



FACTORS AFFECTING THE PSYCHOLOGICAL RESILIENCE OF ADOLESCENTS IN
DEZHOU CITY, SHANDONG PROVINCE IN CHINA



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FACTORS AFFECTING THE PSYCHOLOGICAL RESILIENCE OF ADOLESCENTS IN
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THE THESIS TITLED
FACTORS AFFECTING THE PSYCHOLOGICAL RESILIENCE OF ADOLESCENTS IN DEZHOU
CITY, SHANDONG PROVINCE IN CHINA

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This study aimed to explore the factors contributing to adolescents' psychological resilience, focusing on the sense of meaning in life, growth mindset, fixed mindset, mindfulness, and Confucianism. Through stratified random sampling, 365 students from Grades 10 - 12 at a high school in Dezhou, Shandong Province, China were recruited as participants (121 from Grade 10, 121 from Grade 11, and 123 from Grade 12). Pearson product-moment correlation and multiple regression analysis were employed for data analysis. The results are as follows: The psychological resilience of adolescents in Dezhou city, Shandong province, China is significantly positively correlated with the sense of meaning in life, growth mindset, and mindfulness, and Confucianism ($p < 0.001$), and is significantly negatively correlated with the fixed mindset ($p < 0.001$). The factors affecting the psychological resilience of adolescents were Confucianism and the sense of meaning in life at the statistical significance level of 0.001, fixed mindset at the statistical significance level of 0.01 and growth mindset and mindfulness at the statistical significance level of 0.05. The significantly predicted equation of the study was : $\hat{Y} = 1.197 + 0.232 X_5 + 0.228 X_1 + 0.154 X_2 + 0.104 X_4 - 0.170 X_3$. 4) In terms of standard score were: $Z = 0.236 X_5 + 0.234 X_1 + 0.167 X_2 + 0.107 X_4 - 0.186 X_3$.

Keyword : Adolescents, Psychological Resilience, Sense of Meaning in Life, Growth Mindset, Fixed Mindset, Mindfulness, Confucianism

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The pace of change in the world is accelerating faster than our past in every aspect of our lives. This rapid transformation also gives rise to significant challenges in daily living. Individuals are increasingly confronted with a constant need to adapt to new technologies, shifting job requirements, and changing social expectations. The pressure to remain up-to-date and competitive often results in heightened stress, anxiety, and a sense of uncertainty about the future. The World Health Organization (WHO) states that depressive disorders are the second-most-common disease globally, just behind cardiovascular disease. Around 1 billion people around the world have psychological disorders. Every 40 seconds, someone dies by suicide, and low-and middle-income countries make up 77% of global suicides (World Health Organization, 2017, 2022). Since 2010, depressive disorders have also been the second-leading cause of years of healthy life lost in China (Ferrari et al., 2013). A study by Lu et al. (2021) in *The Lancet Psychiatry* showed that the China psychological Health Survey results indicated that the lifetime prevalence of depressive disorders among Chinese adults was 6.8%, and the prevalence of depression was 3.4%. Currently, there are about 95 million people with depression in China, and around 280,000 people commit suicide each year. Among these suicides, 40% are depressed people. This set of data clearly shows how serious psychological health problems are in China. In particular, depression has become a key factor affecting the physical and psychological health of many Chinese people (Lu et al., 2021). It is noteworthy that recent studies both at home and abroad have revealed a grim trend of depression in adolescents. A systematic review and meta-analysis conducted in China has revealed that approximately 26% of children and adolescents have depressive symptoms, with the highest prevalence in the middle school student population (Zhou et al., 2024). This finding echoes the global report of the World Health Organization (2024), which states that 1 in 7 adolescents globally suffers from a mental disorder and that depression is a major contributor to the burden of disease in this age

group. Building on these findings, Johnson et al. (2018) conducted a comprehensive systematic review of 22 longitudinal studies and showed that, compared to their non-depressed peers, individuals who were depressed during adolescence had almost three times the risk of developing major depression, anxiety disorders, suicidal ideation, and substance use problems in adulthood. Overall, these studies emphasize the importance of prioritizing investments in adolescent mental health as such investments not only protect individual mental well-being in the present but also pre-empt the mental health burden on society in the future, and this "preventative" strategy is far more cost-effective than coping with complex mental illnesses in adulthood. Research by Liu et al. (2020) shows that middle school students have various psychological health problems, like depression, anxiety, and self-harm. These problems often get worse over time and generally increase as students move up in grade levels. This further shows how serious the psychological health situation is among adolescents (Liu et al., 2020)

The adolescence period holds profound significance and is a critical juncture in an individual's life course. It represents a stage of rapid and profound physical, psychological, and social transformation, signifying a transitional phase from childhood to adulthood (Arnett, 2000; Steinberg, 2017). During this period, significant biological changes occur, including puberty and the development of sexual characteristics, which have a direct impact on an adolescent's self-perception and body image (Graberc et al., 1995; Susman & Dorn, 2012). Psychologically, adolescence is marked by the emergence and refinement of cognitive abilities such as abstract thinking, logical reasoning, and metacognition (Piaget, 2016). This enables adolescents to think more complexly about the world and themselves, but also brings about increased self-awareness and self-doubt. Socially, adolescents begin to establish their identities separate from their families, form peer relationships, and explore romantic interests. They start to navigate the complex social hierarchies and norms of their peer groups, which significantly shape their self-esteem and social skills (Brown & Larson, 2009; Eccles et al., 2013). Adolescence is also a time when important life decisions and trajectories often begin. Choices about education, career hopes, and personal values

start to form and can have long-term effects on an individual's future success and well-being (Nurmi, 1991; Savin-Williams & Demo, 1984). It is a period in which adolescents face multiple difficulties such as academic pressure, interpersonal relationship problems, and identity formation confusion. These may cause or worsen psychological health problems, so it is necessary to have appropriate support and intervention (Costello et al., 2003; Kessler et al., 2005). Empirical studies have shown that adolescents with higher resilience levels have better psychological health results, improved academic performance, and an overall better quality of life. For example, a study by Campbell-Sills et al. (2006) found a significant negative correlation between resilience and psychiatric symptoms in young adults. This shows that resilience has a protective effect on psychological health. Also, research has indicated that resilience can be developed through interventions that aim to improve self-awareness, emotional regulation, and social skills.

Adolescents' psychological health problems are often related to their psychological resilience. When students encounter various psychological health problems, their psychological resilience may be affected. A study by Shi et al. (2023) clearly shows that from 2007 to 2021, the overall psychological resilience level of Chinese students has been going down. This research finding is an important warning, highlighting the need to quickly improve adolescents' psychological resilience. In this situation, there is a great need to deeply study the factors that affect adolescents' psychological resilience.

Typically, psychological resilience is defined as an individual's capacity to bounce back, recover, and adapt effectively when facing great adversity, trauma, or stressors (Luthar et al., 2000; Rutter, 1987). It includes not only the ability to endure and conquer challenging situations but also the process of positive growth and transformation that can result from such experiences (Tedeschi & Calhoun, 2004; Walsh, 2003). Furthermore, psychological resilience is a combination of internal elements like personality features, cognitive processes, and emotional control skills, as well as external elements such as social support, environmental resources, and cultural

backgrounds (Ungar, 2011; Werner, 1995). The interplay between these internal and external factors helps determine an individual's overall psychological resilience level and their capacity to go through difficult life events more easily and keep their psychological well – being (Kumpfer, 2002).

The burgeoning interest in psychological resilience among adolescents has illuminated the complexity of its development. Although existing literature has predominantly concentrated on individual attributes like personality traits and coping mechanisms, a more comprehensive understanding necessitates the examination of a wider array of determinants. Recent research has emphasized the important role of intrinsic factors such as a sense of meaning in life (Ryff & Keyes, 1995), in cultivating students' psychological resilience. Frankl was one of the earliest scholars to outline the theory of the meaning of life, and his theory of meaning therapy had a profound impact on the development of this concept. His personal experience made him deeply realize that even in the most extreme environments, people can still find the meaning of life (Frankl, 1985). The sense of meaning in life reflects how individuals comprehend and experience the goals, worth, and course of their lives. It encompasses their subjective grasp of what gives their existence purpose, importance, and direction. It encompasses contemplation on the significance of one's own being, the pursuit of life objectives, and the experiencing of life's worth. Those with a profound sense of meaning in life typically consider their lives as having goals and value, and are capable of finding the impetus to persevere when confronted with difficulties and challenges. When adolescents possess a relatively high sense of meaning in life, they are more inclined to exhibit psychological resilience when facing stress and adversity (Steger, 2013).

Furthermore, another internal factor that is important for resilience is mindset. Mindset generally refers to a person's psychological attitude or way of thinking, which affects how an individual views himself or herself and the surrounding world. Carol S. Dweck primarily classifies mindsets into two types: the fixed mindset and the growth mindset. In a fixed mindset, an individual believes that intelligence and ability are determined by nature and cannot be changed or improved through effort. Conversely,

as posited by Dweck (2006), the growth mindset holds that one's capabilities can be steadily expanded and strengthened through dedication, study, and determination. In comparison, those who adhere to a fixed mindset tend to exhibit lower levels of psychological resilience. They tend to see failure as evidence of inborn and unchangeable incapacity. When facing setbacks, they may lose the motivation to recover and move forward. They regard setbacks as a denial of their abilities, which leads to self-doubt, depression, difficulty in finding solutions, and a tendency to avoid or give up. For example, students with a fixed mindset are less able to deal with academic challenges. When the course becomes more difficult, they are more likely to doubt themselves and are less willing to put in extra effort. They believe that difficulties mean a lack of intelligence rather than an opportunity for improvement. In the long term, a fixed mindset can prevent growth and adaptability after multiple setbacks. Because of a lack of motivation and coping ability, over time, they become more vulnerable to life challenges. Their psychological resilience gradually decreases, making it difficult for them to develop effective coping mechanisms for the changing environment (Blackwell et al., 2007). On the other hand, adolescents with a growth mindset usually show higher levels of psychological resilience. They believe that they can continuously improve their abilities through effort and perseverance. So, when facing difficulties, they will be more courageous in exploring more solutions and show stronger stress resistance. After experiencing setbacks, they can quickly adjust their mindset, learn lessons from them, and improve their ability to recover from failures and move forward (Jaidumrong et al., 2023).

There is also another variable, Mindfulness means the awareness that comes from consciously noticing the present moment without making judgments on the experience being noticed. Theoretically, mindfulness has deep roots in the Eastern traditions of meditation, and it has a very strong link with the philosophical and meditative parts of Buddhism. In Western psychology, we are greatly indebted to Jon Kabat - Zinn for its application. In the 1970s, he was a pioneer in developing mindfulness-based interventions (MBIs), such as Mindfulness - Based Stress Reduction

(MBSR) and Mindfulness - Based Cognitive Therapy (MBCT). These interventions have been very crucial for making mindfulness a mainstream part of psychological practice and health care. Mindfulness is closely tied to psychological resilience in the following ways. It can boost self-awareness, which helps individuals quickly recognize their own states and adopt effective ways to deal with stress and difficult situations. It is good for emotional control. One can observe emotional changes in an objective and calm way, manage negative emotions, lessen mood swings, and improve the ability to handle setbacks. It can strengthen concentration. When facing difficulties, individuals can be more focused on tasks and challenges, which is helpful for solving problems. It also fosters an acceptable attitude. People can calmly face dissatisfaction and pressure in life, reduce resistance and the urge to escape, and thus increase their psychological resilience. (Grossman et al., 2004; Kabat-Zinn, 2003)

Psychological resilience is crucial for students in facing life and study challenges. Among various influencing factors, cultural factors are key. Confucianism, a long - standing cultural - ideological system, potentially affects students' psychological resilience in multiple ways. Many studies, like Chang and Lim (2007), have shown that cultural factors are essential for shaping individual psychological resilience and subjective well-being. Thus, deeply exploring the relationship between Confucianism and students' psychological resilience is highly valuable. Confucianism has values like perseverance, diligence, and self - reflection. These values are part of its principles and are good for building students' psychological resilience. When students learn and develop these values through education or self-study, they will have a stronger sense of purpose and direction. This can guide them when they face challenges and help them deal with difficulties. For example, students with perseverance are more likely to overcome academic problems. Most of the participants in this study are from Shandong, the hometown of Confucius. In this area, most people are greatly influenced by Confucianism. The collectivist idea in Confucianism is deeply rooted in the local culture and is very different from other cultures. When we study psychological resilience, it is necessary to consider the Confucian cultural background, because it gives us a special

way to understand how individuals face adversity. Some principles in Confucianism, like "Ren" (benevolence), "Li" (propriety), and "Zhi" (wisdom), form a framework for understanding psychological resilience that is different from the Western view. These principles can be the source of inner strength when people are in trouble (Xie & Wong, 2021). By comparing how collectivism and individualism deal with adversity, we can see that different ideas have different effects on psychological resilience. Wu et al. (2011) show that collectivism is very important for people's psychological resilience in difficult times. Kim et al. (2016) find that collectivism can improve protection effectiveness. Because collectivists believe that the group can protect them, they usually have higher psychological security and stability, which helps to improve their psychological resilience. Zhang (2021) says that individualism may make people pay more attention to self - development and self - value achievement. This can make people show stronger adaptability and resilience in adversity. This self-centered thinking can help people keep a positive attitude and take action when they lack social knowledge or face life challenges (Markus & Kitayama, 2014; Triandis, 2001). In general, Confucianism affects students' psychological resilience in areas such as values, collectivist ideas, and self - cultivation ideas. The values in Confucianism give internal spiritual support, collectivist ideas build an external support network, and self - cultivation ideas encourage positive coping attitudes.

By examining these influencing factors, this study aims to contribute to the existing literature on adolescents' psychological resilience and provide insights for educators, parents, and psychological health professionals on how to support and enhance adolescents' well-being during this critical stage of development.

1.2 Research Questions

RQ 1-What are the factors that related to the psychological resilience of adolescents in Dezhou city, Shandong province in China?

RQ 2- What are the factors that affect the psychological resilience of adolescents in Dezhou city, Shandong province in China? (sense of meaning in life, growth mindset, fixed mindset, mindfulness, Confucianism)

1.3 Objective of the Study

1.To study factors that related to the psychological resilience of adolescents in Dezhou city, Shandong province in China.

