn't from events themselves, but from how you see yourself.

Student2: Self-identity is very important. I've realized that as long as I believe in myself, others' opinions matter less. That belief helps me keep going during tough times.

Student3: Yes, a lot. When I lack self-identity, I tend to avoid problems. But when I believe in myself, I look for solutions instead.

Student4: Definitely. If a teacher praises me, I'm more motivated. Encouragement boosts my action; criticism makes me doubt myself.

Student5: Yes, self-identity is very important to me—especially since my dad always says, "Be a man." I now manage pressure more maturely, like preparing in advance.

### Group consultation interview

#### Theme 2: Mental Toughness

1.Q1. How do you usually deal with something that makes you feel stressed or uneasy before participating in group counseling? How would you adjust your state?

Student 1: Before participating in the group counseling, the most stressful thing for me was preparing for the final exam. Especially when you feel your mind is completely blank after staying up late for several consecutive days. What I usually do is throw my mobile phone under the bed and force myself to sit at the desk and do exercises. But to be honest, the "persistence" back then was actually quite mechanical. I often cry while watching and sometimes even think of avoiding exams. The main methods to adjust one's state are listening to music or going for a run, but the effect is unstable. Sometimes, the more one runs, the more sad it becomes.

Student 2: In the past, the situation I faced the most pressure was when the project deadline was approaching, such as having to write code and a class presentation. I would be in a state of "the closer it gets, the more I delay", and only stay up late crazily to catch up on the progress in the last two days. At that time, I didn't know how to relieve my emotions. I just kept calling myself a "useless person" while still struggling to hold on. Adjusting one's state mainly relies on coffee and staying up late, but emotions often collapse to the brink, and one may even lose their temper at the people around them.

Student 3: I used to be very anxious every internship application season. Seeing that all my classmates around me have got interview opportunities, but I'm still revising my resume, I feel extremely anxious. My way of coping is to "pretend everything is fine", bury myself in the library, and go crazy watching TV series and browsing social media platforms. But doing so couldn't relieve my anxiety at all; instead, it made me even more exhausted. I often shed tears alone at night, thinking of many scenes of "what if I fail?"

Student 4: Previously, the situation I faced the greatest pressure was when my supervisor temporarily assigned project tasks, especially when I had to independently complete mechanical drawings and 3D modeling. Every time I receive a task, my first reaction is anxiety and the desire to escape. I keep flipping through my phone and dare not put pen to paper. Even though time is getting shorter and shorter, my heart is getting more and more anxious. At that time, the only way I could "adjust" was to stay up late to make up for it, but in fact, the effect was very poor. The next day, I felt dizzy and my efficiency was even lower. I even made serious size mistakes.

Student :5: I used to be extremely anxious about "interpersonal relationships", especially when I had to collaborate with unfamiliar classmates on filming or conducting interviews. I will always practice in my mind what to say, fearing silences and being denied. When the pressure comes up, I will choose to "pretend not to see the message" and then frantically scroll through my phone to divert my attention. But this often misses the best time for

communication and also makes it more difficult for me to integrate into the team. The way to adjust one's state is to "escape", but in fact, one's mind is getting more and more chaotic.

Student 6: For me, the most oppressive period is the few days before the review of the design drawings. The teacher's standards are particularly high, but I always feel that my design is not good enough. In the past, every time it was like this, I would stare at the screen for a long time, not even having a good meal. I often stayed up until three or four in the morning to revise the drawings. In terms of state, it's completely anxiety-driven "forcing oneself on", and there's no efficiency at all. Once, on the morning of the review, I even fainted at the classroom door due to excessive fatigue. That was the first time I realized that I really needed to change my coping style.

Student 7: When I first entered university, I was particularly afraid of unfamiliar environments. The first time a group activity was to be organized in the dormitory, I hesitated for three whole days and didn't participate. My most common reaction is to "pretend not to see the group message", and then hide alone in the library. In fact, deep down I long to be accepted, but I'm also afraid of being rejected if I don't perform well. Back then, "adjusting my state" meant repeatedly keeping a diary for me, but it was actually of no use. My mood was still very depressed, and I often had a stomachache whenever I thought about it.

Student 8: I feel most uneasy when facing uncertain tasks, such as the impromptu debate session of the Model United Nations competition. Previously, I often made extremely detailed study plans for the exam, striving to cover every aspect. But once I encounter problems that exceed expectations, I will have an emotional breakdown. At that time, I would spend several hours walking around the room, saying "I was thinking", but in fact, I was completely in a state of anxiety. The main way to adjust one's state is to forcibly write an outline, but the efficiency is actually very low, often resulting in twice the effort for half the result.

Student 9: In the past, whenever I faced mid-term exams or difficult course projects and found that I couldn't solve the problems, my first reaction would be to "close the books and play with the phone to escape", and then I would start to doubt myself, such as "Am I simply not suitable for learning math?" I have never been willing to mention these emotions to others because I think "boys shouldn't show weakness". The most common way to adjust one's state is to play ball games, using physical fatigue to mask mental fatigue, but in fact, it doesn't solve the problem at all.

Student 10: In the past, whenever I faced relationship conflicts, such as misunderstandings with friends or the atmosphere in the dormitory becoming tense, I would be very anxious. That feeling is like "the world is falling", and I can't help but recall every word and analyze every look over and over again. Sometimes I don't even know exactly where I did wrong myself. The

coping methods are to keep crying or force oneself to apologize, even if I haven't done anything wrong. I haven't really "adjusted my state". I'm just desperately trying to restore superficial peace.

Q2. Before group counseling, would you share an experience where you encountered a major challenge or failure but eventually persisted? How do you think you managed to do it?

Student 1: I once applied for an overseas exchange program of the school. At first, I was very confident. I wrote the materials and also prepared for the English interview. But on the day of the interview, I suddenly got stuck and answered very poorly. As a result, I didn't pass. At that time, I was really devastated and felt that my self-confidence had been completely undermined. A few days later, I still decided to continue applying for the project of the next semester. This time I went to my English teacher to revise the draft and also participated in a "mock interview training group". Finally, I was successfully admitted. This incident made me realize that failure doesn't represent the end; instead, it helped me find the direction to improve myself.

Student 2: In my freshman year, I signed up for the ACM on-campus selection competition. On my first participation, I suffered consecutive defeats and didn't even make it to the preliminary round. At that time, I felt extremely ashamed. I didn't dare to post updates on my Moments either, fearing that others would know. But a senior encouraged me. He told me, "You just have a low starting point, but that doesn't mean you have no potential." Later, I began to do exercises every week and participate in algorithm challenge camps. The following year, I finally made it to the semi-finals. The reason I persisted was that I let go of "how others see me" and instead focused on "I can be a little better than yesterday".

Student 3: I failed the teacher qualification examination twice in a row. During that period, I was really skeptical about life and wondered if I was simply not cut out to be a teacher. But in the end, I still decided to try again because I really love teaching. The third time, I got up early every day to read aloud for 20 minutes and tested questions with my friends. I persisted for a full 40 days. Finally, I passed smoothly. I think it was "taking passion as faith" that kept me going.

Student 4: In my sophomore year, I failed the most important professional course, "Engineering Mechanics". At that time, I really wanted to drop out of school, feeling that I was simply not suitable

for this major. Later, I calmed down and decided to consult the teacher first, then borrow the notes of the senior, and review the content of the day every night at a fixed time. I persisted for more than two months and finally passed the second make-up exam. This experience made me understand that persistence is not passion, but rather a series of choices made despite not wanting to do it.

Student 5: Once in my freshman year, we were working on a course project about "New Media Content Planning", and I was temporarily appointed as the main speaker. That was the first time I gave a lecture in front of more than 50 people. I completely broke down the night before and even had a fever, but in the end I still managed to hold on and complete the presentation. Although there was a lag in the middle, the moment I heard the applause after I finished speaking, tears almost fell down my face. I think I was able to hold on because my roommate gave me a sentence at that time: "As long as you stand on it, you have won half the battle." That sentence made me grit my teeth.

Student 6: I was once the main creator of a design in an architectural competition, but my first draft was rejected. My supervisor commented that it "lacked logic and spatial sense". I once thought of quitting, but later a team member told me, "You are the soul of this project. No matter what the outcome is, we want you to lead us through it." That sentence made me grit my teeth and carry on. We stayed up all night to revise the plan later. Although we didn't win the award in the end, I felt that it was the first time I had completed a work that truly belonged to our team. The reason why I persisted is very simple - not because I'm strong, but because I don't want to disappoint those who support me.

Student 7: During military training, I once fainted because I stood at attention for too long. Later, I was once transferred to the rest area, which made me feel extremely frustrated and think I was very weak. But the instructor came to me and said, "It's true that you're not feeling well, but can you persist in your mental participation?" So every day, I listened to the commands and memorized the movements beside the team. In the last performance, although I didn't go on stage, I was rated as "the trainee who trained most attentively". That was the first time I felt that persistence doesn't necessarily mean "doing one's best", but rather "not giving up the sense of participation".

Student 8: When I participated in the mock court training for the first time in my freshman year, I got stuck when being questioned by the other party during the mock trial. There was a silence on the spot for more than ten seconds. After that, I cried for a long time. After that, I almost wanted to quit the law society. But my partner has always encouraged me: "A true debater is not one who never

gets stuck, but one who knows how to catch oneself." This sentence made me start to retrain my logical expression and mental toughness, and even sign up for a speech club training. I persisted because I began to understand that "the process of growth must involve failure".

Student 9: I failed in mathematical statistics once in my sophomore year. That course was a "watershed" for our department. At first, I gave up on myself and directly clicked "Drop Course" in the course selection system, thinking that I wouldn't take this course. Later, a girl in my class who I wasn't very familiar with sent me a wechat message asking if I had any difficulties. She said she was willing to review with me. I was very touched at that time. Later, we studied together until eleven o'clock at night, which lasted for a full three weeks. Relying on this feeling of "persisting side by side", I stood up again and passed the make-up exam.

Student 10: In the first semester of my freshman year, I applied for a student psychological counseling volunteer program and was rejected in the first round. At that time, I was really shocked because I felt that I "couldn't even do well in studying psychology". But later I decided to attend a public lecture and take the initiative to ask questions to the lecturer. She told me, "To be a helper, one must first take good care of one's own boundaries and emotions." I began to understand that "failure is not a matter of ability, but a space for growth", so I readjust my state and continued to participate in another campus psychological service project, persisting until now.

Q3. After participating in group counseling, when you feel like giving up during the process of achieving a goal, how do you usually keep yourself going?

Student 1: Group counseling made me realize that not all goals can be achieved by "forcing oneself to do it". Now I will stop first, give myself five minutes to take deep breaths, and then re-examine what this goal means to me. I will write down "Why did you start in the first place?" and stick it in front of the desk. Once, I was preparing to review for the College English Test Band 4 until the early hours of the morning. I really wanted to give up, but when I saw the sentence "I want to apply for an exchange", I sat down again. Now I know better how to encourage myself in a gentle yet firm way rather than push myself.

Student 2: Now I no longer use the "forcing myself" approach. When I feel like giving up, I ask myself a question: "Are there any other forms of ways to achieve this goal?" For instance, when doing my graduation project and encountering difficult problems that I don't want to continue, instead of

forcing myself to solve them immediately, I try to optimize the previous structure from a different perspective or have a chat with my teacher. Sometimes I would even draw on the whiteboard what the "self after persistence" would look like. When I saw that version of myself, I was reluctant to give up.

Student 3: I have learned a particularly effective method, which is "emotional letter writing". When I really want to give up, I will write a letter to myself three months later, telling her about the current difficulties and also how much I want to persist. After finishing writing, my mood will be much more stable. I will stick this letter on the mirror to remind myself: You are already remarkable to have reached this point. You are not short of the last step.

Student 4: Now I prefer to use the "segmented goal" method, breaking down large tasks into several easy-to-handle small pieces. For instance, in model design, I would divide it into three parts: "Shell design", "internal structure wiring", and "structural verification". After completing each piece, I would give myself a positive feedback. Sometimes I also review the voice clips of everyone encouraging each other during group activities. Those encouragements make me feel that it's not possible to keep going just by fighting alone.

Student 5: I have learned to motivate myself by leaving some leeway for myself instead of forcing myself to "go all the way to the finish line". For instance, when it's very painful to write an article, I would tell myself, "Write 300 words first. It doesn't matter if you're not satisfied. You can revise it tomorrow." This attitude of allowing imperfection makes it easier for me to start and to persist. I also stuck on my notebook the "self-encouragement words" I wrote during the group activity: You are already closer to your goal than you were yesterday.

Student 6: Now when I want to give up, I "stop". Instead of continuing immediately, I think in a different way: Why did I start this goal? What does it mean to me? I will mark "traces of persistence" on the calendar, such as checking in to complete a certain model or passing the initial review of a plan. These visual progress can allow me to see how much I have advanced. I would also share my feelings during the stuttering stage with my group members. The feedback they gave me often reignited my motivation.

Student 7: Now I can "summon the self that persisted in the past". I will recall those things that I once thought I couldn't accomplish but managed to do, such as successfully participating in the first class

speech and attending the volunteer interview. I also write small cards to myself, such as "You are not incapable; you just can't see an exit for the time being." Whenever I want to evade a task, I take it out to have a look, calm myself down for a while, and then start over.

Student 8: Now I will pay more attention to "feedback during the process" rather than just focusing on the finish line. I will set some "phased rewards", such as allowing myself to watch an episode of the drama or soak my feet once after completing a case analysis. At the same time, I will also write to my present self from a "future perspective", telling her, "Your efforts now will surely thank you in the future." This exercise keeps me motivated to move forward, even when I want to give up.

Student 9: Now when I encounter the feeling of wanting to give up, I will first stop and write three sentences: "Why did I start?" "Which parts have I completed?" "How much do I have left to finish?" I find that once I sort these out, my emotions are not so intense. Besides, in the group, I learned to "look at myself from a different perspective", for example, asking myself, "If you were a friend, how would you encourage yourself now?" This method helps me get rid of a lot of self-blame when I'm down.

Student 10: I will replace "forcing myself" with "gentle reminders". For example, when I am very anxious after completing a research report, I will first write a letter to myself, saying: "You have done your best today. Let's add a little more tomorrow." This way makes my heart less hostile. I have also learned to make a "mental energy list", recording the feelings I get after completing tasks, such as "I have finished the first draft. Although it's not perfect yet, I'm making progress." These records make me more willing to persist.

Q4. After participating in group counseling, what factors do you think can best help a person enhance their mental toughness? Do you intentionally cultivate these traits of yours?

Student 1: I think it's "accepting one's own imperfections". In the past, I was used to regarding failure as a disgrace, but now I have learned to tell myself, "If it doesn't work out this time, there will be another time." In the group, we did an emotional expression exercise once. I cried my eyes out, but that was the first time I felt that being vulnerable was not shameful. I began to keep an emotional diary every day, recording my current mood and coping methods. This small habit has helped me accumulate a lot of "evidence of self-support". I think this is a way to cultivate mental toughness.

Student 2: I think "normalizing failure" is one of the most crucial factors. Previously, my definition of failure was too narrow. As long as I didn't succeed, I would completely deny it. But a phrase we often say in the group is: "Failure is the nourishment for the next attempt." Now every time I fail, I write an "experience summary card" to record what I have learned this time. I'm also practicing expressing my emotions, such as saying "I'm very tired" when I'm tired, and no longer trying to be strong. I think these seemingly simple actions are actually cultivating resilience.

Student 3: I think it's "accepting emotions and taking continuous actions". We are always taught to be strong and adjust quickly, but the tutoring made me realize that being able to walk while crying is also a kind of strength. Now I record "My mood today + what I did" every day. Sometimes when I'm very anxious but still complete a small task, I will give myself a thumbs up. This kind of "seeing my own efforts" has made me walk more and more steadily.

Student 4: I think it's about "allowing oneself to make mistakes but not giving up because of them." In the past, whenever I made a mistake in one place, I would start blaming myself and think that the whole thing was beyond redemption. However, in the group tutoring, we practiced the "Failure Review Card", learning to find experience from mistakes instead of labeling ourselves. Now, before each project I undertake, I write a "list of possible mistakes" and an "emergency plan". I'm not afraid of making mistakes, and instead, I feel more confident.

Student 5: I think it's "the inner ability of self-dialogue". In an activity, we practiced "writing to the anxious self". It was the first time that instead of blaming myself, I gave the scared yet hardworking self a hug. Later on, every time I felt down, I would write a paragraph to myself, such as "Although you were sad today, you still accomplished three small things." I'm deliberately practicing "being my own friend", which is much better than constantly pushing myself.

Student 6: I think it's "self-awareness + a supportive environment". In our tutoring, we often practice naming emotions, such as "It's not that I'm tired, but that I'm ashamed of my failure." This precise identification enables me to better understand my own fluctuations. Meanwhile, the atmosphere in our group was particularly supportive. No one laughed at the failure. Everyone would say, "You've done well already." I'm also learning to create such an environment, such as encouraging my colleagues in the studio and helping everyone share the pressure.

Student 7: I think it's "finding the source of one's own sense of security". For me, it's "expression" and "being understood". In the group, I shared for the first time my experience of being criticized in public by the teacher when I was a child. To my surprise, everyone listened very attentively and said that I was very brave. Since then, I have started to write the "Peace of Mind Notebook", recording the things that make me feel at ease every day, such as a compliment or a chat. Now I insist on writing three "emotional Gratitude" every day, which has gradually given me more stable inner strength.

Student 8: I think the most crucial factor is "the tolerance for fluctuations in one's own emotions and abilities". In the past, I set very high standards for myself. Whenever I was in a bad state, I would think it was due to laziness or poor ability. But in the group, we often hear a sentence: "You are not the problem. You just have emotions." This sentence helped me relieve a lot of internal conflicts. Now I have learned to arrange "low-efficiency days" during the exam preparation stage, allowing myself that "it doesn't matter if I'm not in a good state". As a result, my overall efficiency is higher and I can persist for a longer time.

Student 9: I think it's "allowing failure while keeping hope." In the past, I always thought that only success was something to be proud of. Now, instead, I have started to record the "reserved behavior" in every failure - for instance, even though I failed the exam, I still went to take it; even though I wanted to escape, I didn't give up the practice questions. These little actions gradually convinced me that I was not cultivating my resilience by talent, but by never giving up every time.

Student 10: I think it's "true self-expression" and "the experience of being understood". For the first time in the group, I boldly shared my feelings of being ignored in my family when I was a child. At first, I was very afraid that everyone would think I was being overly sentimental, but everyone listened very attentively. Some even said, "I have had similar experiences too." At that moment, I felt that I wasn't an isolated island. Now I practice expressing "feelings + needs" every day, such as "I feel tired today and need to rest", which makes my relationship with myself closer and also gives me more strength.

## Theme 2: Anxiety

Q5. In what situations are you most likely to feel anxious before participating in group counseling? What specific effects will this kind of anxiety have on you?

Student 1: I'm most likely to feel anxious before the group presentation. That feeling of "everyone is staring at you" makes me want to burrow into a crack in the ground. I would start sweating and my heart rate would increase. Once, during a PPT presentation, I couldn't even speak clearly. When I'm anxious, my mind goes blank, I can't sleep well at night, and it also affects my attention to other courses. My entire state is completely ruined.

Student 2: The situation that makes me most anxious is when giving a presentation at the group meeting, especially when there are several particularly strong students in the group. I would start suffering from insomnia two or three days in advance, constantly thinking in my mind, "What if I make a mistake?" "Did the supervisor think I wasn't prepared?" That kind of anxiety made me constantly deny myself. Even once, I really pretended to be ill at the last minute and didn't attend the meeting. Over time, I have become more withdrawn and dare not take the initiative to undertake tasks

Student 3: What makes me most anxious is public expression, especially English speeches. I study English, but the more I'm afraid of making mistakes, the more I stutter. Once during a public performance, I was incoherent halfway through and didn't dare to speak in class for a whole week after leaving the stage. That sense of shame was particularly strong, which made me start to doubt whether I was unworthy of studying this major.

Student 4: What I'm most anxious about is when I have to present my design plan in PPT during a defense or in public. That feeling of "the whole class staring at you" made my palms sweat and my voice tremble. Once I clicked on the wrong page in my PPT, and there was a laugh from the audience. My mind went blank at that moment, and what followed was a complete mess. After that, I began to avoid all presentation opportunities. As a result, the teacher started to be reluctant to let me undertake the group presentation, and the team relationship also became tense.

Student 5: I'm particularly afraid of public speaking, especially when introducing myself or answering questions on the spot. The feeling that "everyone is looking at you" made me tremble with nervousness. Once in a class, I was interrupted by the teacher for stuttering. After that, I spent the whole day recalling that scene. At night, I even dreamed that everyone was laughing at me. This anxiety made me become silent later on. I would avoid speaking in class if possible, which seriously affected my sense of participation.

Student 6: My peak moments of anxiety are before the evaluation of my works and before the interview. Especially when the judges listen to me present my plans with cold faces, my heart starts to race and I even get stuck in my speech. Once, due to excessive nervousness, I presented the entire spatial structure in reverse. The judge pointed it out on the spot. My face turned red at that moment and I couldn't continue at all. That incident hit me hard. I refused to be the project presenter several times after that and preferred to stay behind the scenes.

Student 7: What I'm most anxious about is being called on to speak at the last minute. Once in a ideological and moral education class, the teacher asked me to evaluate a short video. I was completely stunned, my mouth open but I couldn't speak. Eventually, it was taken over by another classmate. At that time, my face was flushed red and my heart was beating so fast that I couldn't breathe. After class, I went to the rooftop of the teaching building alone and cried for a long time. After that, every time I had class, I sat in the last row, fearing that I would be called again.

Student 8: The situation that makes me most anxious is public expression, especially in English. Once when I was called on to answer a question in an English class, I made a mistake in saying a legal provision. After that day, I changed that class to "auditing" because I really didn't dare to speak anymore. That sense of anxiety is like a hand choking my throat, making me constantly assume "I'm bound to fail". This kind of emotion often keeps me awake all night and causes me to have repeated diarrhea. In severe cases, it affects my study schedule for the entire week.

Student 9: I'm particularly anxious about "on-the-spot performance", especially when I need to explain formula reasoning in front of the group. Once in a probability theory class, the teacher suddenly asked me to write the proof process on the blackboard. I was shaking all over and wrote half of it wrongly. After that, I didn't say a complete word for three days and even suspected that there was something wrong with my intelligence. This anxiety led me to develop the habit of "avoiding performance tasks" and also lowered my image in the eyes of my teachers.

Student 10: What I'm most anxious about is being misunderstood or judged by others. I once put forward a viewpoint in a group discussion. A classmate refuted me and I was at a loss for words on the spot. After that, I kept wondering for several consecutive days whether that sentence was wrong. This anxiety made me reluctant to speak in class and also made me spend a lot of time "wasting time" - debating with others in my mind, only to find that these conversations didn't occur in reality at all.

Q6. After participating in the Integrated group counseling, do you feel that your anxiety has changed? If so, what exactly is the way?