2.To study factors that affect the psychological resilience of adolescents in Dezhou city, Shandong province in China.

1.4 Significance of the Study

For teacher, this research offers teachers insights into effective strategies for promoting students' psychological health and well-being. Teachers can gain a better understanding of adolescents at this critical stage and develop targeted ways to support them. When teachers understand the factors that build psychological resilience, they can guide students more effectively.

For students, this research can strengthen their psychological resilience, allowing them to handle challenges and adversity better. Students will be more ready to face the important changes during adolescence. Also, this research can boost their overall development by providing methods and strategies to foster a sense of meaning in life, develop a growth-oriented mindset, and practice mindfulness.

1.5 Scope of Research

This study adopts a quantitative research method and collects data through a questionnaire survey to explore the factors influencing the psychological resilience of adolescents in Dezhou city, Shandong province in China. The scope of this research is focused on exploring the influencing factors of adolescents' psychological resilience within the context of their developing psychological stage. This study will primarily examine the impact of a sense of meaning in life, growth mindset, fixed mindset,

mindfulness and Confucianism on adolescents' ability to bounce back from adversity and thrive in the face of challenges.

1) population

The sample population for this study is adolescents in grades 10-12 of a high school in Dezhou city, Shandong province in China. The population includes 7020 high school students, there are a total of 2330 students in Grade 10, 2332 students in Grade 11, and 2358 students in Grade 12. To figure out the appropriate sample size for this research, the sample size determination table created by Krejcie and Morgan (1970) was used. This table provides guidelines for choosing sample sizes based on different population sizes. When applied to a population of 7020, the table recommended a sample size of 365 for this study.

2) The participant

The sample group was conducted among 365 students obtained by stratified random sampling, from 10-12 grade of a high schools in Dezhou city, Shandong province in China. According to the stratified sampling survey, 121 students are sampled from Grade 10, 121 students are sampled from Grade 11, and 123 students are sampled from Grade 12. Students attending classes during the research period were randomly chosen as participants. Every individual selected in this random process agreed to take part in the study.

3) Study Variables

The variables involved in this study can be divided into the following five independent variables:

1. Sense of Meaning in Life
2. Growth mindset
3. Fixed Mindset
4. Mindfulness
5. Confucianism

One dependent variable:

1. Psychological Resilience

1.6 Definition of the study

1. Psychological resilience refers to the capacity of an individual to adjust and flourish when encountering difficult situations such as adversity, trauma, or substantial stress. It involves keeping good psychological and emotional health, dealing with challenges effectively, and showing the ability to grow and develop positively in tough circumstances. Psychological resilience is made up of five aspects: personal competence, tolerance, positive acceptance of change, control, and spiritual influences.

1.1 Personal competence refers to an individual believes in their own abilities and skills. It includes a feeling of mastery and self-efficacy. A person with personal competence is confident in their ability to complete tasks successfully and achieve goals, which reflects a strong belief in themselves and their potential to overcome difficulties.

1.2 Tolerance refers to the ability to endure and persist when facing adversity. It requires maintaining a determined and resolute attitude even in difficult situations. People with high levels of resilience are usually persistent and keep working towards their goals despite setbacks.

1.3 Positive acceptance of change refers to embracing change and seeing it as a chance for growth and learning. It involves being open to new experiences and adapting to new situations with a positive attitude. Those who are good at accepting change tend to be more flexible and innovative when solving problems.

1.4 Control refers to the belief that one can control the events in their life and the results of their actions. It is about having a sense of autonomy and the power to influence one's surroundings. People with a strong sense of control are more likely to take the initiative and make decisions that they think will lead to positive results.

1.5 Spiritual influences refers to the impacts of an individual's beliefs, values, and spiritual beliefs on their resilience. This may include religious faith, personal philosophies, the quest to uncover what life means, and beliefs that go beyond personal

experiences. Such spiritual support can give individuals inner strength and comfort, helping them stay positive and hopeful when facing adversity.

2. The sense of meaning in life refers to individuals' perception of life's purpose, coherence, and importance. It contains a sense of direction, motivation, and a feeling of fulfillment, which gives life meaning and value.

3. Mindset refers to the psychological state shown in how a person reacts to and understands the development of things. In the context of learning and personal development, it can be mainly divided into two types. A fixed mindset holds that traits such as intelligence and talent are inborn and can't be altered. On the other hand, a growth mindset is the idea that one's capabilities can be enhanced and developed via hard work, learning experiences, and persistence.

4. Mindfulness refers to being aware of the present moment and accepting things without making judgments, and focusing on the here and now. It involves cultivating an open and receptive state of mind towards one's thoughts, emotions, and experiences, without reacting impulsively or critically.

5. Confucianism refers to a complex system of ethical, social, political, and philosophical ideas developed from the teachings of the Chinese philosopher Confucius. It emphasizes moral values such as benevolence, righteousness, propriety, wisdom, and fidelity. Confucianism also promotes harmonious social relationships, respect for elders and authority, and the importance of education in self-cultivation and social improvement. Confucianism has had a deep influence on Chinese culture, affecting family values, education, governance, and social norms for over 2000 years.

6. Adolescents refer to students in grades 10-12 in high schools in Shandong who are influenced by Confucianism. In this study, this stage of developmental psychology is characterized by significant physical, cognitive, emotional, and social changes as they deal with the challenges of forming their identity, building peer relationships, and facing academic pressures.

1.7 Research Hypothesis

Based on the literature review and theoretical framework, several research hypotheses are proposed to guide the investigation into the influencing factors of adolescents' psychological resilience. These hypotheses are designed to examine the associations among key variables and how they influence adolescents' capacity to recover from hardships and flourish when confronted with challenges during the vital phase of adolescence.

1. Sense of life meaning, Growth Mindset, Fixed Mindset, Mindfulness, and Confucianism were related to psychological resilience of Chinese adolescents in Dezhou City, Shandong province.

2. Sense of life meaning, Growth Mindset, Fixed Mindset, Mindfulness, and Confucianism were affecting psychological resilience of Chinese adolescents in Dezhou City, Shandong province.

1.8 Conceptual Framework of the Study

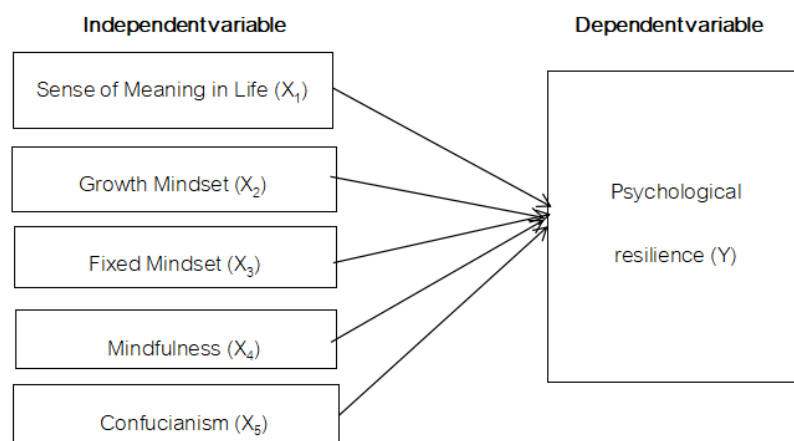


Figure 1 Conceptual Framework: Independent and Dependent Variable

CHAPTER 2

LITERATURE REVIEW

This chapter delves into the definition and conceptual framework of psychological resilience, exploring its various components and associated study variables. These include the sense of meaning in life, mindset, mindfulness and Confucianism each of which is intricately linked to the construct of resilience. The chapter offers an exhaustive review of the literature pertaining to these variables, examining the theoretical underpinnings and empirical research that connects them with psychological resilience. Furthermore, it pinpoints the gaps and limitations in the existing body of knowledge, calling for a deeper comprehension of these influential factors.

2.1 Psychological Resilience

2.1.1 Definition and Conceptualization of Psychological Resilience

Psychological resilience pertains to an individual's capacity to efficaciously adapt, promptly recover, and thrive in the face of hardships and stress. This kind of resilience is not innate but gradually emerges through experiences and learning throughout one's lifetime. Psychological resilience involves multiple psychological processes, such as the regulation of positive emotions, the perseverance of goals, and the identification of meaning. Studies suggest that individuals possessing higher levels of psychological resilience are better able to sustain a positive psychological and exhibit superior adaptability and resilience when encountering life stress and adverse circumstances (Lerner & Galambos, 1998; Werner, 1995). Psychological resilience refers to an individual's ability to adapt and thrive when confronted with adversity, trauma, or significant stressors. It encompasses maintaining psychological and emotional well-being, effectively coping with challenges, and demonstrating the capacity for positive growth and development under difficult circumstances. Psychological resilience consists of five dimensions: personal competence, tolerance,

positive acceptance of change, control, and spiritual influences (Connor & Davidson, 2003).

The aspects of psychological resilience encompass the following aspects:

1. Regulation of positive emotions: Individuals with psychological resilience are competent in effectively governing negative emotions and maintaining an optimistic and affirmative mindset. They can alleviate stress by means of self-adjustment and seeking support, avert the negative impacts of emotions, and transmute them into positive impetus. (Tugade & Fredrickson, 2007)

2. Persistence of goals: Individuals with psychological resilience hold steadfast beliefs and goals. They can sustain a positive and progressive impetus when confronted with setbacks and difficulties, refrain from giving up readily, and tenaciously pursue their objectives. They have faith that their efforts and perseverance will undoubtedly yield rewards, and this conviction endows them with greater motivation to surmount difficulties and challenges. (De la Fuente et al., 2021; Morales et al., 2024)

3. Discovery of meaning: Individuals with psychological resilience are capable of uncovering positive significance and value from arduous experiences. They can acquire opportunities for growth and learning from predicaments, perceive setbacks and stress as indispensable experiences in life, and thereby become more robust and mature. (Masten, 2012)

In summary, psychological resilience is a multidimensional construct that plays a crucial role in shaping individuals' perceptions, behaviors, and overall quality of life. By understanding and promoting psychological well-being, individuals can cultivate resilience, cope effectively with challenges, and lead fulfilling and meaningful lives.

2.1.2 Component of psychological resilience

Psychological resilience encompasses various components, such as personal competence, tolerance, positive acceptance of change, control, and spiritual influences. (Connor & Davidson, 2003)

1. Personal competence, high standards, and tenacity refers to the manifestation of an individual's confidence in their own abilities and pursuit of success.

Individuals with this kind of resilience will set high standards and demonstrate an unwavering spirit in the process of pursuing their goals. This tenacity enables them not to give up easily when encountering difficulties but instead actively seek solutions to problems, thereby enhancing their ability to overcome challenges. For example, a student who gets a low score in a math exam but believes that he has the ability to improve. He sets a high standard for achieving better grades and perseveres in improving his math ability through additional study and seeking help from teachers.

2.Tolerance refers to an individual's reliance on their own instincts and inner strength to deal with negative emotions when facing adversity. They are able to accept and process these emotions rather than being overwhelmed by them. In fact, they can view stress as an opportunity for growth and becoming stronger, thus becoming more resilient in adversity. For example, when an entrepreneur is faced with an important business decision, despite feeling tremendous pressure, she trusts her instincts and accepts this tension as a driving force to move forward. She transforms negative emotions into a source of innovation and improvement, thereby making a successful decision under pressure.

3.Positive acceptance of change refers to an individual's open attitude towards change and the ability to seek a sense of security in interpersonal relationships. They can not only accept the inevitable changes in life but also find opportunities for growth in these changes. At the same time, they obtain support and comfort by establishing and maintaining secure interpersonal relationships, which helps them maintain resilience when facing challenges. For example, when an employee learns that the company will undergo reorganization and he may lose his job. Despite facing uncertainty, he actively looks for new job opportunities and relies on the support of family and friends to maintain a sense of security. He views this change as a new beginning and eventually succeeds in finding a more promising position.

4.Control refers to an individual's sense of control over the outcomes of their own life and actions. Individuals with a strong sense of control believe that their behavior can influence the results, and this belief gives them more motivation to take action,

staying positive when confronted with challenges. This sense of control helps them maintain initiative and motivation in the face of adversity. For example, an adolescent realizes that she can control her own health through healthy eating and regular exercise. She develops an exercise and diet plan and sticks to it, thereby feeling more in control and confident when facing health challenges.

5. Spiritual influences refer to the impact of an individual's beliefs, values, and spiritual convictions on their resilience. These spiritual supports provide individuals with inner strength and comfort, helping them maintain hope and positivity when facing difficulties. Spiritual influences can be religious beliefs, personal philosophies, or other beliefs that transcend personal experiences, providing individuals with a perspective that transcends the challenges of daily life. For example, a person who has experienced a serious car accident feels extremely painful and frustrated during the recovery process. He finds comfort and strength through meditation, prayer, or participating in religious activities. These spiritual practices help him maintain hope and face the long recovery process with a positive attitude.

These components dynamically interact with each other, affecting a person's ability to adapt and develop in adversity. Personal Competence and resilience interact with and promote each other. The improvement of personal ability will enhance adolescents' tough qualities because they believe they have more resources to deal with difficulties. Resilience will also prompt adolescents to continuously challenge themselves and further improve their personal abilities. Positive Acceptance of Change and Control complement each other. Adolescents who actively accept changes are more likely to adapt to new situations and better exert their control ability. Adolescents with a sense of control are also more able to face changes with a positive attitude. Spiritual Influences can support the other four dimensions. Spiritual strength can enhance adolescents' confidence, ability to accept changes, and sense of control, making them stronger in the face of difficulties.

In conclusion, the five dimensions of psychological resilience hold crucial significance for students. This is because it not only helps students build confidence

and face challenges with a positive attitude but also provides them with the ability to persevere in the face of difficulties and setbacks. They learn to view challenges as opportunities for growth and development rather than insurmountable obstacles, thereby enabling them to become resilient individuals who can thrive in an ever-changing world.

2.1.3 Measurement of Psychological Resilience

Psychological resilience is a core concept in psychology, which relates to how individuals effectively cope with and adapt to adversity, stress, and challenges in life. As an important protective factor, psychological resilience helps maintain psychological health, promote personal growth, improve quality of life, and achieve success in social and professional fields. It not only has a positive impact on individual happiness and life satisfaction but also plays a key role in the design of education, treatment, and intervention measures. In addition, research on psychological resilience has driven the development of psychological theories, enhanced our understanding of human potential, and provided valuable information for global psychological health promotion strategies.

The Connor-Davidson Resilience Scale (CD - RISC), developed by Connor and Davidson (2003), is used to assess an individual's resistance and adaptability in the face of adversity, stress, or challenges, that is, psychological resilience. This scale is widely applied in psychological health assessment, clinical practice, and scientific research, helping professionals understand an individual's adaptability in dealing with difficulties and thus formulating personalized intervention plans. It is one of the highly representative self - assessment tools in the field of psychological resilience.

The CD - RISC scale contains a total of 25 items and adopts a Likert 5 - point scoring method. These items cover an individual's reactions and behaviors when facing stress and adversity, such as questions like "I am able to adapt when changes occur.", "I have one close and secure relationship.", "Sometimes fate or God helps me.", and "I can deal with whatever comes my way.", etc.

Individuals with high scores on these resilience scales usually possess higher psychological elasticity and can better adapt to and cope with the challenges

and stresses in life. Those with high psychological resilience often recover more quickly from adversity and are able to maintain a positive attitude and behavior, which helps them maintain psychological health and reduce the risk of mental disorders when facing difficulties.

The significance of these resilience measurement tools lies in their ability to assist psychological health professionals in identifying individuals who may be at risk of developing psychological health problems due to low resilience. This enables the implementation of appropriate preventive measures and intervention measures. Moreover, these tools can be used to study the differences in psychological resilience among different populations, as well as the relationship between resilience and other psychological and social factors. Through such research, we can gain a deeper understanding of nature and determinants of psychological resilience, thereby contributing to the formulation of more effective strategies for enhancing resilience and promoting psychological health.

2.2 Study variables

2.2.1 Sense of Meaning in Life

2.2.1.1 Definition of Sense of Meaning in Life

In the field of psychology, the sense of meaning in life refers to an individual's perception of the significance and purpose of their existence. It includes beliefs, values, and goals that endow life with a sense of coherence and direction. As pointed out by Frankl (1985), finding meaning in life is crucial for psychological well-being. Furthermore, Steger et al. (2006) underscored that a well - defined sense of meaning in life is vital for comprehensive psychological well - being. This sense of meaning in life, which has its foundation in existential and positive psychology, accentuates the importance of uncovering meaning and direction in one's life journey for overall health and mental soundness.

Studies have indicated that a robust sense of meaning in life correlates with numerous beneficial outcomes. These include greater life contentment, enhanced

ability to bounce back from challenges, and improved mental health. Individuals who perceive their lives as meaningful are more likely to experience greater happiness and fulfillment, even in the face of adversity. This sense of meaning acts as a guiding force that helps individuals navigate challenges and setbacks, providing a sense of purpose and direction. (Yıldırım & Arslan, 2022)

The sense of meaning in life is constituted by several elements and is generally formed through a combination of personal values, goals, beliefs, and a sense of purpose. Personal values direct an individual's choices and actions, determining what is significant and worthy in life (Baumeister & Vohs, 2002). Goals offer direction and motivation, providing individuals with something to strive for (Locke & Latham, 2002). Beliefs, whether religious, philosophical, or moral, can supply a framework for understanding the world and one's position in it. A sense of purpose endows life with deeper significance and a reason for existence.

In conclusion, the sense of meaning in life assumes a crucial role in shaping individuals' perceptions of themselves and the world, and it influences their emotional and psychological well-being. By cultivating a strong sense of meaning, individuals can discover purpose and fulfillment in their lives, which in turn leads to enhanced resilience and happiness. Psychologists and mental health professionals emphasize the importance of cultivating the sense of meaning in life. This approach helps people of all ages improve their mental health and overall well-being.

2.2.1.2 The Theory of Sense of Meaning in Life

The theory of sense of meaning in life is a complex and multifaceted concept. It is deeply rooted in existential psychology and positive psychology. Among them, Viktor Frankl (1985) logotherapy emphasizes that people overcome suffering and achieve psychological growth by seeking and discovering the meaning of life. In logotherapy, people can find the meaning of life through three main approaches: through creation and work, through experiencing love and being loved, and through attitudes and choices when facing suffering. The view in positive psychology holds that the meaning of life is an important component of happiness. For example, Martin

Seligman's PERMA model regards meaning as one of the five key elements of happiness and believes that a meaningful life can bring higher happiness and psychological satisfaction (Seligman, 2011).

The theory of meaning in life also involves the shaping of the meaning of life by personal values and goals. When an individual's values and goals are in line with their inner beliefs and interests, people are more likely to feel the meaning of life. In the process of pursuing their own goals and practicing their own values, people find the direction and purpose of life.

In addition, the theory of meaning in life has extensively explored the relationship between various aspects, including interpersonal relationships, spiritual pursuits, and contributions to society, and the meaning of life. Ample research has demonstrated that good interpersonal relationships can offer support and a sense of belonging to individuals, thereby enhancing their sense of meaning in life (Baumeister & Leary, 2017). Spiritual pursuits can provide people with an experience transcending the material world and assist them in discovering a deeper meaning of life (Emmons, 2003). Making contributions to society enables individuals to perceive their own value and importance and augment the meaning of life (Seligman, 2011).

In conclusion, the theory of meaning in life provides a comprehensive framework for understanding how individuals can obtain purpose and meaning from their existence. By conducting in-depth exploration of the sense of meaning in life, researchers and practitioners can assist individuals in cultivating a profound and robust sense of meaning in life, thereby enhancing resilience, well-being, and overall happiness.

2.2.1.3 Research on Sense of Meaning in Life and Psychological Resilience

The pursuit of a meaningful life is a long-standing concept. The meaning of life (i.e., significance) is a complex and multi-faceted concept, widely defined as the emotional and cognitive exploration of whether one's life has value and purpose (Steger & Kashdan, 2009). Empirical research data demonstrates that an increasing number of young people in North America cannot find the meaning and direction of life. They lead

increasingly empty and meaningless lives. Growing evidence indicates that today's college students express a higher demand for personal satisfaction by having meaningful life experience (Howe & Strauss, 2009; Lancaster & Stillman, 2003). In a survey covering 236 American universities, 76% of 112,232 college students indicated that they are exploring the value and goal of life and are in pursuit of the meaning of their own lives (Astin et al., 2010).

Numerous studies have demonstrated that a meaningful life exhibits a strong connection with psychological health. A meaningful life can predict the presence or absence of hope and the occurrence of individual depressive symptoms from a unique and forward-looking perspective (Mascaro & Rosen, 2005). Past research has revealed that individuals with a strong sense of meaning in life tend to experience greater subjective happiness, better mental health, and a higher quality of life. There is a positive correlation between a sense of meaning in life and psychological resilience (Yıldırım & Arslan, 2022).

On one hand, a strong sense of meaning in life can enhance psychological resilience. When individuals have a clear understanding of the purpose and value of their lives, they are more likely to view setbacks as opportunities for growth and learning rather than insurmountable obstacles. This enables them to find motivation and strength when facing adversities. The sense of meaning in life provides a foundation and direction in the face of difficulties. This positive reframing of adversity can enhance personal resilience and help individuals cope with challenges more easily with a positive attitude. For example, studies have demonstrated that those with a strong sense of meaning in life are more proficient at managing stress and overcoming difficulties (Frankl, 1985; Wong, 2013).

Moreover, the sense of meaning in life can serve as a source of motivation and inspiration during difficult times. People with a clear sense of purpose and direction are more likely to persevere in adversity and draw strength from their beliefs and values. This internal motivation can enhance personal resilience and enable them to overcome obstacles that may arise in life (Steger & Kashdan, 2009).

On the other hand, psychological resilience can also contribute to a stronger sense of meaning in life. Resilient individuals are better able to cope with adversity and find opportunities for growth. Through overcoming difficulties, they may gain a deeper understanding of themselves and their values, which in turn can enhance their sense of meaning. Additionally, resilient individuals are often more open to new experiences and perspectives, which can lead to a broader sense of purpose and meaning (Masten, 2014; Tugade & Fredrickson, 2004)

2.2.1.4 Measurement of Sense of Meaning in Life

In psychology, assessing the sense of meaning in life is a complicated and sensitive task. It involves not only an individual's internal experience but also how an individual positions themselves in a social and cultural context. To fully understand an individual's sense of meaning in life, researchers have developed various tools and scales aiming to capture different aspects of this multidimensional concept.

Among them, a widely used scale is "The Meaning in Life Questionnaire" (MLQ), which was developed by Steger et al. (2006). The MLQ scale contains 10 items and aims to assess an individual's perception of life purpose and meaning. These items cover aspects such as "I understand my life's meaning", "I am looking for something that makes my life feel meaningful", "I am always looking to find my life's purpose", and "my life has a clear sense of purpose", etc. Participants are required to rate each item according to their feelings, usually on a Likert seven-point scale from "strongly disagree" to "strongly agree". People with high scores on the scale usually exhibit a stronger sense of life purpose, higher satisfaction, and a more positive mental state. They may be more capable of finding the direction of life and have a clearer understanding of their behaviors and values, thus being more resilient in the face of challenges and difficulties. This sense of meaning in life not only contributes to an individual's psychological health but may also have a positive impact on physical health, as it is associated with lower levels of depression, anxiety, and stress. The practical significance of the MLQ scale lies in that it provides a standardized tool for psychological health professionals to assess an individual's sense of meaning in life. This assessment helps to identify those

individuals who may lack life goals or feel that life is meaningless, thus providing them with appropriate support and intervention. In addition, the MLQ scale can be used to study the differences in the sense of meaning in life among different populations, as well as the relationship between the sense of meaning in life and other psychological variables (such as self-esteem, psychological resilience). Through these studies, we can gain a deeper understanding of nature and the role of the sense of meaning in life and contribute to the enhancement of human well-being.

2.2.2 Growth Mindset

2.2.2.1 Definition of Growth Mindset

The mindset theory proposed by psychologist Carol S. Dweck holds that individuals have beliefs about the nature of their own abilities and intelligence. These beliefs, in turn, shape their goals, attitudes and behaviors (Dweck, 2006). Mindsets are predominantly categorized into two distinct paradigms: the fixed mindset and the growth mindset. The fixed mindset paradigm posits that human capabilities are innate and immutable, whereas the growth mindset is premised on the understanding that abilities can be systematically enhanced through sustained commitment and diligent effort (Dweck & Yeager, 2019; Yeager & Dweck, 2012). For instance, research has shown that adolescents with a growth mindset are more likely to embrace challenges. They might take on difficult academic tasks or engage in new extracurricular activities. In the face of setbacks, they persist and view failures as valuable learning opportunities, just as demonstrated in a study by Dweck (2016). Adolescents with a growth mindset show higher psychological resilience and are not afraid of making mistakes or experiencing failures. Compared with students with a growth mindset, students with a fixed mindset are less capable of coping with academic challenges. They tend to avoid challenges. For example, when encountering a challenging project at work, they are very likely to choose to retreat rather than actively attempt it. When facing difficulties, they are more likely to give up because they regard difficulties as a sign of their lack of ability rather than an opportunity for growth (Boullion et al., 2021).

Extensive research has demonstrated that adolescents with a growth mindset are inclined to exhibit higher levels of academic achievement, motivation, and resilience. For instance, studies by Dweck (2006) and Jaidumrong et al. (2023) have shown that when adolescents hold the belief in their capacity to improve through diligent effort and dedication, they are more prone to set ambitious goals and take proactive measures to attain them. This mindset nurtures a sense of agency and empowerment, facilitating adolescents to navigate obstacles with an air of optimism and determination.

In conclusion, a growth mindset constitutes a potent psychological concept that can exert a substantial influence on adolescents' attitudes, behaviors, and outcomes. Through structured educational programs and constructive feedback, adolescents can be guided to embrace the idea that they can grow and improve. This approach helps them build the ability to bounce back from challenges, stay motivated, and develop a lasting love for learning. Spero and Hatrup (2020) found that interventions aimed at fostering a growth mindset have been effective in boosting students' motivation. Their research showed that after participating in these interventions, students became more eager to learn. For example, students who received growth mindset interventions were more inclined to choose difficult tasks on their own and keep going when facing problems. They also showed greater confidence in their ability to solve challenges and do better in school. In line with these findings, Mohamoud (2024) reported that such interventions enhanced students' self - confidence in their capabilities. This increase in self - efficacy then led to higher motivation, prompting students to stick with tough tasks.

2.2.2.2 Theory of Growth Mindset

The theory of mindset suggests that an individual's perception of their abilities and intelligence can be categorized into two types: fixed and growth. As proposed by Dweck (2006), a fixed mindset assumes that personal abilities remain static, while a growth mindset holds that skills can be improved through hard work and study. Bernecker and Job (2019) noted that students with a fixed mindset often view

challenges as intimidating obstacles. In contrast, those with a growth mindset tend to welcome challenges and use feedback as an opportunity to grow.

One crucial theoretical construct that significantly reinforces the growth mindset is neuroplasticity. In the past, traditional experience held that the neural structure of our brain is fixed. However, modern neuroscience has demonstrated neural plasticity. That is to say, our neural connections can be modified through repeated exposures. The brain will continuously strengthen the neural connections it deems important and weaken the unimportant ones. Neurons are constantly growing and dying. Moreover, this plasticity exists throughout the entire course of human life. This implies that the significance of neural plasticity lies in its ability to constitute the basis of a conviction that cognitive abilities can be significantly enhanced through deliberate practice and continuous effort (Schroder et al., 2017).

As long as an individual continuously trains their thinking according to their own will, they can reach the desired state. An individual's intelligence and talent can also be cultivated and improved through acquired endeavors. Another cornerstone of the growth mindset is self-efficacy theory, introduced by Bandura (1997). Self-efficacy refers to the belief in one's ability to complete certain tasks or handle specific situations effectively. Adolescents embracing a growth mindset often exhibit heightened self-efficacy, as they are convinced that their endeavors can yield positive results. This conviction propels them to set ambitious goals, remain steadfast in adversity, and actively seek to refine their competencies and understanding.

Additionally, social cognitive theory, as articulated by Bandura (1986), underscores the impact of social elements such as feedback, observation, and reinforcement on the formation of individuals' beliefs and actions. Adolescents with a growth mindset are inclined to actively seek constructive feedback, interpret criticism as a developmental opportunity, and glean lessons from the achievements of their peers. By engaging with positive exemplars and supportive milieus, they come to internalize the notion that intelligence is not a fixed commodity but a quality that can be cultivated through dedicated effort and learning.