Student 1: There are obvious changes. The "mindful breathing" practice in group counseling has been of great help to me. Now, every time I get nervous, I do a three-minute breathing exercise to bring myself back to the present moment. Moreover, in the group, we simulated many expression scenarios. Everyone encouraged each other and no longer felt that "mistakes would be laughed at". Although I still get nervous now, I can control my own pace and speak much more fluently.

Student 2: The changes are quite big. Previously, I would fight anxiety by avoiding it. Now, I have learned to face it. I remember that in our group class, we did an exercise called "Anxiety Map", which enabled me to systematically sort out for the first time "Where does anxiety come from and what can I do". Now, before each group meeting, I do a small review and breathing practice in advance. I also communicate more with my teammates to confirm the content and reduce uncertainty. The anxiety hasn't completely disappeared, but it no longer controls me.

Student 3: There have been changes. We had a class to practice "the courage to Express", and the teacher asked each of us to share one of our most unsuccessful experiences in the past. That environment is very safe and everyone is very genuine. For the first time, I discovered that everyone has their own vulnerabilities and imperfections. I'm not an exception. Since then, I have dared to speak up actively in class. It doesn't matter even if I make mistakes.

Student 4: There have indeed been changes. The most obvious one is that I no longer regard "nervousness" as a sign of failure. Group counseling taught me to use "mindfulness awareness" to accept physical reactions, such as a faster heartbeat and sweaty palms, all of which are my body preparing for me. After the tutoring, I also tried to express myself publicly several times. Every time I finished speaking, I would record my current performance score, such as "7 points for controlling the speaking speed" and "6 points for eye contact". I used specific data to replace emotional evaluations, and my anxiety was significantly relieved.

Student 5: A lot has changed. One key point is that I no longer think "anxiety is wrong". Before each activity in the group, we would mark our states with emotion cards. Some would choose "nervous", while others would choose "confused". The teacher never asked us to "be positive", which taught me to admit my own state. I have also learned "relaxing dialogue training". Through eye contact practice

and voice guidance, I have become more stable in my expression. Now I can speak up actively in group discussions.

Student 6: Now I'm more proactive in dealing with anxiety. Before the presentation, I will prepare three sentences for myself, such as "You have prepared", "The judges are listening to your ideas instead of finding faults", and "Mistakes don't define you". This kind of self-dialogue is really effective. Moreover, the "improvisational expression training" in the group made me realize that expression is not recitation, but the presentation of one's own thoughts. Anxiety is no longer an obstacle to "whether to speak or not", but has become the driving force for "how can I speak more freely".

Student 7: There have been great changes. Group counseling enabled me to face up to my anxiety for the first time instead of just thinking "I'm too bad". We have learned a tool called "Emotion Thermometer". At the beginning of each activity, we would say our "anxiety temperature", and gradually I could sense the ups and downs of emotions. There was a class practice of "word-for-word expression practice". I read a short passage from the lines. Although my voice was very low, everyone applauded for me. Since then, I have begun to practice raising my hand to speak in class, starting with one sentence and doing it slowly.

Student 8: Now I deal with anxiety more "gently" instead of suppressing or denying it. We practiced the "Anxiety Dialogue Card" in the group. I remember the sentence I wrote was: "I know you are here to remind me to prepare carefully, but please don't use a threatening way." This kind of emotional conversation makes it easier for me to calm down before exams or speeches. Now when I have English classes, I preview the speech content one day in advance and silently recite "Expression is not performance, it is communication" three times before class. My anxiety has been greatly reduced.

Student 9: The change is obvious. I have learned the "rehearsal + mindfulness" combination method. For example, before answering questions or going on stage, I will simulate several times in front of the mirror, combined with deep breathing to relax my body. In our group, there was an exercise called "Standing Beside Anxiety", imagining that anxiety is not an enemy but a little assistant that reminds you to "get ready". Now I still have anxiety, but it's no longer out of control. I can complete the task with it.

Student 10: I have begun to learn to "accept evaluations but not deny myself". We have practiced a technique called "role shifting" in the group, observing ourselves as a role, such as "I am like a newcomer practicing expression now", rather than "a loser". This sense of distance enables me to listen to the feedback without over-interpreting it. Now I can ask questions in class. Even if the teacher doesn't fully agree, I won't blame myself immediately. Instead, I remind myself, "This is just a process."

Q7. In group counseling, which activities or techniques do you think are the most effective in reducing your foreign language anxiety? Why?

Student 1: The most useful one is "role-playing oral practice". We were divided into groups to play the roles of "Visa officers and international Students". I remember that the first time I stammered, but my partner gave me very positive feedback. That feeling of being "recognized" makes me more and more daring to speak. The teacher also asked us to imitate a TED talk clip, which made me realize for the first time that I could also speak with confidence. I started practicing oral English for one minute every day and have persisted until now.

Student 2: I think the most effective one is "role substitution expression training". That time, each of us played from someone else's perspective, such as "If you were your future mentor, how would you evaluate yourself now?" I originally thought I would be criticized, but my companion who was playing my role said, "He was still willing to prepare hard in the midst of nervousness, and this in itself is worthy of affirmation." For the first time, I realized that I also had aspects worthy of affirmation. After that, I no longer regarded anxiety as a weakness but a process.

Student 3: My favorite is the "Emotional Dialogue" exercise. The teacher asked us to visualize anxiety as a character and have a conversation with it. At that time, I drew an "anxious little person" wearing glasses and frowning, and then said to it, "I know you are here to remind me, but please don't control me." That kind of self-talk makes me feel that my emotions can be managed. Later on, every time I was nervous, I would imagine the "anxious little man" beside me. I would smile and I wouldn't be so scared anymore.

Student 4: The most effective one is the "Anxiety Profiling Chart" exercise. That time, the teacher asked us to draw an experience that made us anxious, connecting emotions, thoughts and behaviors with arrows. For the first time, I realized that it wasn't that I was afraid of saying the wrong thing at

that time, but that I was afraid of being laughed at by my classmates. This awareness made me understand that my true fear came from "the collapse of my self-image", rather than the task itself. Since then, I have begun to practice "exposure therapy", such as deliberately speaking in the group and not avoiding it even if I make mistakes.

Student 5: The activity that benefited me the most was the "Emotional Sand Table". That day, we expressed our inner state through a sand table. I chose a scene of a little girl sitting at the foot of a mountain, symbolizing my fear of challenges. But the teacher asked me to imagine "What's on the mountain?" I said, "Perhaps it's the person I want to be." At that moment, I suddenly realized: It turned out that I was not afraid of climbing mountains, but of falling down. This metaphorical expression enabled me to find the wish behind my anxiety. Since then, I have begun to face the opportunity to express myself more bravely.

Student 6: The most effective one was that "Emotional Review Timeline" exercise. We were asked to draw a timeline of the event that made us most anxious, covering all our thoughts, feelings and behaviors from before the event to after it. That time, I drew the process of "failing the first defense". While drawing, I suddenly realized that the sense of shame after failure was the root cause of my anxiety, not the event itself. Through this exercise, I redefined that experience and also re-understood myself. After that, my mindset when facing image reviews has also become much more stable.

Student 7: The most effective one is the "Emotional Role Reversal" exercise. We should imitate the conversation between "the anxious self" and "the friend who supports us". When I played the role of that supporter, I said to the "anxious ego" within me, "You're not bad; you just care a lot." Suddenly, my nose stung. I had never treated myself like this before. This exercise made me realize that I could actually be my own gentlest friend. This inner support is the most powerful force for me to relieve anxiety.

Student 8: The exercise that benefited me the most was the "non-judgmental mirroring" exercise. That day, we worked in pairs. One expressed and the other responded with just eye contact and nodding, without interrupting or commenting. I told a story about my failure in a high school speech. Halfway through, tears streamed down my face. But the silent support from the other party made me not evade that experience for the first time. I realized that some anxiety was because I was too afraid of

being evaluated. This feeling of being "quietly caught" became a psychological fulcrum for many of my later tense moments.

Student 9: For me, it's the "Failure Reconstruction Group Sharing" activity. At that time, each of us had to talk about a failure experience and state three points we learned from it. I talked about my failure. My hands were shaking halfway through, but everyone listened very attentively. Some even told me, "I've experienced it too." That was the first time I felt that after failure was spoken out, it was no longer so terrifying. For the first time, I also realized that sharing is a kind of release rather than exposing weaknesses.

Student 10: What impressed me the most was the activity of "Draw Your Anxiety Monster". Each of us has to draw the appearance of anxiety and give it a name. I drew a monster with multiple eyes and called it "The Judging Demon". Later, I talked to it and said, "I know you are afraid that I will be rejected, but please don't disturb my expression anymore." At that moment, my tears couldn't be stopped flowing down. This exercise made me "stand opposite anxiety" for the first time instead of being swallowed up by it.

Q8. What do you think are the long-term impacts of group counseling on your future life and study anxiety management?

Student 1: I think the biggest impact is that I'm more willing to face my emotions. Before, I was "suppressing" my anxiety, but now I'm "coexisting with it". Whether it is a job interview or adapting to going abroad in the future, I believe I can face challenges in a more gentle but firm way. When I was considering applying for a postgraduate program, I also reserved mental toughness for myself. For instance, I made a backup plan and told myself: No matter what the outcome is, I won't break down.

Student 2: I think its greatest long-term impact is that it has given me a set of "toolboxes for dealing with anxiety". Whether it's the pressure of writing code or the tension in interpersonal communication, I know that I can pause for a moment, observe my emotions, and then decide to act. Rather than immediately entering a state of panic as before. Now I am also more daring to express my needs. For example, I tell my roommate, "I'm a little anxious now and want to be quiet for a while." These small changes gradually accumulated my sense of security.

Student 3: The greatest influence is that I have learned to "treat myself gently". In the past, whenever I encountered anxiety, I would think, "Solve it quickly." Now, I ask myself, "What do you need?" When I

was preparing my graduation thesis, I was very anxious. But instead of forcing myself, I arranged a moderate plan and set up "emotional time" to write a diary. This way of self-care gives me more confidence to face various challenges during the graduation season.

Student 4: I think the biggest change is that I'm better at "predicting anxiety and preparing in advance". For instance, before the interview, I will do mock questions and answers to scout the way in advance and minimize uncertainties as much as possible. At the same time, I am also more daring to seek help. Before, I wanted to handle everything alone. Now, I will ask senior students for advice or cooperate with my teammates. I believe these changes will make me more resilient in the workplace in the future and no longer be easily defeated by anxiety.

Student 5: Now I no longer evade but am willing to "face it slowly". For instance, recently I was going to conduct an off-campus interview. At first, I was very afraid to talk to strangers, but I used the method of "self-affirmation first, then action" taught by the group and told myself, "You are ready to give it a try." I really managed to make an appointment with the interviewee. I believe that in the future, whether it is for further education or in the workplace, as long as I maintain this coping strategy, I will become more and more stable and confident.

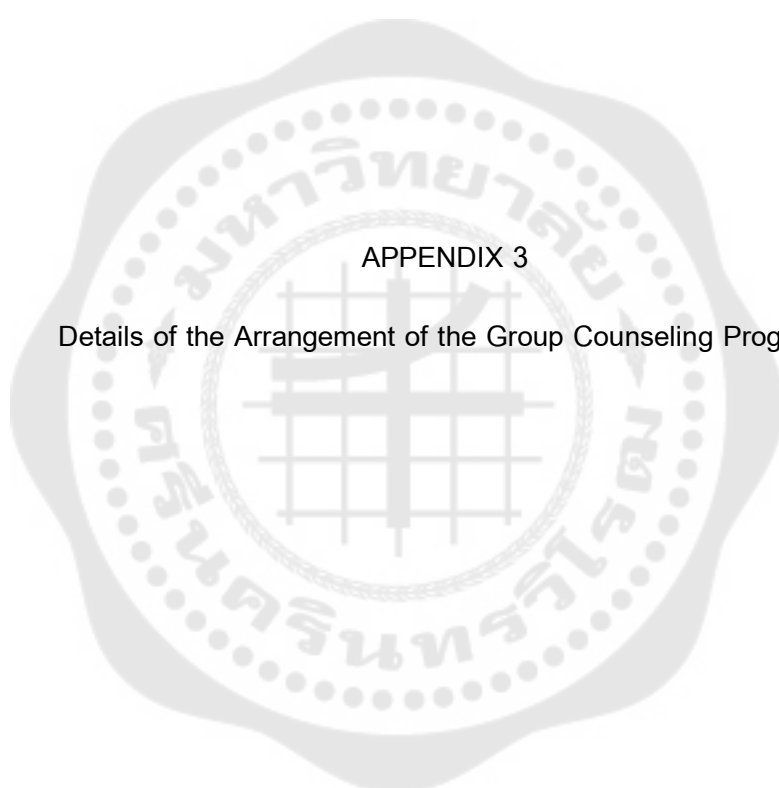
Student 6: I think the influence is very long-term. I used to think that "withstanding pressure" meant completing tasks independently. Now I understand the importance of "connection and regulation". I will continue to apply the emotion management skills I learned in the coaching and also want to bring this approach into my future team, such as organizing regular emotion reviews and mutual evaluation feedback when doing projects. I hope that in the future, whether I enter a construction company or open a studio, I can always maintain a mindset that "can both catch up with myself and others".

Student 7: I feel that I have become more capable of "catching up" my own vulnerability. Anxiety used to be a failure and a disgrace to me. Now it is a signal, reminding me that I need to take care of myself. I am also more willing to seek help, such as making an appointment for consultation at the psychological center or scheduling a time with the teacher to discuss the thesis plan. I no longer bear my emotions alone, but learn to live on with the belief that "I deserve to be supported". I believe that in the future, whether it is for further education, work or interpersonal communication, I will be able to deal with anxiety more calmly.

Student 8: I believe this group experience will become a very important part of my life. It taught me to "let emotions flow instead of getting stuck". I also plan to bring some of the skills learned in the group into my internship life, such as making emotional predictions before meetings, organizing key expressions, and setting mental preparations for "accepting failure". I am already considering becoming a college counselor in the future, hoping to convey this concept centered on "acceptance and self-help" to more students.

Student 9: I think the greatest impact is that "it makes me no longer feel ashamed of anxiety." Now I can say "I'm a little nervous" calmly before the interview, but I'm prepared. I also began to establish an "emotional recording system", assessing my stress state every week and making timely adjustments. I believe that whether I pursue further studies or enter the workplace in the future, I will be able to face the uncertainties in life in a more gentle and powerful way.

Student 10: I now know that anxiety is not an enemy but a signal. I have turned "emotional dialogue" and "need expression" into daily habits, and also left several pages of "anxiety Coping Guide" in my diary, including deep breathing exercises, a list of safe conversations with friends, and five sentences to remind myself to pause. I believe that in the future, whether I engage in psychological research or become a counselor, these experiences will make me more gentle, powerful, and better able to accompany others through anxiety.



APPENDIX 3

Details of the Arrangement of the Group Counseling Program

Group Name: "Away from Anxiety, Happy Life" integrated group counseling Training Camp

**integrative Group Counseling Program on Mental Toughness (10 Sessions)**

This study, titled *The Influence of Self-Image and Mental Toughness on Anxiety and Reducing Anxiety among Chinese University Students through Integrative Group Counseling*, is divided into two phases: model testing and a quasi-experimental intervention. The research aims to investigate the impact of self-image and mental toughness on anxiety among Chinese university students, and to explore the effectiveness of an integrative group counseling program in reducing their anxiety. In the first phase, the study identified a strong correlation between mental toughness and anxiety. Building on these findings, the second phase implemented an integrative group counseling program grounded in Person-Centered Therapy, Cognitive Behavioral Therapy (CBT), Humanistic Theory, Existential Theory, and Growth Mindset Theory (Dweck, 2006). The purpose was to enhance mental toughness and evaluate its influence on anxiety reduction. The program was delivered in 2025, with sessions held twice a week for 90 minutes each, over a period of one and a half months. A follow-up interview was conducted one month after the program concluded. The study further examined differences in anxiety levels between the experimental group, which received the intervention, and the control group, which did not, as well as pre- and post-intervention changes within the experimental group. All the participating students were 10 with an anxiety index ranging from 50 to 69.

Session numbers	Theme	Objectives	Procedures	Theory	Technique
Session #1(Beginning phase)	Icebreaking Session: Building Rapport and Familiarity	<p>1. Promote mutual understanding and trust among members.</p> <p>2. Students will understand what it means to participate in this program to learn about anxiety and resilience and their importance.</p> <p>3. Mobilize the enthusiasm of members, enhance group</p>	<p>1. Ice mini game: "My Tag".</p> <p>2. Take a mental toughness test.</p> <p>3. Map your life's challenges.</p> <p>4. Set personal growth goals.</p>	Person-Centered Therapy	Unconditional positive regard, genuineness, and positive feedback

		cohesion, and develop personal growth plans.			
Session #2(Working stage)	Self-confidence - Identify and activate your strengths	1. Help members identify personal strengths and enhance mental toughness. 2. Use an external perspective to stimulate self-identity and reduce anxiety. 3. Develop confidence in expressing yourself in groups.	1. Warm-up activity: "Flash yourself" game 2. Advantage Recognition activity: "My Hidden Skill Pack" 3. Mirroring exercise: "How Others see Me" 4. Confidence expression training: "Confidence reconstruction" role play	Cognitive Behavioral Theory (CBT), Cognitive reconstruction therapy, emotion recognition and regulation therapy	Advantage recognition, mirror feedback, role play, positive expression
Session #3(Working phase)	Self-confidence - Self-affirmation	1. Strengthen your ability to maintain confidence	1. Guide: "Things I want to try" share. 2. Affirmations	Cognitive Behavioral Theory (CBT),	Positive self-talk, behavioral task training,

	n and persistence in the face of challenges	and act in the face of challenges. 2. Train expressions of assertive behavior. 3. Build sustainable habits of assertive behavior that lead to sustained lower anxiety.	training: "Encourage yourself to say it." 3. Assertive behavior Challenge task: "I do what I'm afraid of." 4. Confidence habit building: "Stick to what I said." 5. "Light Up Your Confidence Badge" ceremony	Cognitive reconstruction therapy, positive training therapy	public commitment
Session #4(Working stage)	Challenges - actively face difficulties and improve the	1. Let members experience their emotions and reactions to a challenge.	1. Review and discuss the previous section. 2. Challenge to play the game: "Mission	Cognitive Behavioral Therapy (CBT), Cognitive reconstruction therapy, emotion	Emotion recognition, cognitive reconstruction, positive feedback

	ability to cope	(Produces anxiety) 2. Learn how to deal with challenges through teamwork. (Reduces or lowers anxiety) 3. Develop a personalized challenge response strategy.	Impossible". 3. Challenge analysis and team discussion 4. Develop personal challenge coping strategies.	recognition training therapy	
Session #5(Working phase)	Challenge - Cultivate growth thinking and improve resilience	1. Help members identify their own belief patterns about failures and challenges. 2. Guide members to understand and initially practice the core	1. Warm up 2. "Theatre of Failure" experience 3. Thinking Transformation Workshop 4. "Future Me" Growth Action Plan	Growth Thinking Theory (Dweck, 2006)	Cognitive reconstruction, role playing, positive psychological suggestion, peer support

		<p>concepts of growth thinking.</p> <p>3. Cultivate the ability to accept failure situations, improve psychological endurance, and reduce anxiety caused by challenges.</p>			
Session #6(Working stage)	Control - Develop emotional regulation	<p>1. Enhance members' ability to identify and understand emotions.</p> <p>2. Have basic emotion regulation strategies in the face of anxiety, frustration,</p>	<p>1. Emotional regulation strategy learning and practical operation training</p> <p>2. Emotion identification and discussion</p> <p>3. Emotional Regulation</p>	<p>Cognitive Behavioral Therapy , Cognitive reconstruction therapy, emotion recognition training therapy</p>	<p>Mindfulness practice, cognitive reconstruction, breathing regulation, body awareness, situational simulation</p>

		anger and other emotions. 3. Create a personalized emotional coping plan.	Experience: "Emotional Ninja Challenge"		
Session #7(Working phase)	Control - Develop problem solving skills	1. Cultivate members' ability to react calmly in stressful situations. 2. Master the problem-solving process of the system. 3. Develop a personalized problem response plan and give it action.	1. Review emotional management strategies. 2. Situational simulation game: "Decision-making under pressure" problem solving method learning and practice. 3. Develop coping strategies for personal problems.	Cognitive behavioral therapy , Cognitive reconstruction therapy, emotion recognition training therapy	Logical thinking training, situation simulation, decision making, behavior practice
Session	Commit	1. Assist	1. "What is the	Humanistic	Value

#8(Working stage)	ment - Building goal orientation and persistence	members to clarify their personal values and identify their truly important goals. 2. Guide members to recognize when they are vulnerable to wavering in the face of difficulties and temptations. 3. Experience the psychological and behavioral process of "persistence" through tasks,	goal?" Value clarification activity 2. Group collaboration Game: "Persistence Challenge" 3. Map your goals and frustrations 4. Create a personal persistence action plan	theory, Enhanced autonomous consciousness therapy	clarification, task decomposition, positive feedback
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		<p>improve frustration resistance and willpower to continuously resist anxiety.</p>			
<p>Session #9(Working phase)</p>	<p>Commitment - Discover intrinsic value and increase your sense of purpose</p>	<p>1. Help members explore their own core values and enhance their awareness of "why they work" to enhance resilience.</p> <p>2. Guide members to understand their multiple roles in life and clarify their intrinsic motivations.</p> <p>3. Combat</p>	<p>1. Previous section review + warm-up guide</p> <p>2. "My Value Ranking Card"</p> <p>3. Meaningful dialogue: "Why am I here?"</p> <p>4. Inner goal description exercise</p>	<p>Existentialism theory, Humanism theory, Expressive humanistic therapy</p>	<p>Value clarification, meaning focus, self-exploration, symbolic expression</p>

		<p>anxiety through experiential activities that enhance the emotional connection of the target and stimulate internal commitment.</p>			
<p>Session #10(Ending steps)</p>	<p>Integration and Prospect : the practice and continuation of Mental toughness</p>	<p>1. Review and integrate the core skills of mental toughness training (challenge coping, emotion regulation, goal commitment, confident expression). 2. Develop a personalized resilience</p>	<p>1. The Growth Time machine: Review and integration 2. Mental Toughness: My future practice plan 3. The connection of hearts: Farewell and blessing</p>	<p>Cognitive Behavioral Therapy (CBT), Emotion Regulation training therapy</p>	<p>Growth review, future planning, emotional connection, group empowerment</p>

		<p>plan to reduce anxiety.</p> <p>3. Deepen the emotional connection of the group and establish a sustainable mutual assistance network.</p> <p>4. Reinforce the core belief that I am capable of handling challenges and continuously combat anxiety.</p>			
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**Session 1: Ice breaking sessions to build rapport and familiarity(Beginning stage)****Summary:**

Build trust between leaders and group members, understand the content of group counseling, fully participate in group counseling, understand mental toughness and anxiety, complete the front side of mental toughness and anxiety, and develop personal growth plans.