In conclusion, the theoretical foundation of a growth mindset is supported by developmental psychology, cognitive science, and social cognitive theory. Recognizing the potential for change in intelligence, the importance of self-efficacy, and the impact of social influences can empower educators and parents to foster a growth mindset in adolescents. This, in turn, enables them to face challenges, remain resilient, and reach their full potential.

2.2.2.3 Research on Growth Mindset and Psychological Resilience

In recent years, more and more academic research has shown that interventions to develop a growth mindset are vital for helping students become more psychologically resilient. Mohamoud (2024) conducted a study indicating that students exposed to growth mindset interventions demonstrated significantly heightened resilience when confronted with academic challenges. Notably, these students tended to view failures not as reflections of personal inadequacies but as valuable learning opportunities. This finding aligns closely with the work of Macnamara and Burgoyne (2023). In their research, they explored the impact of growth mindset interventions on students' academic achievement through a systematic review and meta - analysis. Their study, complemented by practical recommendations, strongly affirmed that such interventions are instrumental in fostering a positive and tenacious mindset among students. By employing various strategies and activities aimed at promoting a growth mindset, educators and researchers can implement various strategies and activities to promote a growth mindset. By doing so, they can assist students in cultivating a more optimistic and determined approach to learning and personal development. This positive and tenacious mindset has a profound impact on students' academic perseverance. It empowers them to face challenges and setbacks with courage and resilience, and encourages them to persevere in their pursuit of academic excellence even in the face of difficulties. In essence, these interventions can effectively cultivate a mindset that drives academic persistence.

Furthermore, there exists a profound connection between psychological well - being and the construct of a growth mindset. Generally, individuals with a growth -

oriented psychological mindset exhibit greater psychological resilience and are less likely to experience stress and anxiety. As Burnette et al. (2013) proposed, by embracing challenges and perceiving setbacks as valuable learning opportunities, individuals can enhance their emotional and cognitive resilience. This process facilitates cognitive reappraisal and emotional regulation, which is in line with the principles of positive psychology. Positive psychology emphasizes the significance of cultivating a growth mindset for achieving optimal psychological functioning and well-being.

Many researchers have explored how growth mindset interventions affect students' resilience. In a long-term study, Mohamoud (2024) found that students who took part in these interventions gradually became more resilient. They were better at bouncing back from setbacks, saw failures as chances to learn, and stayed positive even when things were tough. This research also showed that these interventions helped students deal with school-related stress and adopt a growth-focused attitude. As a result, students not only became more resilient but also performed better in their studies. For example, students who participated in such interventions showed a remarkable ability to adapt to setbacks, becoming more proficient at dealing with adversity and bouncing back from setbacks, and were better able to transform setbacks into learning opportunities. Yeager et al. (2019) also conducted a study demonstrating that brief growth mindset interventions targeted at middle school students, such as online courses emphasizing that intelligence can be enhanced through effort, can significantly improve the academic performance (e.g., GPA) and psychological resilience of students with low academic achievements. As a result, these students are more likely to proactively face challenges rather than shy away from difficulties. In contrast, individuals with high psychological resilience can strengthen their positive mindset through successful experiences in the face of difficulties. As they overcome one challenge after another, their belief in the continuous development of their abilities becomes more firmly established, thereby further solidifying a growth mindset (Dweck, 2006). Moreover, the optimistic attitude of individuals with high psychological resilience

when encountering setbacks helps them maintain a positive mindset in various situations and adapt flexibly to changes (Bonanno, 2008).

In conclusion, the relationship between mindset and psychological resilience is intricate and two - way. Mindset significantly impacts the formation and development of psychological resilience, while psychological resilience, in turn, also exerts an influence on mindset. The complex interaction between them highlights the crucial importance of cultivating a positive and highly adaptable psychological framework. Psychological resilience serves as a buffer, enabling individuals to maintain a stable mindset even in challenging circumstances. Findings from multiple studies clearly show that growth mindset interventions are helpful for building students' resilience. Across these research efforts, a common conclusion emerges: such interventions assist students in bouncing back from difficult situations, staying persistent when challenged, and keeping their motivation to succeed strong.

2.2.2.4 Measurement of Mindset

In the field of psychology, mindset is of great importance. It influences an individual's perception, attitude, and behavior towards various aspects of life, including learning, achievement, and personal growth. A person's mindset can determine how they respond to challenges, setbacks, and opportunities, thereby significantly affecting their psychological well-being and development.

The Mindset Scale was developed based on the theory put forward by psychologist Dweck (2006). This scale aims to measure an individual's belief about whether abilities and intelligence can be changed. In this research revealed that people who believe they can improve their abilities by working hard , those with a growth mindset tend to do better in both learning and daily life compared to those who think their abilities can't be changed, known as having a fixed mindset. This scale contains a series of statements designed to assess an individual's mindset. For example, questions like "You are a certain kind of person, and there is not much that can be done to really change that.", "You can always change basic things about the kind of person you are.",

"Only a few people will be truly good at sports-you have to be 'born with it.'", and "You can always substantially change how intelligent you are." etc.

A high score on the scale means that an individual tends to have a growth mindset and believes that their abilities and intelligence can be improved through effort. This mindset is associated with higher learning motivation, better academic performance, stronger ability to cope with challenges, and higher life satisfaction. Those with a growth mindset tend to keep going when they encounter difficulties. Instead of being discouraged, they see challenges as chances to grow and gain new knowledge.

On the other hand, getting a low result on the scale indicates that a person is more inclined to have a fixed mindset. People with this mindset think that skills and intelligence are set from birth and can't be developed. When they run into problems, they're likely to quit quickly. Instead of seeing failure as a result of not trying hard enough or using the wrong methods, they blame it on a lack of natural talent.

The practical significance of the Growth Mindset Scale lies in helping educators, psychologists, and individuals understand and promote the development of a growth mindset. By enhancing an individual's growth mindset, it can help them achieve better results in education, career, and personal life. In addition, this scale can also be used to evaluate the effectiveness of intervention measures, such as educational programs or training workshops, aimed at cultivating a growth mindset in students and adults.

2.2.3 Fixed Mindset

2.2.3.1 Definition of Fixed Mindset

In contrast, the Fixed Mindset refers to the belief that certain traits, such as intelligence or talent, are fixed characteristics determined at birth. To put it simply, individuals with a fixed mindset perceive these traits as immutable throughout their lives. This mindset leads them to allow failure or success to define their self-identity. For instance, when they succeed at a task, they may attribute it solely to their inborn abilities. Conversely, in case of failure, they are likely to blame an inherent lack of

necessary traits, rather than considering other crucial factors like effort, strategy, or external circumstances. As a result, this way of thinking can significantly limit their potential for growth and development, as they may lack the motivation to improve or learn from experiences, firmly believing that their abilities are predetermined and unalterable.

In the realm of adolescent psychology, psychologist Dweck (2006) brought the concept of the fixed mindset to prominence. This mindset embodies the belief that personal qualities, such as intelligence and talent, are innate and unchangeable. Indeed, extensive research has consistently demonstrated that adolescents with a fixed mindset tend to exhibit negative self-perception, employ maladaptive coping styles, and lack resilience when confronted with challenges and setbacks. For example, Hong et al. (1999) pointed out that these adolescents often engage in negative attribution under academic pressure. When they fail an exam, instead of considering external factors, they attribute the failure to their own lack of ability. This kind of attribution pattern not only reinforces their negative self-image but also influences their coping strategies, causing them to avoid similar challenges in the future and lose the courage to retry. Consequently, they struggle to make breakthroughs in their academic performance. Likewise, Mueller and Dweck (1998) discovered that after receiving praise for their intelligence, adolescents with a fixed mindset tend to shy away from more challenging tasks. Fearful that failure would contradict the perception of being smart, they find it difficult to actively engage with academic challenges, lack the resilience to overcome obstacles, and consequently hinder the development of their academic performance. Furthermore, Robins and Pals (2002) showed in their research that such adolescents are prone to spiraling into negative emotions following academic failures, which severely disrupts their learning state. For instance, after failing an exam, they may experience prolonged periods of depression and self-doubt instead of quickly readjusting and resuming their studies. Therefore, when facing subsequent challenges, their lack of resilience leads to significant fluctuations in grades and makes consistent improvement elusive.

Evidently, the fixed mindset poses significant obstacles to adolescent development. By firmly viewing abilities as static and innate, adolescents with this mindset are trapped in a cycle of negative self - perception, avoidance of challenges, and limited resilience. The wealth of research evidence consistently demonstrates how this cognitive framework hinders academic growth, disrupts effective coping mechanisms, and undermines emotional well - being. In fact, numerous studies have also emphasized the negative impact of the fixed mindset on students' psychological resilience. For example, Blackwell et al. (2007) found that the fixed mindset is detrimental to students' learning motivation, self-efficacy, and psychological resilience. This clearly indicates that the fixed mindset has a negative influence on psychological resilience. Similarly, in a study by Dweck and Yeager (2019), it was shown that students with a fixed mindset were more likely to give up easily when facing difficulties, which was closely related to their low psychological resilience. Moreover, based on the research of Karwowski (2014), adolescents with a fixed mindset often had a negative perception of themselves during the process of dealing with setbacks, further weakening their psychological resilience and making it difficult for them to recover quickly from failures.

In conclusion, recognizing the detrimental effects of the fixed mindset is the first step towards promoting a growth - oriented approach among adolescents. By encouraging them to embrace effort, learn from failures, and view abilities as malleable, we can empower them to break free from self - imposed limitations, fostering greater resilience and paving the way for sustained personal and academic development.

2.2.3.2 Theory of Fixed Mindset

Based on Dweck (2006) mindset theory, people's beliefs about their skills and self-control fall into two main types: the fixed mindset and the growth mindset. Those with a fixed mindset believe that their abilities are inborn and permanent. In contrast, individuals with a growth mindset think they can build and improve their capabilities by working hard and staying committed. People who have a fixed mindset often look at challenges as dangers. They're afraid that failing will show what they can't

do. But those with a growth mindset see challenges as chances to learn and get better. They're more eager to try new things and leave their comfort zones, actively seek out constructive feedback, and view criticism not as a judgment of their worth but as a valuable source of information for improvement. This fundamental difference in perspective shapes how individuals approach tasks, setbacks, and personal growth, ultimately influencing their long-term success and resilience (Bernecker & Job, 2019).

Several theories address the concept of a fixed mindset, among them Dweck (2006) entity theory, which posits that intelligence and ability are immutable traits deeply rooted in innate endowment. This is exemplified by the common belief that "mathematical aptitude is inborn." Operating within a binary cognitive framework that contrasts fixed and incremental mindsets, this theory serves as a fundamental lens through which individuals perceive and assess their capabilities, significantly influencing self-evaluation, motivation, and behavior. At its core, the entity theory contends that human potential is static and unalterable by effort, leading proponents to attribute academic achievements primarily to inherent talent rather than hard work or strategy. They interpret setbacks as evidence of insufficient innate ability, thereby fostering learned helplessness and reduced perseverance. The theory's dichotomy between beliefs in fixed traits and the malleability of abilities forms a cognitive schema that permeates various life domains, impacting educational choices, career aspirations, and interpersonal relationships. By categorizing mindsets into these opposing camps, Dweck (2006) entity theory offers a robust framework for understanding how beliefs about personal capabilities can either constrain or empower individuals, underscoring the profound influence of cognitive perspectives on human development and performance.

Furthermore, learned helplessness is also one of the factors that trap individuals in a fixed mindset. Learned helplessness refers to a negative psychological state in which, due to repeated exposure to uncontrollable negative events, individuals develop the belief that they are powerless to change their circumstances. In Seligman (1975) experiment involving dogs subjected to electric shocks, it was discovered that

individuals who repeatedly encounter uncontrollable setbacks will actively abandon attempts to alter their circumstances. They develop a cognitive pattern of "efforts being in vain," which establishes a vicious cycle with the fixed mindset. This suggests that once the fixed mindset takes hold, people tend to believe that their abilities are immutable. When confronted with setbacks, rather than striving to improve through exertion, they are more inclined to passively accept the situation. In addition, this passive acceptance of setbacks further strengthens the fixed mindset, creating a continuous cycle in which individuals are ensnared in a state of learned helplessness. This not only impacts their capacity to deal with current difficulties but also exerts a long-term influence on their motivation to pursue personal growth and development. According to the research by Gong et al. (2023), students who consistently rank at the bottom of their academic performance are highly likely to experience "low sense of achievement" and "emotional exhaustion" due to the continuous accumulation of pressure from the learning environment. This long-standing state will not only harm their mental health but also significantly impede the development of their psychological resilience.

Moreover, the Essentialist Bias pertains to the inclination of individuals to assume that certain entities or groups have intrinsic and immutable essential traits. This mode of thinking can result in the oversimplification and misinterpretation of intricate scenarios. It may also induce a fixed mindset in individuals. Gelman (2003) suggested that humans have a cognitive propensity to ascribe characteristics to an internal essence (for instance, the belief that "Asians have a superior mathematical aptitude"). Such categorical thinking bolsters the notion of the solidification of abilities at a group level, fostering a thought pattern where the "invariability of abilities" becomes deeply ingrained.

In conclusion, the theoretical foundation of a fixed mindset is supported by theories such as entity theory, learned helplessness, and essentialist bias, which emphasize that intelligence and abilities are immutable traits. This perspective posits that individual achievement primarily depends on innate endowments rather than

acquired efforts, while attributing failures to inherent deficiencies in ability rather than external circumstances or strategic shortcomings. Such a cognitive framework overemphasizes the deterministic role of innate factors and environmental constraints, neglects the possibility of individuals effecting change through sustained effort, and is heavily influenced by essentialist perceptions of inherent qualities—leading to rigid judgments about one's own or others' capabilities. Consequently, this mindset suppresses the willingness to pursue challenges and transcend limitations, undermines psychological resilience in adversity, and creates barriers to unleashing full potential, ultimately hindering long-term growth and development.

2.2.3.3 Research on Fixed Mindset and Psychological Resilience

A burgeoning body of research has delved into the profound influence of mindsets on students' resilience, defined as the capacity to recover from adversities, persevere through challenges, and maintain the drive for success. Central to this inquiry are two distinct mindsets: the fixed mindset and the growth mindset. The fixed mindset posits that an individual's abilities are innate and immutable, impervious to enhancement through effort. As a consequence, adolescents with a fixed mindset tend to exhibit lower levels of psychological resilience compared to their counterparts.

Numerous academic studies have consistently demonstrated that the fixed mindset significantly undermines psychological resilience. Rooted in the work of Dweck and Leggett (1988), individuals with a fixed mindset perceive their abilities as static and unalterable. When confronted with challenges, they often resort to avoidance strategies, fearing that failure will validate their perceived inadequacies. As Nussbaum and Dweck (2008) highlighted in their research on self-theories and self-esteem maintenance, those adhering to a fixed mindset tend to adopt defensive postures in the face of potential failure to safeguard their self-esteem. For example, Blackwell et al. (2007) found that such individuals may shy away from complex tasks at work, opting to retreat rather than risk exposing perceived limitations in their "fixed" abilities. This evasive behavior not only hinders the development of problem-solving skills but also stunts the growth of psychological resilience. Schleider and Weisz (2016) further

illuminated the link between fixed mindsets and diminished resilience, noting a significant association between this mindset and symptoms of anxiety and depression among adolescents. These individuals often employ negative coping strategies when facing stress, further eroding their resilience. Additionally, Grant and Dweck (2003) showed that those with fixed mindsets tend to adhere to rigid achievement goals, limiting their adaptability in the face of difficulties and weakening their overall resilience.

The relationship between psychological resilience and the fixed mindset is deeply intertwined. As conceptualized by Dweck (2006), the fixed mindset fosters a self-perpetuating cycle where setbacks are interpreted as evidence of inherent inadequacy rather than opportunities for growth. For instance, upon encountering failure, individuals with a fixed mindset are more likely to abandon their efforts, believing that they lack the innate capacity for success (Blackwell et al., 2007).

The impact of mindsets extends beyond motivation and learning processes, permeating the very mechanisms of attention allocation and decision-making. Research by Ehrlinger et al. (2016) reveals that individuals with fixed mindsets exhibit distinct cognitive patterns: they prioritize validating their existing intelligence over pursuing genuine ability development. This cognitive bias leads them to selectively focus on less challenging tasks, avoiding potential negative feedback while preserving a positive self-image.

In behavioral terms, this tendency to opt for easy tasks to affirm one's intelligence, while reinforcing the fixed mindset in the short run, often culminates in overconfidence bias. This overconfidence can cloud rational judgment, leading to suboptimal decision-making. In high-stakes contexts, such as the medical field, these errors can have severe consequences. As Ehrlinger et al. (2016) cautioned, when physicians base diagnoses or treatment plans on unfounded confidence, patient safety may be compromised. This illustrates the cascading effects of the fixed mindset from biased attention allocation to overconfidence, ultimately culminating in risky decision-making underscoring its far-reaching implications for individual behavior and societal outcomes.

A recent comprehensive meta-analysis by Yuan et al. (2025) has provided compelling evidence of the detrimental effects of the fixed mindset on adolescent well-being. The study revealed that adolescents who endorse the belief in innate and unchanging abilities are significantly more likely to experience adverse mental health outcomes. Specifically, they exhibit elevated levels of depressive symptoms, including persistent sadness, hopelessness, and anhedonia. Moreover, these individuals show an increased propensity for aggressive behaviors, manifesting as irritability, hostility, or physical aggression. These findings underscore how the fixed mindset not only shapes cognitive processes but also has profound implications for emotional regulation and social behavior, highlighting the urgent need to cultivate growth mindsets during adolescence to promote positive mental health and social adjustment.

2.2.4 Mindfulness

2.2.4.1 Definition of Mindfulness

Mindfulness is the psychological state of being fully present and engaged in the current moment, while non-judgmentally observing one's thoughts, feelings, and sensations. It involves paying attention intentionally, with curiosity and openness. Mindfulness can be cultivated through practices such as meditation, yoga, or simply by bringing awareness to daily activities. For instance, when a student is studying, they can be mindful by noticing the words on the page, the sounds in the environment, and their own reactions and thoughts as they learn. They might take a moment to pause and breathe deeply, bringing their attention back to the task at hand without getting distracted by worries or distractions (Kabat-Zinn, 2003).

Mindfulness, which has been widely studied in the field of psychology, can be defined as the ability to pay close attention to the present moment in an open, curious, and accepting way. It involves carefully observing one's own thoughts and emotions without being overly influenced by them or reacting impulsively. By regularly engaging in mindfulness practices, individuals can develop a stronger sense of self-awareness, enabling them to better understand their emotional states and regulate their

responses. Additionally, mindfulness can enhance cognitive flexibility, allowing individuals to approach problems from different perspectives and adapt to changing circumstances. These qualities are essential components of psychological resilience, helping individuals to bounce back from adversity and maintain a positive psychological outlook.

Extensive research has indicated that mindfulness can exert a substantial positive influence on diverse aspects of psychological health. For example, numerous studies have revealed that it can effectively lower stress levels. In the study conducted by Charness et al. (2024), it was demonstrated that mindfulness training can result in stress reduction and enhanced cognitive performance. Similarly, in the domain of anxiety management, mindfulness has been shown to assist individuals in better regulating their emotions. The cultivation of mindfulness skills empowers individuals to respond to challenging situations with greater clarity and composure. As individuals develop mindfulness, they become more attuned to their internal states and are better able to manage their responses, thereby leading to more adaptive and productive behaviors.

The cornerstone of mindfulness is the cultivation of non-judgmental psychological awareness, which entails a vigilant observation of one's thoughts and emotions without the imposition of evaluative labels such as 'good' or 'bad' (Kabat-Zinn, 2003). This stance of acceptance and non-reactivity is instrumental in nurturing a compassionate and empathetic rapport with one's internal experiences, a concept that has been associated with improved psychological well-being (Lomas et al., 2017). Such an approach is conducive to the development of enhanced psychological resilience, enabling individuals to confront life's adversities with a greater sense of fortitude and adaptability.

In essence, mindfulness is pivotal in bolstering psychological resilience. It achieves this by augmenting self-awareness, refining emotional regulation, and fostering adaptive coping mechanisms (Hofmann et al., 2010). The integration of mindfulness practices into one's daily life can instill a consciousness of presence and

acceptance, which has been shown to reduce stress and anxiety, and improve overall well-being (Creswell & Lindsay, 2014). This, in turn, empowers individuals to navigate life's challenges with increased composure and resilience.

2.2.4.2 The Theory of Mindfulness

The theoretical underpinnings of mindfulness are deeply entrenched in Eastern contemplative traditions, particularly within the philosophical and meditative canons of Buddhism. Its adaptation in Western psychology owes much to Jon Kabat-Zinn, who in the 1970s pioneered mindfulness-based interventions (MBIs) such as Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT). These interventions have been pivotal in integrating mindfulness into mainstream psychological practice and health care (Grossman et al., 2004; Kabat-Zinn, 2003).

Central to the practice of mindfulness is the concept of attention regulation, which involves purposefully directing one's focus to the present experience, be it the breath, bodily sensations, or environmental cues (Lutz et al., 2008). This disciplined attention fosters a heightened state of awareness and concentration, empowering individuals to witness their psychological and emotional processes objectively, without cognitive entanglement (Bishop et al., 2004).

The principle of non-judgmental awareness stands as another cornerstone of mindfulness. It posits that an individual should maintain an attitude of acceptance and non-reactivity towards their internal experiences, observing thoughts and emotions without the conferral of evaluative judgments or attempts at suppression (Keng et al., 2011). Nurturing this non-judgmental stance is believed to engender a more empathetic and compassionate self-relation, promoting emotional resilience and self-compassion (Neff, 2003).

Moreover, mindfulness is anchored in the awareness of the present moment, eschewing past ruminations and future anxieties in favor of the immediate 'here and now' (Kabat-Zinn, 2003). This focus on the present cultivates clarity and equilibrium,

equipping individuals to confront life's challenges with enhanced calmness and mindfulness.

In sum, the theoretical framework of mindfulness spotlights the development of attention regulation, non-judgmental awareness, and present-moment awareness as fundamental to its practice. Embracing these tenets in everyday life is posited to bolster psychological resilience, emotional well-being, and life quality (Grossman et al., 2004). Mindfulness presents itself as a transformative methodology for negotiating psychological complexities and fostering a profound sense of tranquility and resilience.

2.2.4.3 Research on Mindfulness and Resilience

Investigations into the nexus of mindfulness and psychological resilience have yielded auspicious findings, elucidating the intricate relationship between the practice of mindfulness and an individual's capacity to manage stress and confront adversity (Garland et al., 2015). A burgeoning body of literature has delved into the salutary effects of mindfulness on bolstering psychological resilience across a diverse spectrum of populations. Notably, research has begun to unveil the potential of mindfulness practices in enhancing the resilience of adolescents, a demographic characterized by unique developmental psychological challenges and stressors (Pinto et al., 2021).

Adolescents undergoing significant cognitive, emotional, and social transformations, are particularly susceptible to the impacts of stress. Mindfulness programs tailored for this age group have demonstrated efficacy in reducing symptoms of anxiety and depression, while concurrently improving emotional regulation and self-compassion (Biegel et al., 2009; Galante et al., 2018). These findings underscore the relevance of mindfulness in fostering resilience during a critical period of human development.

Moreover, the incorporation of mindfulness into educational settings has emerged as a proactive approach to cultivating resilience and emotional well-being among students. By teaching mindfulness skills, schools can provide adolescents with

tools to navigate the complexities of academic and social pressures with greater equanimity and clarity of mind (Schonert-Reichl & Lawlor, 2010).

The empirical evidence amassed thus far suggests that mindfulness may serve as a pivotal intervention for enhancing psychological resilience. However, the mechanisms underpinning this relationship require further dissection. Future research should aim to parse the specific components of mindfulness practices that contribute to resilience and explore the long-term effects of such interventions on adolescent development (Hughes et al., 2023).

According to the study by O'Connor et al. (2021), mindfulness level is a crucial asset for building individual resilience in the face of adversity. It is essential as practicing mindfulness can foster the development of several traits, like emotional control, healthy coping strategies, and a sound sense of self-worth, which benefit individuals greatly when dealing with life challenges and the environment.

Similarly, it is mentioned that an enhanced level of mindfulness is shown to have a significant relationship with reducing depression and stress. Numerous studies have demonstrated that regular mindfulness practice can lead to better self-control and a more positive outlook on life. For instance, research by Lo et al. (2019) and Epel et al. (2019) found that individuals who engaged in mindfulness activities reported lower levels of depression and stress. Additionally, studies have shown that mindfulness can enhance resilience by helping individuals better manage difficult emotions and situations. This increased resilience can lead to improved psychological health and a greater ability to cope with life's challenges.

In general, studies on mindfulness and psychological resilience underscore the positive impacts of mindfulness practices on individuals' capacity to foster resilience and well-being. Incorporating mindfulness into daily lives enables individuals, particularly adolescents, to acquire the skills and psychological resources required to deal with adversity, manage their emotions, and flourish amid uncertainty. The expanding corpus of research advocates for the integration of mindfulness-based

interventions in psychological health promotion and resilience-enhancement endeavors among diverse groups.

2.2.4.4 Measurement of Mindfulness

Mindfulness is a critical skill in psychology that enables individuals to live with higher levels of autonomy, pleasant affect, vitality, and satisfaction. It involves focusing on the present moment, accepting it without judgment, and deriving insight and understanding from the current experience.

The Mindful Attention Awareness Scale (MAAS) is a widely recognized tool for measuring mindfulness, developed by Kirk Warren Brown and Richard M. Ryan in 2003. This scale is designed to assess dispositional mindfulness, which is the tendency to be aware of and attentive to current experiences. It is a 15-item questionnaire that uses a 1-6 Likert scale, where respondents indicate how frequently they engage in certain activities related to mindfulness and mindlessness.

The MAAS includes statements such as: "I break or spill things because of carelessness, not paying attention, or thinking of something else.", "I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.", "I find it difficult to stay focused on what's happening in the present.", "I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there." etc.

Higher scores on the MAAS indicate a greater tendency to be mindful, which is associated with various positive outcomes. For instance, individuals with higher mindfulness scores tend to report higher levels of pleasant affect, self-esteem, optimism, and self-actualization. They also exhibit lower levels of neuroticism, anxiety, depression, and unpleasant affect.

Conversely, lower scores suggest a lower frequency of mindful states, which might be linked to higher susceptibility to stress and negative emotional states. Such individuals may benefit from interventions aimed at enhancing mindfulness skills.

The practical significance of the MAAS lies in its ability to provide a baseline for individuals to understand and cultivate their mindfulness. It has been

validated across cultures and age groups and is useful in research areas such as self-determination theory and consciousness. The scale can help in developing interventions to improve mindfulness, which can lead to better self-regulation and overall well-being.

2.2.5 Confucianism

The influence of Confucian ideals extends beyond philosophical discourse, deeply permeating the social and psychological constructs of Chinese society (Ho, 1995). As Bond (1996) elaborates in his comprehensive handbook, the nuances of Chinese psychology are inextricably linked to the cultural values and beliefs that have been passed down through generations, including those stemming from Confucianism. These values continue to resonate in modern interpretations of psychological resilience, offering a robust framework for understanding how Chinese adolescents cultivate the inner strength to confront and surmount life's inevitable obstacles.

2.2.5.1 Definition and concept of Confucianism

In Confucianism, “Ren (Benevolence), Yi (Righteousness), Li (Propriety), Zhi (Wisdom), and Xin (Fidelity)” are the core moral concepts, which have far - reaching impacts on individuals' psychological resilience (Liu, 2015). Confucianism is an important part of Chinese culture and has played an indelible role in shaping China's history, values, and social structure. It is a profound philosophical and ethical system that has had a profound, lasting impact on Chinese society for millennia (Tang, 2008). Confucianism is also a rich and complex ideological and cultural system, occupying a cornerstone position in the history of East Asian culture (NationalGeographicSociety, October 7, 2024,).

1. Ren (Benevolence) refers to the core of Confucianism and represents deep care and compassion for others. In terms of psychological resilience, the practice of Ren helps individuals develop a positive attitude towards life and empathy towards others, thus enabling them to demonstrate greater adaptability and resilience in the face of adversity (Guo et al., 2021).