**Objectives:**

1. Promote mutual understanding and trust among members.
2. Students will understand what it means to participate in this program to learn about anxiety and resilience and their importance.
3. Mobilize the enthusiasm of members, enhance group cohesion, and develop personal growth plans.

**Activities:**

1. Ice mini game: "My Tag".
2. Take a mental toughness test.
3. Map your life's challenges.
4. Set personal growth goals.

**Counseling Theory:**

Person-centered theory

**Counseling techniques:**

Unconditional positive attention, sincerity and positive feedback

**Concept:**

The leader and the group members build trust, introduce the details of the training program, explain the specific time, form, and method, let the students understand the group topic, have the students endorse the group rule list, engage the students in leadership activities, and complete a pre-test of mental toughness and anxiety.

**Materials:**

Whiteboards & Markers

Post-it Notes & colored cards

Mental toughness self-rating scale

Anxiety test sheet

Personal notebook (record all personal information in the group)

Pen and paper

**Procedures:**

**Beginning stage: Introduce and sign the event rules (10 minutes)**

1. The leader (consultant) welcomes everyone and introduces himself.

1. State the objectives of the group counseling (enhance mental toughness ) and clarify the team rules (respect, confidentiality, sincere participation) and sign the commitment.

Team rules:

2. Listen to the leader's command, listen to others carefully, please raise your hand to speak. You can speak only when you speak. Listen carefully and don't interrupt others. Don't laugh at what others say and communicate normally (don't make jokes or put people down). Be supportive of other group members and be polite and respectful. Don't talk about groups outside the group. Keep the content of group counseling confidential and do not discuss it externally.

Working stage: Intermediate Activities (70 minutes)

### 2. Ice Breaker: "My Tag" (20 min.)

Ask each member to write three key words describing themselves on a post-it note (e.g., "optimistic," "resilient," "nervous").

Share your key words in turn and introduce yourself briefly.

Leaders give positive feedback when appropriate and encourage members to respond to each other.

Objective: To promote mutual understanding and build trust among members.

### 3. Map your life's challenges. (20 minutes)

1. Facing whether or not there have been challenges and difficulties in their past lives, and how they have lived through them, allows students to begin to end their

feelings of resilience and anxiety and begin to learn coping strategies through group counseling.

2. Each member draws a "life challenge map" in a notebook: Draw a life curve in your notebook, noting any major challenges or difficulties you have experienced (e.g. academic pressure, relationships, setbacks, etc.). Next to each challenge, write down how you handled it.

3. Each member spent 5 minutes talking to the group about their coping strategies when they experienced challenges and anxieties.

4. The leader led the discussion.

Life challenge discussion?

How did you feel when you were talking about your experience with anxiety?

Do you find the importance of teams?

5. Leaders conclude by emphasizing the importance of Mental toughness and awareness of anxiety and team values.

#### **4 .Mental toughness assessment (20 minutes)**

1. Each member completed a mental toughness self-rating scale and anxiety scale (about 10 minutes).

2. The leader leads members to discuss the assessment results:

Are you satisfied with your resilience score?

What do you think could be improved?

Do you often feel anxious?

3. Leaders summarize the basic concepts and meanings of mental toughness and anxiety.

#### **5. Set Personal growth Goals (10 minutes)**

1. Each member wrote down a specific goal to improve mental toughness (such as "adjust your deep breathing three times during a challenge" or "Get up early and run three times a week").

2. Members can choose to share their goals, and leaders encourage and offer advice.

3. Members adopt a "Personal growth plan manual" approach, allowing members to write to their future selves in a notebook. (Open after group consultation)

**Ending steps: (10 min.)**

#### **6. Group counseling**

The leaders concluded the event and thanked all members for their participation. Ask each member to describe in one sentence how they feel at the moment.

**Process issues:**

1. Which activity did you like best?
2. What impact do you think mental toughness has on your daily life?
3. Are you willing to try new ways to improve your mental toughness ?
4. What do you know about your anxiety?
5. What did you get from your first mission today?

**Evaluation:**

Through assessment and discussion, members have a further understanding of Mental toughness and anxiety. Through the "Life Challenge Map", members can discover their own resilience traits in order to better reduce anxiety, learn new coping strategies, set personal growth goals, and lay the groundwork for follow-up counseling.

**Session 2: Confidence – Identifying and Activating Personal Strengths**  
**(Working stage)****Summary:**

This session aims to help members develop self-affirmation by exploring personal strengths, receiving positive feedback, and engaging in experiential activities. Through this process, participants can activate inner confidence, enhance mental toughness, and reduce feelings of anxiety.

**Objectives:**

1. Help members identify personal strengths and enhance mental toughness.
2. Use external perspectives to stimulate self-recognition and reduce anxiety.
3. Improve confidence in expressing oneself within a group setting.

**Activities:**

1. Warm-up activity: "Spotlight on Me" game
2. Strength identification activity: "My Hidden Skill Pack"
3. Mirror exercise: "Me in the Eyes of Others"
4. Confidence expression training: "Confident Reenactment" role-play

**Counseling Theory:**

Cognitive Behavioral Theory (CBT), Cognitive reconstruction therapy, emotion recognition and regulation therapy

**Counseling techniques:**

Strength identification, mirror feedback, role-play, positive expression

**Concept:**

Everyone possesses unique abilities and resources, but anxiety and self-critical thoughts often cause them to be overlooked. The first step in building confidence is to recognize what we already have.

**Materials:**

Strength keyword cards

Confidence journal paper

“Me in the Eyes of Others” feedback sheets

Whiteboard & markers, timer

**Procedures:****Beginning stage:**

Review the previous session and discuss any new insights about mental toughness and anxiety.

### 1. Warm-up Activity – “Spotlight on Me” (10 minutes)

1. The leader reviews last week’s task and asks members whether they completed their mental toughness goals in daily life (e.g., "taking three deep breaths when facing a challenge" or "jogging three times a week").

2. Members share their experiences and difficulties in achieving the goals.

3. Facilitator prompt: “You might think these are tiny things, but it’s the small details that form the foundation of our strength.”

Working Stage:

### 2. Strength Identification Activity – “My Hidden Skill Pack” (25 minutes)

1. Each member draws 3 strength keyword cards (e.g., expressiveness, persistence, creativity, communication).

2. They reflect and write: “When have I used this strength?”

3. Then share one strength with the group and summarize in one sentence: “I discovered that I am someone who is \_\_\_\_.”

Guiding questions

Is there a strength you had never noticed before?

Are you willing to bring this strength into more areas of your life?

### 3. Mirror Exercise – “Me in the Eyes of Others” (25 minutes)

1. Each member has a sheet of paper taped to their back. Other members write affirming traits starting with: “I see in you...” (e.g., “Your outfit today is neat and gives a sense of security.”)

2. Each member reads aloud their paper and reflects on how others see them.

Then share: “Which comment touched you the most? Are you willing to believe these evaluations?”

3. The facilitator emphasizes: “Sometimes our view of ourselves isn't complete. Others' eyes may see more clearly.”

#### 4. Confidence Expression Training – “Confident Reenactment” (20 minutes)

1. Each member recalls a moment when they did something really well and delivers a 2-minute “confidence speech” to recreate that moment.
2. Group members respond with positive affirmations (e.g., “That was the right choice!” or “I can hear your inner strength!”)
3. The whiteboard can be used to list key traits such as “initiative,” “perseverance,” or “creativity” to empower the speaker.

Ending Stage:

#### 5. Closing Ritual – “My Confidence Vow” and Confidence Journal (10 minutes)

1. Each member completes the sentence:  
“One thing I started believing about myself again today is \_\_\_\_.”

They are encouraged to write this in their confidence journal as a future reminder when their confidence wavers.

The leader concludes : “Confidence doesn't mean being perfect—it means recognizing and affirming your growth.”

#### Process issues :

1. How did you feel about today's group session?
2. Which activity made you feel that “I'm actually doing better than I thought”?

3. How do you think today's session helped strengthen your mental toughness?
4. Was there any feedback from others that made you rethink yourself?
5. Would you be willing to take more opportunities to show your true self?

**Evaluation:**

This session uses strength identification and mirror feedback to help members re-evaluate their self-worth, thereby enhancing mental toughness and building foundational cognitive and emotional experiences for confidence. It also improves expression skills and psychological acceptance, laying the groundwork for showing up confidently in future challenges.

**Session 3: Confidence – Self-Affirmation and Behavioral Persistence When Facing Challenges(Working stage)****Summary:**

Building on self-recognition, this session focuses on how to maintain confidence during real-life difficulties and challenges, thereby sustaining mental toughness and enhancing the performance of “confident behaviors.” Through challenge simulations, self-affirming speech, and goal tracking, confidence is transformed into action, further reducing anxiety.

**Objectives**

1. Strengthen the ability to maintain confidence and take action in the face of challenges.
2. Train effective expressions of confident behavior.

3. Establish sustainable habits of confident behavior to maintain reduced anxiety levels.

**Activities:**

1. Guided sharing: “Things I Want to Try”
2. Affirmative self-talk training: “Speak Your Encouragement Aloud”
3. Confidence behavior challenge task: “Doing What I Fear”
4. Confidence habit building: “Following Through on My Word”
5. “Igniting the Confidence Badge” Ceremony

**Counseling Theory:**

Cognitive Behavioral Theory (CBT), Cognitive reconstruction therapy, positive training therapy

**Counseling techniques:**

Positive self-dialogue, behavioral task training, public commitment

**Concept:**

True confidence is not only recognizing oneself, but also choosing to persist, act, and express oneself even when facing anxiety and difficulty.

**Materials:**

Scenario simulation task cards

Confidence behavior tracking sheets

Timer

Rating stickers

Encouragement badges

**Procedures:****Beginning stage:**

Review the previous session. Reflect on how it felt to identify and activate personal strengths.

**1. Warm-Up Sharing – “Things I Want to Try” (10 minutes)**

1. Guide members to express things they’ve wanted to try but felt worried about.

Members take turns sharing: “I’ve always wanted to try \_\_\_\_, but I worry that \_\_\_\_.”

2. Leader prompt: “It’s not about lacking ability—it’s about overthinking. Today, we begin with action.”

**Working Stage:****2. Affirmative Self-Talk Training – “Speak Your Encouragement Aloud” (20 minutes)**

1. Members watch a short motivational video clip titled “I Am Good Enough,” which delivers affirmations and encouragement.

2. Distribute “Self-Affirmation Statement Cards”; each participant chooses two that resonate most.

3. Each member completes a 30-second self-encouragement exercise, stating the two affirmations and explaining their choices.

Group feedback questions:

1. Did the statement feel emotionally impactful when you heard it?
2. Did it sound as gentle and kind as if you were speaking to a friend?

### 3. Confidence Behavior Challenge Task – “Doing What I Fear” (30 minutes)

1. The leader explain the task, Provide three categories of “Challenge Task Cards”:

Social (e.g., initiating a conversation)

Expressive (e.g., sharing one’s work or opinion)

Assertive (e.g., refusing something unwanted)

2. Members select one challenge and simulate it in the group.

Examples: Introducing oneself to a stranger, refusing an unreasonable request, expressing a personal stance.

3. Each members completes one simulation, with group members providing positive feedback.

#### 4. Confidence Habit Building – “Following Through on My Word” (20 minutes)

1. The leader distribute : “Confidence Behavior Tracking Sheets,” which include:

“Behavior I Want to Try”

“Obstacles I Anticipate”

“How I Plan to Persist”

“My Expected Outcome”

2. Members fill them out and pair up to sign a "Commitment Support Card" for each other.

3. The leader encourage members to complete their chosen confident behavior during the week and report back later.

Ending Stage:

#### 5. “Igniting the Confidence Badge” Ceremony (10 minutes)

1. Each member receives a "Confidence Badge" and writes in their notebook:

“One step I’ve taken today is: \_\_\_\_.”

Let's shout the slogan together:

“I deserve to be confident because I keep moving forward!”

2. Then play the uplifting song "Chasing Dreams with a Pure Heart" (追梦赤子心) .

3. The leader summary this session.

**Process issues:**

1. How did it feel to learn about self-affirmation and persistence in today's session?
2. Which part of the simulation most challenged your confidence?
3. What supportive feedback made you feel empowered?
4. In what ways do you think today's activities helped reduce your anxiety?

**Evaluation:**

This session transforms confidence from cognition into action. Through practice in expression and challenge simulations, members enhance their ability to concretize and display confidence, thereby gradually increasing mental toughness. Establishing sustained support relationships and follow-up commitments encourages ongoing real-life practice, making confidence a long-term behavior and maintaining reduced anxiety as a sustainable outcome.

**Session 4: Challenge – Facing Difficulties Positively and Enhancing Coping Abilities (Working stage)****Summary:**

The goal of this session is to help members experience and discuss the emotional and behavioral responses triggered by challenges, particularly anxiety. Through hands-on activities and group interaction, members will gain awareness of the nature of challenges, reduce anxiety, and learn active coping strategies. The session aims to strengthen their mental toughness in the face of adversity.

### Objectives

1. Enable members to experience the emotions and responses that arise when facing challenges (anxiety-inducing).
2. Teach coping strategies through teamwork and collaboration (anxiety-reducing).
3. Develop personalized coping strategies for facing challenges.

### Activities:

1. Review and discuss content from the previous session.
2. Challenge experience game: "The Impossible Task."
3. Challenge analysis and group discussion.
4. Formulating personal challenge-coping strategies.

### Counseling Theory:

Cognitive Behavioral Therapy , Cognitive reconstruction therapy, emotion recognition training therapy

### Counseling techniques:

Emotion recognition, cognitive restructuring, positive feedback

**Concept:**

By engaging in experiential challenge activities, members can better understand the emotional and behavioral responses that arise when facing difficulty. They are guided to discover strategies that suit them personally and are encouraged to apply these strategies when facing real-life challenges in the future.

**Materials:**

Paper, markers, balloons, straws, tape

Challenge task cards

Timer

**Procedures:****Beginning stage:****1. Review and Discussion of Previous Session (10 minutes)**

1. The leader review the “Confidence Behavior Tracking Sheet” distributed last time.

Members pair up to check in with their “Commitment Support Cards.”

2. The leader asks members if they followed through on their mutual support and goals, share their execution experiences, discuss difficulties encountered, and reflect on self-affirmation and behavioral persistence when facing challenges.

Working Stage:

## 2. Challenge Experience Game – “The Impossible Task” (20 minutes)

1. The leader assign member to build the tallest free-standing tower possible within 10 minutes. The tower must stand on its own for at least 5 seconds.

2. The member receives a seemingly impossible or very difficult task, along with a limited set of materials (e.g., paper cups, balloons, straws, tape).

3. Team members must cooperate and find solutions together.

4. After the task, members share their feelings and strategies:

How did you feel during this challenge?

What strategies did you use?

Can you relate these strategies to the real-life difficulties you've faced?

## 3. Challenge Analysis and Group Discussion (20 minutes)

1. The leader discuss the following:

What was your first response when facing the challenge?

Did you ever feel like giving up? What helped you keep going?

How did your team handle obstacles?

What insights did this experience give you about your decision-making in real life?

If you had to do it again, what would you change?

2. The member summarizes different ways of responding to challenges and highlights the importance of flexible thinking and team support.

#### 4. Formulating Personal Challenge-Coping Strategies (30 minutes)

1. Each member reflects on their challenge experience and writes down three strategies they could use when facing future challenges and discussion prompts:

Do you feel these strategies fit your personal style?

Are you open to trying new ways of coping with future challenges?

2. Members then write their own “Challenge Declaration,” expressing their determination to face difficulties head-on.

Ending Stage:

#### 5. Facilitator Summary (10 minutes)

1. The member summarizes the core content of the session.
2. Each member shares one sentence summarizing their biggest takeaway.
3. The leader encourages members to apply the learned strategies in everyday life.

Process issues:

1. What were your specific feelings about today’s group session?
2. Which aspect of mental toughness did today’s session focus on?
3. After completing today’s tasks, do you have a new understanding of yourself when facing difficulties?

4. Do you think these strategies will help you deal with everyday challenges?

**Evaluation:**

This session helps members recognize the emotional reactions that challenges provoke and learn how to adjust their mindset and actively respond to anxiety. Through experiential learning and reflective discussion, members begin developing mental toughness in the face of difficulty, thereby reducing anxiety and forming effective, personalized coping strategies.

**Session 5: Challenge – Cultivating a Growth Mindset and Enhancing Frustration Tolerance(Working stage)**

**Summary:**

This session aims to guide members in exploring their beliefs about failure and challenges, using the growth mindset theory to facilitate cognitive restructuring. The goal is to enhance Mental toughness and coping strategies when facing failure, thereby increasing frustration tolerance and alleviating anxiety.

**Objectives**

1. Help members identify their belief patterns regarding failure and challenges.
2. Introduce and guide the initial practice of core growth mindset principles.
3. Foster acceptance of failure, strengthen psychological endurance, and reduce anxiety triggered by challenges.

**Activities:**

1. Warm-up activity
2. “Failure Theater” experiential activity
3. Mindset Transformation Workshop
4. “Future Me” Growth Action Plan

**Counseling Theory:**

Growth Mindset Theory (Dweck, 2006)

**Counseling techniques:**

Cognitive restructuring, role-playing, positive self-affirmation, peer support

**Concept:**

Through structured experience, cognitive reframing, and peer feedback, members are encouraged to face simulated failure scenarios in a safe group environment. This process enhances their self-awareness, helps reshape limiting beliefs, and fosters internalization of growth mindset principles and strategies.

**Materials:**

Notebooks and markers

Printed Growth Belief Scale

“Failure Theater” scenario cards

Mindset transformation cards

“Future Me” action cards

**Procedures:**

**Beginning stage: (10 minutes)**

1. The leader leads a brief discussion—“How did you feel after learning to face challenges and improve your coping abilities in the last session?”

**1. Warm-up Activity**

Prompt: “Have you ever given up on something because you feared failure? What were you thinking at the time?”

**Working Stage:**

**2. “Failure Theater” Experiential Activity (30 minutes)**

1. Each member draws a “Failure Theater” scenario card (e.g., failing a job interview, flunking an exam, getting rejected in a confession).

The member role-plays how the person might react to the failure.

The leader group gives feedback:

“What mindset was this character demonstrating?”

“How would a person with a growth mindset respond differently?”

3. Each member completes the sentence: “If I were him/her, I would...” and attempts to rewrite the character’s dialogue accordingly.

### 3. Mindset Transformation Workshop (20 minutes)

1. The member distribute fixed mindset phrase cards (e.g., “I can’t do it,” “I’m just not talented in this area”).

2. Members reframe these into growth mindset statements (e.g., “I can improve with practice”).

3. Share the revised statements in the group:

“Which statement was most useful to you?”

“In which real-life situations might you try using it?”

### 4. “Future Me” Growth Action Plan (20 minutes)

1. Each member sets a personal challenge goal (e.g., completing a presentation, entering a competition, initiating communication).

2. Write this in their notebook along with how they plan to use growth mindset thinking to overcome expected difficulties.

3. Members share their plan with the group and receive peer encouragement.

Distribute “Growth Badges” with affirmations like “I’m willing to try” and “Failure has meaning” as a symbolic motivation.

**Ending Stage:****5. End the Ritual (10 minutes)**

1. Each member shares a key takeaway or the most inspiring statement they heard today in one sentence.

2. The group claps together to celebrate each member's courage in facing challenges.

3. The leader summarizes and uses a closing message:

"Failure is simply a part of learning. People who grow don't never fail—they just never stop trying."

**Process issues:**

1. What are your thoughts about the concept of a growth mindset today?

2. Has your perspective on failure changed in any way?

3. How might you respond differently to similar setbacks in the future?

4. When facing anxiety, how could you apply growth mindset thinking to manage it?

**Evaluation:**

This session helps members reframe their beliefs about challenges and failure, thereby enhancing their resilience when encountering setbacks. By cultivating a growth mindset, participants build frustration tolerance and reduce anxiety. Through experiential activities, discussion, and action planning, they are better equipped to face future difficulties with a constructive and empowered attitude.

## Session 6: Control – Developing Emotion Regulation Skills(Working stage)

### Summary:

This session aims to help members build awareness of their emotions and learn effective regulation strategies, following the process of “Identify – Understand – Accept – Regulate.” Through strategy training and practice, members will develop internal stability when facing emotions such as anxiety, frustration, and anger, thereby enhancing self-control.

### Objectives

1. Enhance members' ability to recognize and understand their emotions.
2. Equip members with basic strategies to regulate anxiety, frustration, and anger.
3. Help members establish a personalized emotional coping plan.

### Activities:

1. Emotion regulation strategies learning and practical training (30 min)
2. Emotion identification and discussion (20 min)
3. Emotion regulation experience activity: “Emotion Ninja Challenge” (30 min)

### Counseling Theory:

Cognitive Behavioral Therapy, Cognitive reconstruction therapy, emotion recognition training therapy

**Counseling techniques:**

Mindfulness, cognitive restructuring, breath regulation, body awareness, scenario simulation

**Concept:**

Emotions serve as an internal feedback system. Regulation is not about suppression but about awareness and transformation. By cultivating awareness and adjusting responses, individuals can strengthen their ability to manage inner states with autonomy and control.

**Materials:**

Emotion cards

Breath training diagram

Scenario simulation cards

Paper and markers

**Procedures:****Beginning stage:****Session review:**

Facilitator leads a brief reflection: “Thinking back to the last session on cultivating a growth mindset and frustration tolerance, what did you find most impactful?”

### 1. Warm-Up Activity:

Prompt: “Imagine a moment when anxiety took over—what were you doing at the time?”

Guide members to recall what they did in response when they were overwhelmed by anxiety.

### Working Stage:

### 2. Emotion Regulation Strategies – Learning and Practice (30 minutes)

1. The leader introduce three emotion regulation strategies:

-Breath Regulation: Square breathing method (Inhale 4 seconds – Hold 4 seconds – Exhale 4 seconds – Hold 4 seconds)

-Cognitive Restructuring: Reframe “I can’t handle this” into “This is just part of the process.”

-Body Awareness: Identify emotional signals from the body (e.g., racing heart, tension)

2. Members draw scenario cards (e.g., “being criticized in class,” “sleepless before an exam”). Each person selects one strategy and practices it through small-group role-play.

3. The leader provide feedback on effectiveness and situational fit and guid

### Questions:

Which strategy felt most natural or effective for you?

Did you notice any change in your anxiety levels during practice?

Would you be willing to apply this strategy in real-life situations?

### 3. Emotion Identification and Discussion (20 minutes)

1. The leader introduce “Emotions are not the enemy—they are messengers. But if emotions become overwhelming, they may hinder rational decisions.”

2. The leader distributes Emotion Cards with terms such as: anxiety, shame, frustration, anger, fear, calmness.

3. Each member draws one card and recalls a situation where they experienced that emotion.

4. Members complete and share the sentence:

“When I feel \_\_\_(emotion), I usually \_\_\_.”

5. The leader provide member to discuss :

1. How do emotions affect your behavior and thinking?
2. Which emotions do you find most difficult to manage?
3. If you had a “pause button,” would you use it? Why?