2. Yi (Righteousness) refers to fairness and justice, and it requires individuals to consider moral and social norms in their actions. The relationship between

psychological resilience and Righteousness is manifested in the individual's ability to insist on the right course of action and not violate inner moral norms even in the face of difficulties, and this kind of insistence enhances the individual's psychological resilience (Leong & Kiat, 2023).

3. Li (Propriety) refers to a set of social behavioral norms that help individuals learn how to act and interact appropriately in society. In the construction of psychological resilience, Propriety can facilitate individuals forming good social relationships and social skills, which are important resources for coping with stress and adversity (Rossano, 2012).

4. Zhi (Wisdom) refers to being wise and rational, which encourages individuals to pursue knowledge and truth. The relationship between psychological resilience and Wisdom lies in the fact that individuals with higher Wisdom are able to assess adversity more objectively and formulate effective coping strategies, thus improving their psychological resilience (Kim et al., 2024; Zhang et al., 2023).

5. Xin (Fidelity) refers to honesty and trust. In terms of psychological resilience, Xin can help individuals build stable interpersonal relationships and social support networks, which are important protective factors in adversity (Wee, 2011).

Through these core values, Confucianism provides individuals with a comprehensive set of moral and behavioral guidelines that help to enhance their psychological resilience in the face of life's challenges. By practicing Ren (Benevolence), Yi (Righteousness), Li (Propriety), Zhi (Wisdom), Xin (Fidelity), individuals are not only able to acquire moral guidelines in society but also develop more resilient and adaptable psychological traits (Ren et al., 2024; Xie & Wong, 2021).

2.2.5.2 Research on Confucianism and Psychological Resilience

Within the cultural tapestry of Shandong Province, China, the enduring imprint of Confucian philosophy casts a distinctive light on the conceptualization of adolescent psychological resilience. The foundational principles of perseverance, social harmony, and moral rectitude that are woven into the fabric of Confucian thought are not merely philosophical tenets but also serve as critical catalysts in the development of

resilience amidst adversity (Xie & Wong, 2021). This cultural milieu fosters a unique psychological fortitude among the youth, shaping their capacity to navigate and overcome life's challenges.

Confucianism is the strongest foundation of traditional Chinese culture. As of today, in addition to China, Confucianism has had a profound impact on the culture and society of many other countries (Li, 2015). Confucianism, which originated from the "Way of Confucius and Mencius", has a profound historical origin in the long course of Chinese cultural development, and has had an extremely profound impact on the general ethical and moral concepts of the Chinese people, as well as on the values and priorities of Chinese culture. As an important ideological achievement of Chinese civilization in the long process of development, the values of Confucianism have become a kind of collective unconscious of the Chinese nation after more than 2,000 years of accumulation and precipitation. It can be seen that the values of Confucianism represent, to a large extent, the basic concept of value prioritization in traditional Chinese culture (Xu, 2009).

Confucianism advocates facing adversities with an accepting attitude, regarding adversities and setbacks as the essential paths for self-realization and success. At the same time, Confucian thought also encourages people to actively and diligently overcome adversities and believe that effort is the cornerstone of success. Confucius emphatically put forward the influence of "ordinances of heaven" on an individual's life course. Mencius inherited Confucius' concept. He believed that the hardships and difficulties endured by individuals are arrangements of destiny. However, he also emphasized that taking proactive action in the face of adversity and setbacks is the key to an individual's successful destiny (Hwang, 2001). The "Book of Changes" once recorded a sentence widely known to all Chinese people: "As Heaven's movement is ever vigorous, so must a gentleman ceaselessly strive along. As the Earth's capacity is to hold, so must a gentleman constantly cultivate virtue in himself to shoulder the world." People are encouraged to strive for improvement like the movement of heaven. At the same time, the attitude and virtue of acceptance embodied in the earth are highly

valued. This sentence tells us that those who can calmly bear all kinds of circumstances bestowed by life and destiny are regarded as excellent people with noble characters. People who can have the ideological realm of "not being conceited in victory and not being discouraged in defeat" and "never giving up" are those advocated by Confucianism.

From the perspective of Confucianism, hardships such as setbacks and pressures exist and are caused by random factors that individuals cannot control (referred to as the "thought of heavenly mandate"). Hardships can temper people. Only those who can withstand the tempering of hardships can achieve great undertakings. When facing hardships, accept them, but don't give up on oneself. Instead, take this opportunity to cultivate one's own character, temper one's own will, and improve one's own abilities to prepare for future opportunities (Jing, 2007).

Overall, looking at how Confucian thought and different cultural contexts affect psychological resilience is very useful for promoting cross-cultural comparative studies. This helps us see the unique features and differences in psychological resilience among different cultures. Comparing the psychological resilience shown under different cultural value systems can give us deep understanding of how culture influences the development of psychological resilience (Oyserman et al., 2002). For example, contrasting the resilience observed under Western individualistic and Eastern collectivistic cultural values can offer a clearer understanding of how culture molds an individual's capacity to confront adversity (Triandis, 2018). Markus and Kitayama (2014) have further elaborated on the implications of these cultural differences for cognition, emotion, and motivation, noting that cultural context plays a significant role in shaping the self-concept and subsequent behavior. Recently, there has been a growing interest in the effects of cultural values on psychological resilience, laying solid empirical groundwork for investigating the impact of diverse cultural ideologies, such as Confucianism, on this construct. Furthermore, the ongoing evolution and innovation in research methodologies have expanded the horizons for such inquiries.

In an article by Xie and Wong (2021), it is argued that Confucianism can serve as a cultural foundation for psychological resilience. Confucianism emphasizes acceptance of adversity while encouraging efforts to overcome it. Confucius emphasized the influence of "heavenly destiny" on the trajectory of an individual's life, while Mencius continued this approach by considering personal difficulties to be a matter of fate, while emphasizing the importance of action. A famous line from the I Ching, "As Heaven's movement is ever vigorous, so must a gentleman ceaselessly strive along. As the Earth's capacity is to hold, so must a gentleman constantly cultivate virtue in himself to shoulder the world." encourages people to strive to better themselves as the heavenly bodies move, but also emphasizes the importance of being tolerant and accepting of adversity as the earth is. Confucianism promotes an attitude of accepting adversity while responding positively to life, and this attitude is considered a desirable personality trait in Chinese culture. This attitude of acceptance of adversity in Confucianism, as well as its emphasis on overcoming difficulties through personal effort and moral cultivation, is seen as an expression of psychological resilience.

Overall, the contribution of Confucianism to psychological resilience is that it provides values and a way of life that help remain optimistic amid challenges and enhance psychological resilience through personal effort and moral cultivation (Xie & Wong, 2021).

2.2.5.3 Measurement of Confucianism

Confucianism, as an important component of traditional Chinese culture, has a significant positive impact on cultivating the psychological resilience of young people. The core concept of 'gentleman personality' encompasses qualities such as courage, benevolence, righteousness, propriety, wisdom, fidelity and emphasizes filial piety, etiquette, and moral cultivation. It not only provides moral and behavioral guidance for young people, but also helps them demonstrate stronger psychological resilience when facing challenges in life. In addition, Confucian coping strategies, such as accepting adversity as an opportunity for growth, are closely related to an individual's psychological health, indicating that the psychological construction mechanism in

Confucianism may promote adolescent psychological health by enhancing psychological resilience. Therefore, the practical significance of Confucianism lies in providing a cultural and psychological support system for young people, helping them establish psychological resources to cope with life pressures and challenges.

The questionnaire developed by Monkhouse et al. (2013) study, "Measuring Confucian values among East Asian consumers: A four country study," was designed to measure the Confucian values of East Asian consumers, which are important for understanding the behavioral patterns and cultural characteristics of this demographic. The questionnaire includes items that tap into the core aspects of Confucianism, such as the importance of family, respect for hierarchy, and the pursuit of harmony. Here are a few examples of the types of statements that might be included in such a questionnaire: "Wealth and power are becoming important determinants of social status.", "I recognize and respect social expectations, norms and practices.", "I am concerned with protecting the pride of my family.", "am concerned with not bringing shame to myself." etc.

A high score on this questionnaire suggests a strong adherence to Confucian values. This could mean that the individual places a high value on family loyalty, social order, and collective well-being over individual success. Such individuals may be more likely to seek consensus, avoid conflict, and prioritize the needs of the group. This adherence to Confucian values can contribute to psychological resilience by providing a strong social support network and a sense of purpose that extends beyond the self.

In contrast, a low score might indicate that the individual holds modern or individualistic values that may not align with traditional Confucian teachings. This does not necessarily imply negative traits but rather a different set of priorities that may emphasize personal achievement and self-expression over collective harmony. While this could also be a valid approach to life, it might result in a different coping strategy during times of stress or adversity.

By conducting research on questionnaires related to Confucianism to explore the impact of Confucian values on psychological resilience, it has far-reaching significance for understanding and enhancing the coping abilities of Chinese people in the face of adversity. It not only helps to develop psychological intervention strategies that are in line with the Chinese cultural context, promoting the development of individual psychological health, but also can enhance social harmony and cultural inheritance, providing crucial resources for the indigenization of psychology and theoretical innovation.

2.3 Research Gaps and Limitations

Despite the considerable progress made in the study of factors influencing adolescent psychological resilience, several significant gaps and limitations persist.

First, the intricate interrelationship among the diverse internal factors that shape psychological resilience remains inadequately comprehended (Bonanno, 2008). The individual sense of meaning in life, a mindset, mindfulness, on adolescent psychological resilience have been extensively explored (Ryff & Keyes, 1995). However, the synergistic effects and complex interplays among these factors remain understudied. The integration of a meaningful life perspective with a growth-oriented mindset (Dweck, 2006) and mindful awareness (Kabat-Zinn & Hanh, 2009) is posited to foster a resilient and persistent outlook in adolescents. This integrative approach may significantly bolster their capacity to navigate life's adversities and catalyze personal development, echoing the principles of hardiness that contribute to resilience (Maddi, 2004).

Second, the majority of existing studies have focused on the isolated effects of each factor on psychological resilience, often neglecting the potential moderating or mediating roles of other variables. This reductionist approach may limit the comprehensive understanding of the true nature and mechanisms underlying psychological resilience in adolescents (Hartmann et al., 2020).

Furthermore, the cultural and contextual variations in the manifestation and effects of these internal factors have been largely overlooked. Adolescents from different

cultural backgrounds and social environments may exhibit distinct patterns of psychological resilience and the role of internal factors may vary accordingly. However, cross-cultural and context-specific studies are scarce, hindering the development of universally applicable theories and intervention strategies (Powell & Davies, 2012).

In addition, longitudinal studies tracking the development of psychological resilience and the changes in internal factors over time are lacking. Such studies are crucial for understanding the dynamic processes and trajectories of psychological resilience and its underlying factors during adolescence (Shi et al., 2022).



CHAPTER 3

METHODOLOGY

This chapter explores the methods used in our quantitative study on what influences psychological resilience in Dezhou, Shandong, China. Drawing from prior chapters, it provides a comprehensive overview of the study's investigative blueprint, data - gathering techniques, and methods of analysis.

3.1 Research Methodology

This study used a quantitative approach to figure out what factors affect the psychological resilience of adolescents in Dezhou city, Shandong province, China. Quantitative research typically involves a systematic analysis of data, combined with specific scenarios in classrooms and daily life, to elucidate various phenomena related to the psychological resilience of adolescents. In the present study, a questionnaire - based survey was employed to collect data for the evaluation of adolescents' psychological resilience and the identification of associated influencing factors in Dezhou, Shandong.

3.2 Research Instrument

This study developed a Likert 5 - point scale questionnaire. To ensure the reliability and validity of the measurement, the development of the questionnaire drew on multiple existing scales related to psychological resilience, life meaning, growth mindset, fixed mindset, and mindfulness, which were then adjusted and refined according to the local cultural characteristics. It has 44 items in total. The study utilizes adapted and newly - developed scales to measure key variables. For the sense of meaning in life, it was adapted items from Meaning in Life Questionnaire (MLQ) (Steger et al., 2006). The mindset variable, distinguishing between growth and fixed mindset, was adapted items from Dweck (2006). Mindfulness was adapted items from the Mindful Attention Awareness Scale (MAAS) (Brown & Ryan, 2003), focusing on present - moment

awareness. The Confucianism scale was adapted items from Confucian values such as benevolence, righteousness, propriety, wisdom, and fidelity (Monkhouse et al., 2013). In the final part, psychological resilience was adapted items from the Connor - Davidson Resilience Scale (CD - RISC) developed by Connor and Davidson (2003). Content validity was checked by three experts. Results of the validity and reliability are described below. (Table 1)

Table 1 Show the validity and reliability of questionnaire

Variable Scale	N of Items	IOC	Cronbach's Alpha	CITC
Sense of Meaning in Life	8	1.00	0.970.	0.827-0.931
Growth Mindset	4	1.00	0.956	0.866-0.914
Fixed Mindset	4	1.00	0.976	0.936-0.965
Mindfulness	8	1.00	0.931	0.723-0.842
Confucianism	10	1.00	0.954	0.745-0.844
Psychological Resilience	10	1.00	0.905	0.576-0.724
Overall	44		0.925	0.296-0.619

During the questionnaire survey, students provided their answers by selecting one of five options: "Strongly Agree," "Agree," "Unsure," "Disagree," or "Strongly Disagree." "Strongly Agree" indicated full agreement with the statement, while "Agree" meant general agreement with some possible reservations. "Unsure" was for those who

had not yet formed a definite opinion and were still thinking or undecided. "Disagree" signified disagreement with the statement, and "Strongly Disagree" showed a firm disagreement along with alternative thoughts. Statements with positive significance are scored as follows: Strongly agree: 5 points; Agree: 4 points; Unsure: 3 points; Disagree: 2 points; Strongly disagree: 1 point. On the other hand, statements with negative connotations are scored as follows: Strongly agree: 1 point; Agree: 2 points; Unsure: 3 points; Disagree: 4 points; Strongly disagree: 5 points. Following are some details of the questionnaire.