### 4. Emotion Regulation Experience Activity: “Emotion Ninja Challenge” (30 minutes)

1. Members pair up. One plays the “Challenger,” creating a situation likely to trigger strong emotions (e.g., misunderstanding, rejection, failure).

2. The other plays the “Emotion Ninja,” responding calmly using regulation strategies.

3. Afterward, roles switch and the exercise is repeated. Each member creates a personalized emotional response plan. Include :

Regulation Methods to Use:(All three should be practiced if possible)

Mindfulness Language: "I notice I'm feeling angry, but I am breathing."

Cognitive Reframing: "I failed, but that doesn't define all of who I am."

Physical Regulation: Use breathing to prevent emotional escalation.

3. The leader asks member :

Guided Questions:

1. What automatic emotional reactions did you experience when facing the challenger?
2. Which regulation method helped you calm down the fastest?
3. Was this different from how you usually respond in similar situations?

Ending Stage :(10 minutes)

5. Facilitator Wrap-Up:

1. The leader provide member to summary : Group Motto:(Shouted aloud to enhance memory)

"Today I learned: Pause before reacting."

"Breathing really can change my emotions."

"You can't always choose your emotions, but you can choose your response."

2. The leader summary: "Emotions won't disappear just because we dislike them, but they don't have to control us either. The key is awareness and the power to choose how we respond."

Process issues:

1. What are your impressions of today's emotion regulation techniques?
2. Did you realize you have more control and choices than you thought?

3. Which technique or statement would you use to cope with your anxiety?

4. Would you be willing to try these strategies in the coming week to manage your emotions?

**Evaluation:**

This session combines scenario simulation, technique practice, and personalized planning to help members not only understand emotion regulation cognitively but also experience it practically. Through interaction and feedback, members enhance their self-awareness and build the belief that “I can control my reactions.” This lays a solid foundation of self-regulation to support the upcoming focus on problem-solving skills, while effectively reducing negative emotions associated with anxiety.

**Session 7: Control—Cultivating Problem-Solving Skills(Working stage)**

**Summary:**

This session aims to help members master effective strategies for coping with stress and difficulties in daily life, especially the ability to stay calm and rational during anxious moments. Through scenario simulations, problem-solving training, and individualized strategy development, the session enhances members’ psychological control and problem-solving skills.

**Objectives:**

1. Cultivate the ability to respond calmly under pressure.
2. Master a systematic problem-solving process.
3. Develop personalized coping strategies and take action.

**Activities:**

1. Review of emotion regulation strategies.
2. Scenario simulation game: "Decision-Making Under Pressure"—learning and practicing problem-solving methods.
3. Development of personal problem-solving strategies.

**Counseling Theory:**

Cognitive Behavioral Therapy (CBT), Cognitive reconstruction therapy, emotion recognition training therapy

**Counseling techniques:**

Logical thinking training, scenario simulation, decision-making, behavioral practice.

**Concept:**

By practicing and discussing how to deal with real-life stressful situations, members improve their problem identification and problem-solving abilities. This allows them to maintain a clear mind in pressure situations, increasing their sense of control and real-world coping skills.

**Materials:**

Scenario cards

timepiece

Whiteboard & markers

Decision-making card templates

**Procedures:****Beginning stage:**

Review of the Previous Session:

Reflect on the last session and discuss experiences related to emotion regulation.

**1. Reviewing Emotion Management Strategies (10 minutes):**

1. The leader say : "In our last session, we talked about recognizing and managing emotions. Today, we'll extend from 'managing emotions to solving problems.' And ask : Have you ever had the experience where your emotions settled down, but the problem was still there?" "Have you tried using breathing, mindfulness, or other strategies to manage emotions? How did you view the problem afterward?"

Working Stage:

**2. Scenario Simulation Game: "Decision-Making Under Pressure" (45 minutes)**

Objective: Experience the challenge of making rational decisions in anxious situations within a limited time. Cultivate members' ability to stay calm under pressure.

1. Each member draws a “high-pressure scenario card” (e.g., unexpected assignment check, breakup). In small groups, members work together to propose a reasonable coping strategy within 10 minutes and present their discussion and solution to the group.

2. The Leader introduces the six-step problem-solving method:

1. Clarify the problem: What’s the key issue?

2. Analyze the cause: What may have led to this problem?

3. Set a goal: What outcome do I hope to achieve?

4. Generate alternative solutions: What are some possible ways to address this issue?

5. Select the best solution: Which is the most feasible, least costly, and has the fewest side effects?

6. Reflect and adjust: After implementation, what worked? What needs adjustment?

3. The leader selects one scenario and walks the group through the six steps together. And ask members : Which step do you think best improves your resilience and reduces anxiety? Do you tend to skip any steps? What do you think would happen if you actually followed through?

### 3. Developing Personal Coping Strategies (25 minutes)

1. Each member selects a real-life problem they are currently facing. Using today’s content, they write a “Personal Problem-Solving Plan” in their notebook:

My current problem is: \_\_\_\_\_

My goal is: \_\_\_\_\_

Three strategies I can try: \_\_\_\_\_

The one I'm most likely to use is: \_\_\_\_\_

If that doesn't work, I can also: \_\_\_\_\_

2. Members share their problems and strategies. Others offer suggestions or support.

3. The member provides positive feedback and helps members recognize that they do have control and clarity.

**Ending Stage (10 minutes):**

**4. Facilitator's Closing Remarks:**

1. The leader summary :“Today we started from stressful situations and explored how to think rationally and take action. Where does your sense of control come from? From your clear goals and strategies.”

2. Each member summarizes today's gain in one sentence, for example:  
“I found out I'm not incapable—I just didn't have a method.”

3. The leader encourage members to challenges their life : “The challenges in life haven't decreased, but your ability to handle them has increased. You're building resilience and reducing anxiety.”

**Process issues:**

1. During today's activity, did you realize you're more capable of solving problems than you thought?

2. Which problem-solving step are you best at? Which one helps you most in reducing anxiety?

3. What are your thoughts on the 'control' part of this mental toughness group counseling?

4. Are you willing to try solving a small problem this week using today's method?

**Evaluation:**

This session, through scenario simulations and structured training, helps members enhance clarity and efficiency in high-pressure situations. It boosts their confidence and sense of control when addressing anxiety-related issues. Through group interaction and individual exercises, members gradually build psychological structures and behavioral habits that foster self-control.

**Session 8: Commitment — Establishing Goal Orientation and Perseverance(Working stage)**

**Summary:**

This session aims to help members clarify their personal goals and build a sense of internal commitment. Through experiential activities, they will explore the psychological and behavioral process of persistence, understand reasons for giving up, and learn to sustain their efforts against anxiety by cultivating a "commitment mindset" to fuel intrinsic motivation.

**Activities:**

1. Help members clarify personal values and identify goals that truly matter to them.

2. Raise awareness of moments when they tend to waver in the face of difficulties or temptations.

3. Enhance resilience and willpower through experiential tasks focused on perseverance, helping members counter anxiety consistently.

**Activities:**

1. "What's Your Goal?" — Value Clarification Activity
2. Group Collaboration Game: "Perseverance Challenge"
3. Mapping Goals and Obstacles
4. Developing a Personal Commitment Action Plan

**Counseling Theory:**

Humanistic Theory, Enhanced autonomous consciousness therapy

**Counseling techniques:**

Value clarification

Task breakdown

Positive reinforcement

**Concept:**

True commitment is not just about saying you'll do something—it's about forming an emotional connection with meaningful goals and being willing to work toward them continuously.

**Materials:**

Blank paper and markers

Notebooks

Commitment Map Templates

Timer

Small props for interactive tasks

**Procedures:****Beginning stage:**

Warm-up Review

Begin by reflecting on the last session:

"What were your takeaways about improving your problem-solving skills?"

**1. Value Clarification Activity: "What's Your Goal?" (15 minutes)**

1. The leader ask member : "Have you ever had a goal you truly wanted to achieve? Did you work for it? What made you give up?"

2. Member sharing round: "I wish I could keep doing \_\_\_ because it matters to me because \_\_\_."

Working Stage:

2. Group Game: “Perseverance Challenge” (20 minutes)

1. The leader proceed member with 3 progressive tasks:

Task 1: Synchronized Clapping

Members stand in a circle. Without speaking, they must clap simultaneously five times within 10 seconds.

If they fail, they retry until they succeed.

Task 2: Team Balance Bridge

Using tape or rope to outline a “tightrope” on the floor, each member must stand inside it on one foot for 30 seconds.

If anyone fails, the entire team restarts.

Task 3: Silent Countdown Challenge

Without talking or using timers, each member must silently count 30 seconds in their head and raise their hand when they think time’s up. The one with the smallest time error wins.

This task requires focus, self-control, and team synergy.

2. The leader debriefing discussion:

1. Did you have a moment where you felt like giving up?

2. What helped you push through?

3. Would you have done just as well alone?

### 3. Mapping Goals and Obstacles (25 minutes)

1. The leader introduce the strategy of breaking down goals into manageable parts: Long-term Goal → Mid-term Tasks → Short-term Actions

2. The leader distribute “Goal-Obstacle-Strategy Maps.” Ask members to:

Identify a real personal goal

List 3 potential obstacles

Propose strategies to overcome each

Example:

Goal: Memorize 1000 English words before finals

Obstacle 1: Procrastination / scrolling phone

Obstacle 2: Poor time planning

Obstacle 3: Avoiding difficult words

Strategies: Wake up 30 minutes earlier to study, check in with roommate daily, set a reward system

### 4. Creating Personal Commitment Plans (20 minutes)

1. Each member completes a “My Commitment Card”:

I will stick to: \_\_\_\_\_

Frequency: \_\_\_\_\_

Possible obstacles (at least 3): \_\_\_\_\_

My strategies: \_\_\_\_\_

If I succeed, I'll reward myself with: \_\_\_\_\_

2. Each member completes the sentence:

"I promise myself I will \_\_\_\_\_."

**Ending Stage:**

**5. Group Leader's Closing Remarks (10 minutes)**

1. The leader summary and give some sentences to members : "Commitment is not just a slogan. It's a choice you make for yourself."

2, Members write a message to your future self who keeps going:

"I want to tell the future me who sticks to the plan: \_\_\_\_\_."

3. The leader summary : "Today, we explored how to find meaning → make a plan → overcome difficulty → gain a sense of accomplishment. This is the path of commitment."

**Process issues:**

1. How do you plan to stay committed to fight anxiety and build toughness?

2. When you feel like avoiding or delaying, what part of today's session might help you most?

3. What is your personal understanding of perseverance?

4. Does building resilience to fight anxiety bring you a sense of achievement?

Why?

**Evaluation:**

This session helps members build emotional connections to their goals through personal value exploration. By experiencing the challenges of persistence and designing actionable commitment plans, members enhance both their psychological readiness and behavioral execution for long-term perseverance. Moving from "finding meaning → making a plan → overcoming obstacles → experiencing accomplishment," this strengthens their commitment and helps reduce anxiety while promoting sustained mental toughness.

**Session 9: Commitment — Discovering Inner Values and Enhancing Goal Orientation(Working stage)**

**Summary:**

This session focuses on helping members explore their inner values and awaken a deeper understanding of life direction. Through activities such as value sorting, awareness of life roles, and meaning-oriented inquiry, members are guided to connect personal beliefs with goals, building an intrinsically driven commitment system. This helps them maintain a sense of purpose in anxious situations and enhances the meaning and sustainability of mental toughness.

**Objectives :**

1. Help members explore their core values and enhance awareness of "why I strive," thereby strengthening resilience.
2. Guide members to understand their multiple life roles and clarify intrinsic motivation.
3. Use experiential activities to strengthen the emotional connection to goals and stimulate internal commitment to counter anxiety.

**Activities:**

1. Review of the previous session + Warm-up
2. "My Value Sorting Cards"
3. Meaningful Dialogue: "Why am I here?"
4. Inner Goal Visualization Exercise

**Counseling Theory:**

Existentialism, Humanistic Theory, Expressive humanistic therapy

**Counseling techniques:**

Value clarification, meaning-centered reflection, self-exploration, symbolic expression

**Concept:**

The true source of goal orientation lies in deep recognition of one's inner values. Only when a person understands "who I am and why I live" can they establish grounded commitments and persevere through challenges.

**Materials:**

Value sorting cards

Markers and sticky notes

Commitment note cards

Notebooks

**Procedures:**

**Beginning stage:**

**1. Review of the Previous Session + Warm-up (10 minutes)**

1. The leader guide members to share their experiences with their "Persistence Action Plan" from the last session:

"Did you try to stick to the commitment you made last time?"

"What obstacles did you encounter? How did you respond?"

**Working Stage:**

**2. "My Value Sorting Cards" (20 minutes)**

1. The leader explain a set of 20 cards with different values printed on them (e.g., freedom, responsibility, love, achievement, exploration, stability, security, creativity, etc.)

2. Each member selects five values that best represent them.

3. Members take turns sharing: “What do these five values mean to me?”

4. The leader ask the question: “If you had to make a commitment for one of these values, which one would you choose? Why?”

### 3. Meaningful Dialogue: “Why am I here?” (30 minutes)

1. The leader guiding questions:

“Have you ever thought about why you're sitting here right now?”

“What do you hope your future self five years from now will thank you for doing today?”

2. Each member shares a “meaning narrative.”

3. The leader records keywords or powerful phrases, e.g., “I want to become more determined,” “I don't want to keep avoiding things.”

4. As a group, member share the key phrases they heard from one another to help the speaker gain deeper insight into their core motivation.

### 4. Inner Goal Visualization Exercise (20 minutes)

1. The leader guiding prompt:

“Close your eyes and imagine yourself working hard toward a meaningful goal. What is the scene like? What are you doing? Who are you doing this for?”

2. The member draw or symbolize “the goal I truly want to stick to inside my heart” using images/keywords/symbols.

3. The leader provide member to share your visualized goal with the group and say “If I stick to this goal, I want to say this to myself: \_\_\_\_\_.”

### Ending Stage:

#### 5. Summary and Commitment (10 minutes)

1. The leader guide a group member reflection: “Value → Role → Goal → Meaning” — these are the four pathways to commitment.

2. Each member fills out a Commitment Note Card:

Who I am: \_\_\_\_\_

What matters most to me: \_\_\_\_\_

The direction I'm willing to strive toward: \_\_\_\_\_

Because it means: \_\_\_\_\_

4. The leader closing words:

“True commitment doesn't come from external pressure. It comes from that voice within you that longs to live meaningfully.”

5. The leader tell member to write in your notebook:

“One message I want to give to my future, hardworking self: \_\_\_\_\_”

#### Process issues:

1. Which value touched you the most? How do you plan to act on it?

2. Among all your roles, which one makes you feel it's 'worth it' to persevere?

3. Do you think today's value-based commitment can help reduce your anxiety?

Why?

4. If a goal could connect your values and your sense of meaning, how far would you be willing to go for it?

**Evaluation:**

This session guides members to explore the connection between values, roles, and goals from the inside out. Through sorting, drawing, and role awareness, they enhance their emotional identification with goals and increase their internal drive against anxiety. By clarifying values and expressing commitment, members gain a deeper understanding of “why I persist,” helping them maintain direction and momentum even in anxious states, thereby steadily enhancing their mental toughness.

**Session 10: Integration and Outlook — Practicing and Sustaining Mental Toughness(Working stage)****Summary:**

As the concluding session of the series, this group aims to help members consolidate the gains from the previous nine sessions, reinforce core mental toughness skills, and establish an ongoing mindset and action plan for managing anxiety. Through reviewing their growth journey, creating personalized continuation strategies, and deepening group emotional bonds, members transition from “group-based learning” to “self-directed resilience,” preparing them to face future challenges with confidence and practical tools.

**Objectives:**

1. Review and consolidate the core mental toughness skills (challenge response, emotion regulation, goal commitment, and confident expression).
2. Develop a personalized resilience continuation plan to reduce anxiety.
3. Deepen emotional bonds within the group and establish a sustainable mutual support network.

4. Reinforce the core belief: “I have the ability to handle challenges,” and maintain long-term resistance to anxiety.

**Activities:**

1. Growth Relay: Review and Reflection
2. “Mental Toughness: My Future Action Plan”
3. Heartfelt Connection: Farewell and Blessings

**Counseling Theory:**

Cognitive Behavioral Therapy (CBT), Emotion Regulation training therapy

**Counseling techniques:**

Growth reflection, future planning, emotional connection, group empowerment

**Concept:**

Cultivating mental toughness is not an endpoint but an ongoing practice. By integrating learned strategies, activating inner resources, and establishing a support system, members can transform growth within the group into effective coping in daily life, achieving true “internalized resilience.”

**Materials:**

1. Growth Reflection Handbook(includes core knowledge from the previous 9 sessions, personal goal records, and reflection notes)
2. Future Commitment Sheet(A4 paper with sections: “My Resilience Strengths,” “My Daily Practice Plan,” “My Support System”)
3. Memory Book(photos and one-line messages from each member, compiled and copied into 10 personalized copies)
4. Colored sticky notes, markers, timer, background music (e.g., After the Storm Comes the Sun, I Believe)

**Procedures:****Beginning stage:**

Review of the Previous Session

*1. The leader prompts reflection on the last session:*

“What are your thoughts about discovering inner values and enhancing goal orientation?”

Members sit in a circle. The facilitator begins holding the “relay baton” and says: “One way I’ve become braver since the first session is — I’m willing to face my mistakes.”

Then the baton is passed to the next person. Each completes the sentence:

“One thing I’m more persistent with than before is...”

After the last person speaks, the facilitator summarizes:

“Perhaps we didn’t even realize it, but session by session, you’ve all become stronger.”

### Working Stage:

#### 2. Growth Time Machine: Review and Integration (20 minutes)

1. The leader prompt: “Over the past sessions, we’ve journeyed together from understanding challenge to building confidence. Now, open your Growth Handbook and let’s revisit those key moments.”

2. The leader draws a mind map on the board: Four Stages of Mental Toughness (Challenge, Control, Commitment, Confidence).

3. Members take turns contributing key takeaways under each stage.

4. The leader provide group discussion:

1. Which session gave you a new understanding of yourself?

2. Which strategy has already helped you in real life?

5. The leader summary:

“You’ve not only learned techniques, but more importantly, discovered the confident self and internal resilience within.”

#### 3. Mental Toughness: My Future Action Plan (30 minutes)

1. The leader prompt: “The power of mental toughness lies in daily, consistent practices. Now, let’s create your ‘Resilience Action Guide’ to help bring your learning into your everyday life.”

4. The leader distribute the Future Commitment Sheet, which includes:

My Mental Toughness Strengths: List 3 personal strengths discovered through the group sessions.

My Daily Practice Plan: Set one short-term goal (1 week) and one long-term goal (1 month).

My Support System: List 2–3 people you can turn to in tough times (e.g., family, friends, group peers) and how to seek support (e.g., “talk to \_\_\_ about worries,” “share feelings in the group chat”).

4. Members pair up and share their plans, offering feedback:

1. “Which part of their plan do you find especially practical?”
2. “If they run into difficulty, how could you support them?”

5. The leader emphasizes: “Your plan doesn’t have to be perfect — what matters is consistent action. The end of this group is not a finish line, but the beginning of your independent journey with tools in hand.”

#### 4. Heartfelt Connection: Farewell and Blessings (25 minutes)

1. The leader prompts: “During this journey, we’ve witnessed each other’s courage and growth. Now, let’s offer sincere goodbyes and blessings — for yourself and your companions.”

2. The leader provides members to do activity Gratitude Circle: Each member says:

“I want to thank \_\_\_ because \_\_\_.”

“I’ll remember \_\_\_ from this group.”

And members write the Memory Book Message: \*\* Members write a note for themselves or a blessing for others (e.g., “May you always remember your strength,” “Next time you’re struggling, remember the breathing technique we practiced!”)

3. The leader provide member to set the Group Contract Continuation:\*\*

Members agree on ways to stay connected after the group. The facilitator announces a 1-month follow-up plan.

#### **Ending Stage:**

#### **5. Facilitator Closing Words: Departing with Resilience (15 minutes)**

1. The leader prompt : “Today, our group counseling comes to an official close — but your resilient life is just beginning. Remember: You already have the ability to face challenges, and that power will only grow stronger through practice.”

2. Each member holds a card with a Commitment Motto and reads aloud together: “I believe that no matter what challenge I face, I have the courage to deal with it. I believe that every effort I make brings me closer to a better version of myself.”

3. The leader awards each member a “Mental Toughness Ally” badge, plays upbeat background music, and takes a group photo.

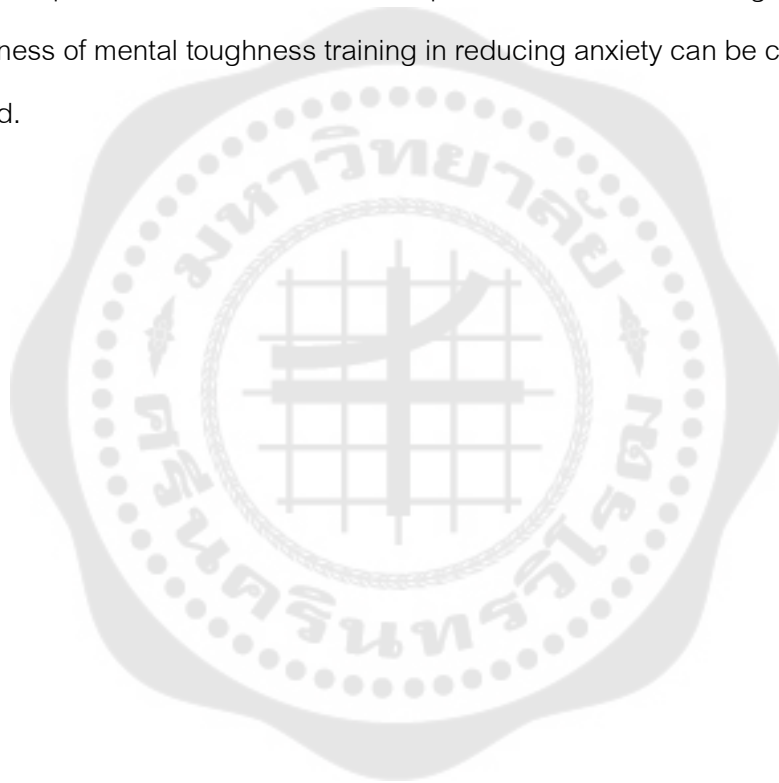
4. Members retake the Mental Toughness Questionnaire and Anxiety Scale, then compare to their initial results and share reflections.

#### **Process issues:**

1. Looking back on the whole group program, what are your reflections?
2. Which strategy will become your “secret weapon” for future challenges?
3. After completing all the sessions, do you feel your anxiety has decreased?
4. What belief do you most want to hold on to for your future self?

**Evaluation:**

This final session helps members transition from “learning” to “independent application” through three key components: review and integration, action planning, and emotional bonding. By organizing their takeaways, members strengthen their sense of self-efficacy and enhance mental toughness from multiple angles, effectively reducing anxiety. The support built among members extends into future life. Through the commitment plan and a scheduled follow-up after one month, the long-term effectiveness of mental toughness training in reducing anxiety can be continuously evaluated.



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