Instruments used in this study will include validated scales and questionnaires to assess the research variables of sense of meaning in life, growth mindset, fixed mindset, mindfulness, and Confucianism among adolescents. The following instruments will be utilized:

1. In this study, the scale for the dimension of the sense of meaning in life was developed from the scale developed by Steger et al. (2006). It is used to assess individuals' perceptions of the purpose, coherence, and significance of their lives. The scale consists of 8 items, such as the degree of agreement with statements like "I feel that my life has a clear meaning and purpose." A Likert 5-point scale is adopted, where 1 represents "strongly disagree" and 5 represents "strongly agree". The higher the score, the higher the level of the presence of meaning or the degree of the search for meaning in an individual.

2. The questionnaire regarding the growth mindset and fixed mindset dimension in this paper references from the Mindset Scale compiled by Dweck (2016). This scale is exclusively designed for the evaluation of an individual's perspectives regarding the modifiability of personal capabilities, intellectual capacity, and aptitudes. Essentially, it aims to measure the extent to which an individual agrees that their capabilities can be enhanced through effort, learning, and perseverance. The scale consists of a total of eight items, which are meticulously divided into two distinct dimensions. Four of these items belong to the growth mindset dimension, which focuses on attitudes and beliefs that embrace the potential for development. On the other hand,

the remaining four items pertain to the fixed mindset dimension, exploring the perspectives that hold the view that traits are inherent and unalterable. A Likert 5-point scale is adopted to quantify the respondents' self-evaluations. This approach enables a nuanced understanding of each participant's stance, capturing the subtle differences in their agreement or disagreement with the statements presented within each dimension.

3. The questionnaire on the mindfulness dimension in this paper references from the Mindful Attention Awareness Scale (MAAS) developed by Brown and Ryan (2003). This scale is designed to assess the trait of mindfulness, with a particular focus on examining consciousness and attention, two fundamental aspects considered to constitute awareness. The mindfulness assessment scale used in this paper consists of eight items and employs a Likert 5-point scoring system, where 1 indicates "strongly disagree" and 5 indicates "strongly agree." The higher the score, the higher the individual's level of mindfulness. This means that individuals with higher scores are more capable of perceiving their own experiences and the surrounding environment in a non-judgmental and present-focused manner in daily life. When facing various situations, they tend to maintain clear awareness and stable attention, and are less likely to be distracted or fall into automatic response patterns.

4. The questionnaire survey in this paper references from the Confucian Values Questionnaire developed by Monkhouse et al. (2013). The questionnaire on Confucian culture in this paper comprises 10 items across five dimensions:

1). Ren (Benevolence): This dimension assesses whether individuals regularly demonstrate empathy and concern for others in daily life. It also examines their belief in enhancing personal well-being and the meaning of life through acts of helping others.

2). Yi (Righteousness): It measures an individual's willingness to adhere to what they believe is right, even in challenging circumstances. This dimension also evaluates whether individuals make decisions based on their values when facing moral dilemmas, regardless of potential personal disadvantages.

3). Li (Propriety): This aspect focuses on an individual's emphasis on courtesy and etiquette. It also explores their ability to adapt their behavior according to different social settings to ensure appropriateness.

4). Zhi (Wisdom): It evaluates an individual's desire to explore new knowledge and truth. Additionally, it assesses their belief in the ability to gain valuable experiences and lessons from adversity through reflection and learning.

5). Xin (Fidelity): This dimension gauges an individual's importance attached to honesty and keeping promises. It also examines whether individuals remain committed to their promises to others, even when confronted with difficulties. A Likert 5 - point scale is adopted, where 1 represents "strongly disagree" and 5 represents "strongly agree." Higher scores indicate a deeper influence of Confucian values on an individual's culture and behavior.

5. The questionnaire survey in this paper references from the Connor-Davidson Resilience Scale (CD-RISC) compiled by Connor and Davidson (2003). In this paper, the dimensions of the resilience questionnaire mainly include the following five dimensions with a total of 10 items:

1). Personal Competence: It assesses an individual's confidence in their own abilities and skills, involving a sense of mastery and self-efficacy. That is, a person feels confident in their ability to successfully complete tasks and achieve goals, which is a firm belief in themselves and their potential to overcome challenges.

2). Tolerance: It measures an individual's ability to endure and persevere in the face of adversity, including maintaining a sense of determination and firmness even when facing difficulties. People with high resilience may show tenacity and persistence, and will continue to strive towards their goals despite setbacks.

3). Positive Acceptance of Change: It examines whether an individual can embrace change and regard it as an opportunity for growth and learning, including accepting new experiences with a positive attitude and adapting to new situations. People who are good at accepting change are more likely to be flexible and innovative in their problem-solving approaches.

4). Sense of Control: It understands an individual's belief in their control over events and the outcomes of actions in their lives. It refers to having a sense of autonomy and the ability to influence the environment. People with a strong sense of control are more likely to take the initiative and make decisions that they believe will lead to positive results.

5). Spiritual Influence: It focuses on the influence of an individual's beliefs, values, and spiritual beliefs on their resilience. It may include religious beliefs, personal philosophy, the pursuit of the meaning of life, and beliefs that go beyond personal experiences. This spiritual support can provide individuals with inner strength and comfort, helping them to stay positive and hopeful when facing adversity. A Likert 5-point scale is adopted, where 1 represents "strongly disagree" and 5 represents "strongly agree". The higher the score, the higher the level of an individual's psychological resilience.

These instruments have been selected based on their reliability and validity in previous research studies and will be administered to the sample population to gather data on the influencing factors of adolescents' psychological resilience.

Construction of Research Tools and Methods for Assessing Tool Quality

The personal information section of the questionnaire covers several key aspects. It includes questions about the respondent's age, gender, place of residence, academic grade, and annual family income.

Section 1. Personal Information

1.what is your age?

- A. Under 12 years old
- B.12-14 years old
- C.15-17 years old
- D.18 years old and above

2.What is your gender?

- A. Male

B. Female

3.What is your home location?

A. Urban

B. Rural

C. Other

4.What is your grade level?

A. Grade 10

B. Grade 11

C. Grade 12

5.What is your annual family income?

A. less than \$30,000

B.\$30,000-\$50,000

C.\$50,000-\$100,000

D.\$100,000-\$200,000

E. More than \$200,000

Part II Sense of Meaning in Life Questionnaire scale

Section 2. Sense of Meaning in Life. For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	I feel that there is a clear meaning and purpose in my life.					
2	I find meaning in life even when things are difficult.					

Part III Mindset Scale

Section 3. Mindset, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree

1	I believe that through hard work, I can improve my abilities .					
2	I am willing to face challenges, even if I may fail.					
3	I think my abilities are fixed and cannot be changed.					
4	No matter how hard I try, my intelligence level will not change much.					

Part IV Mindfulness Scale

Section 4. Mindfulness, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	I often pay attention to feelings and experiences in the present moment.					
2	When I am stressed, I can stay calm and focused on the task at hand.					

Part V Confucianism Questionnaire

Section 5. Confucianism, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly	Agree	Unsure	Disagree	Strongly
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		agree				disagree
1	In daily life, I often show compassion and concern for others.					
2	Even in difficult situations, I will adhere to what I believe is right.					
3	I value politeness and etiquette and believe that they are crucial for maintaining harmonious interpersonal relationships.					
4	I like to explore new knowledge and truth, which helps me make wise decisions when facing challenges.					
5	I value honesty and keeping promises and believe that this is the foundation for building stable interpersonal relationships.					

Part VI Psychological Resilience Scale

Section 6. Psychological Resilience, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√"

inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	In the face of challenges, I can quickly adapt and find solutions.					
2	I trust my instincts, which help me a lot when making decisions.					
3	I regard change as an opportunity for growth and am willing to					

	accept new challenges.					
4	I believe that my actions can have a positive impact on the results.					
5	In the face of difficulties, I can quickly recover by relying on inner beliefs and external support.					

3.3 Population and Sample

1) population

The sample population for this study is adolescents in grades 10-12 of a high school in Dezhou city, Shandong Province. The population includes 7020 high school students. There are a total of 2330 students in Grade 10, 2332 students in Grade 11, and 2358 students in Grade 12. To decide on the appropriate sample size for this research, the sample size determination table from Krejcie and Morgan (1970) was used. This table provides guidelines for selecting sample sizes based on known population sizes. For a population of 7020, the table recommended a sample size of 365.

2) sample

The sample for this study comprised 365 high school students from Grades 10-12 across Shandong Province, carefully selected to ensure representativeness and statistical power. Given the diverse sociocultural and educational landscapes within the province, a stratified random sampling approach was employed, incorporating multiple dimensions of stratification to minimize selection bias and enhance generalizability. The cohort maintained an equal gender distribution, with balanced representation of male

and female participants. Students were randomly chosen from those attending classes during the study period, ensuring a representative cross-section. All selected individuals willingly agreed to participate in the research upon invitation, demonstrating voluntary engagement throughout the process.

3.4 Data Collection

After the questionnaire was approved by the reviewing experts, it was distributed through an online questionnaire survey system. The questionnaire is composed of six parts in total, which include adolescents' perception of psychological resilience and five predictive factors that influence their psychological resilience: sense of meaning in life, growth mindset, fixed mindset, mindfulness, and Confucianism.

To conduct this study, a stratified random sampling method was employed. Specifically, a total of 365 questionnaires were distributed among students in Grades 10-12. This sampling method helps to ensure that the sample is representative of the target population. By including various aspects related to psychological resilience and its influencing factors, the questionnaire provides a comprehensive framework for exploring how these elements interact and contribute to the development of adolescents' psychological resilience. Through a rigorous review process by experts, the validity and reliability of the questionnaire have been enhanced, which further guarantees the scientific nature of the subsequent data collection and analysis.

3.5 Data Analysis

The completed questionnaires underwent a comprehensive analysis, employing various statistical methods.

1) Descriptive statistics such as means and standard deviations were calculated using the SPSS program.

2) The research explored the relationships among 1) sense of meaning in life, 2) growth mindset, 3) fixed mindset, 4) mindfulness, and 5) Confucianism. This analysis employed multiple correlation techniques.

3) The study investigated the impact of 1) sense of meaning in life, 2) growth mindset 3) fixed mindset), 4) mindfulness, and 5) Confucianism on the psychological resilience of adolescents in Dezhou, Shandong, through stepwise multiple regression analysis.



CHAPTER 4

RESEARCH RESULTS

Symbols used in data analysis and interpretation.

In terms of data analysis and interpretation, the research results are used to achieve the research objectives.

Understand the interpretation of the data analysis results; therefore, the researchers define the symbols used in the interpretation as follows.

N is the number of samples

X stands for average

df means degrees of freedom

R is the coefficient of determination

\hat{Y} represents the prediction equation

Z represents the predicted value of the equation for predicting the psychological resilience of adolescents.

Std. represents the estimation error

X_1 stands for Sense of meaning in life

X_2 stands for Growth Mindset

X_3 stands for Fixed Mindset

X_4 stands for Mindfulness

X_5 stands for Confucianism

Y stands for psychological resilience

4.1 Data analysis

As revealed by the research in this literature, researchers can divide the influencing factors of the psychological resilience of adolescents in Dezhou, Shandong Province, China, into five parts: the sense of meaning in life, growth mindset, fixed mindset, mindfulness, and Confucianism.

The filled - out questionnaires underwent analysis using basic descriptive methods, such as presenting data and calculating percentages.

1. SPSS software was employed to perform descriptive statistical analysis, which involved computing the average (mean) and measuring the variability (standard deviation).

2. An examination was carried out to explore the associations among the sense of meaning in life, growth mindset, fixed mindset, mindfulness, Confucianism, and the psychological resilience of adolescents in Dezhou, Shandong, China.

Table 2 Describe the statistical results:

<i>Descriptive Statistics</i>					
	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Y</i>	365	1.40	4.70	3.166	.928
<i>X₁</i>	365	1.25	4.75	3.255	.955
<i>X₂</i>	365	1.25	5.00	3.497	1.005
<i>X₃</i>	365	1.00	4.75	2.424	1.013
<i>X₄</i>	365	1.50	4.75	3.576	.954
<i>X₅</i>	365	1.20	4.70	3.143	.945

This table provides descriptive statistics for 6 variables (*Y* to *X₅*). Each variable has 365 observations. The following is an explanation of each part of the data: The dependent variable psychological resilience was measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). To categorize resilience levels, we divide the scale into three equal intervals based on theoretical range (1–5), as follows: Low Resilience: 1.00 – 2.33, Moderate Resilience: 2.34 – 3.66, High Resilience: 3.67 – 5.00.

X₁: Minimum value is 1.25, Maximum value is 4.75, Mean is 3.255, Standard. Deviation is .955.

X₂: Minimum value is 1.25, Maximum value is 5.00, Mean is 3.497, Standard. Deviation is 1.005.

X_3 : Minimum value is 1.00, Maximum value is 4.75, Mean is 2.424, Standard. Deviation is 1.013.

X_4 : Minimum value is 1.50, Maximum value is 4.75, Mean is 3.576, Standard. Deviation is .954.

X_5 : Minimum value is 1.20, Maximum value is 4.70, Mean is 3.143, Standard. Deviation is .945.

Y (Dependent Variable): Minimum value is 1.40, Maximum value is 4.70, Mean is 3.166, Standard. Deviation is .928.

The results of descriptive statistical analysis indicate that the lowest scores fall within the 1.00 - 1.50 interval, while the highest scores span from 4.70 to 5.00. The mean values vary between 2.424 and 3.576, all of which are relatively near the value of 3. Standard deviation figures, ranging from .928 to 1.013, suggest that the data distribution patterns across different sections are quite alike.

4.2 Research result

Through analyzing the correlations among the existing data and variables, researchers can pinpoint the most significant factors that impact the psychological resilience of adolescents in Dezhou, Shandong Province, China.

Table 3 Show the correlation coefficients among the various factors affecting psychological resilience

	Y	X_1	X_2	X_3	X_4	X_5
Y	1	0.528***	0.537***	-0.542***	0.388***	0.520***
X_1		1	0.389***	-0.390***	0.416***	0.473***
X_2			1	-0.850***	0.286***	0.381***
X_3				1	-0.290***	-0.389***
X_4					1	0.347***
X_5						1

*** Correlation is significant at the 0.001 level (2-tailed)

The multiple linear regression model's results were displayed in these tables. Here, the dependent variable was Y, while the independent variables consisted of X_1 through X_5 . The model summary table provided information about how well the regression model as a whole related to the data and its ability to make predictions. The R value, known as the correlation coefficient, showed how closely the predictor variables (X_1 to X_5) and the dependent variable (Y) were linked. With an R value of .691, it indicated a fairly strong relationship between them. The R Square value, also called the coefficient of determination, was .478. This meant that the predictor variables could account for 47.8% of the changes seen in the dependent variable. The adjusted R Square value, which considered the number of predictor variables, was .471. This made it a more accurate way to judge the model. Additionally, the model's standard error, or Std. Error of the Estimate, was 0.67. This number showed how much error the model typically made when making predictions.

Table 4 Show the results of the analysis of variance of the psychological resilience of adolescents in Dezhou, Shandong.

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.691 ^a	.478	.471	.67440	1.876

These tables presented the results of the multiple linear regression model, where the dependent variable was Y and the independent variables include X_1 to X_5 . The model summary table gave the relevance and predictive power of the entire regression model. The R value was the correlation coefficient, indicating the degree of correlation between the predictor variables (X_1 to X_5) and the dependent variable (Y) of the model. The R value was .691, indicating a moderate to strong correlation. R Square, which was the coefficient of determination, was .478, indicating that the predictor

variables in the model could explain 47.8% of the variation in the dependent variable. The adjusted R Square value was .471, taking into account the number of predictor variables, which was a fairer evaluation metric. The model's standard error (Std. Error of the Estimate) was 0.67, which was a measure of the model's prediction error.

Table 5 Show the results of the analysis of variance of the psychological resilience of adolescents in Dezhou, Shandong.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	P-Value.
1	Regression	160.033	5	32.007	70.373	<0.001
	Residual	174.647	384	.455		
	Total	334.680	389			

***p<0.001

The ANOVA^a table shows the significance test results of the regression model. The regression sum of squares (Regression SS) is 160.033, the residual sum of squares (Residual SS) is 174.647, and the total sum of squares (Total SS) is 334.680. The F statistic is 70.373, and its p value is less than 0.001, indicating that the predictor variables of the model as a whole have a significant impact on the dependent variable, that is, the model is valid. From Table, it was found that there were 5 factors that could predict the psychological resilience of adolescents in Dezhou, Shandong. The linear relationship was statistically significant at the 0.001 level as shown in Table.

Table 6 show the results of the factor analysis that can predict the psychological resilience of adolescents in Dezhou, Shandong.

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	P-Value
1	(Constant)	1.197	.405		2.954	.003**
	Sense of Meaning in Life (X ₁)	.228	.044	.234	5.191	.000***
	Growth Mindset (X ₂)	.154	.065	.167	2.364	.019*
	Fixed Mindset (X ₃)	-.170	.065	-.186	-2.618	.009**
	Mindfulness (X ₄)	.104	.040	.107	2.569	.011*
	Confucianism (X ₅)	.232	.043	.236	5.391	.000***

***p<0.001 **p<0.01 *p<0.05

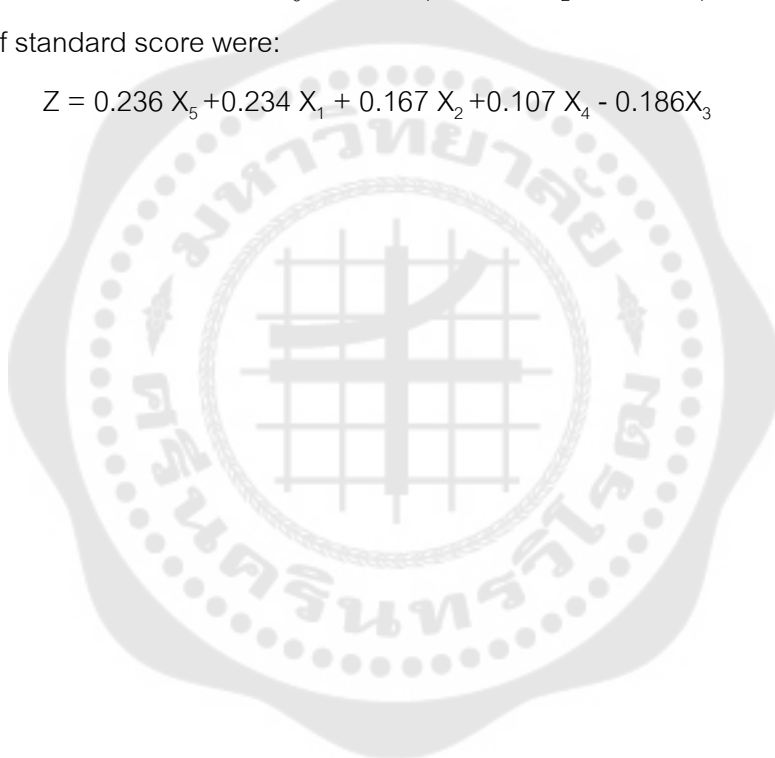
As can be seen from the table, at the statistical significance level of 0.001, the factors influencing the psychological resilience of adolescents in Dezhou City, Shandong Province are Confucianism and the sense of meaning in life. At the statistical significance level of 0.01, the factor influencing the psychological resilience of adolescents in Dezhou City, Shandong Province is the fixed mindset. At the statistical

significance level of 0.05, the factors influencing the psychological resilience of adolescents in Dezhou City, Shandong Province are the growth mindset and mindfulness. There were 5 factors, ranked from the most influencing factor to the least influencing factor namely, Confucianism (X_5) Sense of meaning in life (X_1) Growth Mindset (X_2) mindfulness (X_4) Fixed Mindset (X_3). Together, these 5 factors could explain the psychological resilience variance of adolescents in Dezhou, Shandong was 47.8%. Therefore, the coefficient of the forecaster was written as an equation as follows.

$$\hat{Y} = 1.197 + 0.232 X_5 + 0.228 X_1 + 0.154 X_2 + 0.104 X_4 - 0.170 X_3$$

In term of standard score were:

$$Z = 0.236 X_5 + 0.234 X_1 + 0.167 X_2 + 0.107 X_4 - 0.186 X_3$$



CHAPTER 5

CONCLUSION AND DISCUSSION

5.1 Objective of the Study

- 1.To study factors that related to the psychological resilience of Chinese adolescents
2. To study factors that affect the psychological resilience of Chinese adolescents

5.2 Research Hypothesis

Based on the literature review and theoretical framework, several research hypotheses are proposed to guide the investigation into the influencing factors of adolescents' psychological resilience. These hypotheses aim to test the relationships between key variables and their impact on adolescents' ability to bounce back from adversity and thrive in the face of challenges during the critical period of adolescence.

- 1.Sense of life meaning, Growth mindset, Fixed mindset, Mindfulness, and Confucianism were related to psychological resilience of Chinese adolescent in Dezhou City, Shandong province.

- 2.Sense of life meaning, Growth Mindset, Fixed Mindset, Mindfulness, and Confucianism were affecting psychological resilience of Chinese adolescent in Dezhou City, Shandong province.

5.3 Research methods

This research employs quantitative research methods to explore the factors that affect the psychological resilience of adolescents in Dezhou, Shandong. Quantitative research typically uses data to explain educational phenomena. In the form of a questionnaire survey, the data on the understanding, self-evaluation, and influencing factors of adolescents in Dezhou, Shandong are collected.

5.4 Conclusion and discussion

1. All variables related to psychological resilience of adolescents in Dezhou, Shandong are statistically significant at the .001 level, and there are 5 factors, namely, Sense of Meaning in Life, Growth Mindset, Fixed Mindset, Mindfulness, Confucianism, the results can be discussed as follows:

1.1 The research data indicates that there is a significant positive correlation between a growth mindset and adolescents' psychological resilience ($r = 0.537$, $p < 0.001$). From this, it can be seen that adolescents with a growth mindset, that is, those who believe that intelligence, abilities, and talents can be developed through effort and learning, tend to demonstrate higher psychological resilience when facing adversities such as academic pressure and social conflicts. Moreover, they are more inclined to adopt positive coping strategies and regard setbacks as opportunities for learning. This conclusion is consistent with the results of the meta-analysis conducted by Burnette et al. (2020) through integrating data from multiple populations, and is also supported by the empirical study on adolescent groups carried out by Zeng et al. (2012).

In summary, the growth mindset plays a crucial role in shaping adolescents' psychological resilience, and interventions based on the growth mindset are expected to become an effective approach to enhancing the mental health of adolescents. Therefore, future research could focus on exploring effective methods for cultivating a growth mindset in educational settings, delve deeply into its long-term impacts on adolescents' life satisfaction, career development, and other aspects, and conduct cross-cultural studies, so as to develop more culturally appropriate intervention strategies.

1.2 In contrast, the research data clearly demonstrates that there is a significant negative correlation between the fixed mindset and psychological resilience ($r = -0.542$, $p < 0.001$), and another study has also confirmed that there is a moderate yet significant negative correlation between the two variables.

From this, we can conclude that there indeed exists a significant negative correlation between the fixed mindset and psychological resilience, and this conclusion

is consistent with the research findings of Boullion et al. (2021) and Gunnarsdóttir (2021). Boullion et al. (2021) utilized sophisticated analytical methods and a large and diverse sample to confirm that this negative correlation is not accidental. Meanwhile, Gunnarsdóttir (2021) replicated this result through a different research design and sample, which further enhances the validity of the conclusion. Moreover, as shown in the research of scholars such as Dweck (2006), individuals who hold a fixed mindset firmly believe that their abilities are innate and unchangeable. Therefore, when facing adversity, they tend to regard setbacks as reflections of their own inadequacies rather than opportunities for growth. As a result, they find it difficult to learn from failures and adjust their strategies, which in turn leads to lower levels of psychological resilience. These research findings collectively emphasize the importance of cultivating a growth mindset for enhancing psychological resilience. Meanwhile, they also provide important implications for educational practices, workplace training, and mental health interventions.

1.3 Data from this study shows a significant positive correlation ($r = 0.528$, $p < 0.001$) between the sense of meaning in life and psychological resilience, indicating that stronger life meaning is linked to higher psychological resilience. This finding aligns with Frankl (1985) existential theory, which posits better adaptability in adversity for those perceiving life purpose. (Mohseni et al., 2019) used a mixed-methods approach to not only replicate this positive correlation but also explore its mechanisms, showing that enhancing life meaning can strengthen psychological resilience and benefit mental health. Miao and Cao (2024) conducted a large-scale longitudinal study on diverse populations and found that higher life meaning was closely related to greater psychological resilience, as demonstrated by college students in meaningful activities and trauma survivors finding meaning in experiences. In conclusion, these studies from various perspectives and populations confirm the robust and reciprocal relationship between life meaning and psychological resilience, suggesting that interventions enhancing life meaning could be effective for boosting psychological resilience and

improving mental health. Future research could explore the relationship's mechanisms, moderators, and mediators for more targeted interventions.

1.4 The research data shows that there is a significant positive correlation between Confucianism and psychological resilience ($r = 0.520$, $p < 0.001$). This finding is consistent with the conclusion of the study conducted by Xi et al. (2015) which argued that Confucian philosophical concepts are not merely abstract moral teachings but rather a practical source of psychological strength that enables individuals to better cope with life's difficulties. Meanwhile, this also aligns with the results derived from Zhou (2023) when exploring the integration of excellent traditional Chinese culture into positive mental health education for college students, that is, Confucian culture has a positive impact on mental health, further confirming the significant value of Confucian ideas in shaping individual psychological resilience.

1.4.1 Benevolence (Ren)

Research indicates that Li and Hou (2012) identified a significant positive correlation between Confucianism "benevolence" (Ren) - based coping mechanisms and psychological resilience. Building on this foundation, Fan et al. (2017) further elucidated that "benevolence" (Ren) fosters psychological resilience through three distinct pathways. These findings collectively underscore the profound impact of Confucianism "benevolence" (Ren) on mental fortitude. The concept of "benevolence" (Ren), encompassing compassion, social responsibility, and ethical conduct, functions not only as a moral principle but also as a psychological buffer against adversity. Li and Hou (2012) discovery of the "pro - adversity mindset" and "sense of responsibility" within Ren - inspired coping strategies aligns seamlessly with Fan et al. (2017) three - pronged model, which highlights Ren's role in enhancing social support, cultivating harmonious relationships, and deepening moral self - cultivation.

1.4.2 Righteousness (Yi)

Fan et al. (2017) demonstrated that upholding Confucianism "righteousness" (Yi) mitigates cognitive dissonance during adversity, enabling individuals to allocate mental resources more effectively for problem - solving and

emotional regulation. This evidence confirms a significant positive correlation between "righteousness" (Yi) and psychological resilience, indicating that "righteousness" (Yi) is not only a moral principle but also a practical means of enhancing mental toughness. By preserving consistency between actions and beliefs, "righteousness" (Yi) reduces psychological discomfort and empowers individuals to navigate challenges more adeptly. This finding aligns with Rees et al. (2015), whose research showed that individuals with moral principles can maintain emotional stability and adaptability in challenging work environments. Integrating "righteousness" (Yi) into psychological research thus offers culturally - relevant strategies to boost resilience, highlighting the enduring value of Confucianism virtues in modern mental health studies.

1.4.3 Propriety (Li)

Jing (2007) revealed a moderately significant positive correlation between the consistent practice of Confucianism "propriety" (Li) and overall psychological resilience. This indicates that embedding "propriety" (Li) in daily routines can effectively boost individuals' ability to handle challenges and stress. "Propriety" (Li)-based behaviors are crucial for emotional regulation, a key aspect of resilience. Functioning dualistically, "propriety" (Li) stabilizes society by minimizing interpersonal conflicts and regulates emotions by cultivating self-discipline and emotional control. Giang and Huynh (2022) study shows that Confucianism "propriety" (Li) is of great significance for social and emotional health, and can enhance individuals' psychological resilience. The dual role of "propriety" (Li) underscores the lasting significance of Confucianism virtues in maintaining social order and promoting individual mental health and resilience in modern society.

1.4.4 Wisdom (Zhi)

This research confirms a significant positive correlation between Confucianism "wisdom" (Zhi) and psychological resilience, aligning with Jing (2007) theory that defines "wisdom" (Zhi) as the ability to make value - based judgments and understand social dynamics, thereby enabling rational responses to stress and enhancing resilience. By employing the CD - RISC, the study experimentally shows that

Confucianism wisdom - based interventions effectively boost participants' resilience scores, validating the theoretical connection and suggesting new approaches for mental health interventions. Building on this, Huo et al. (2013) further elaborate that Confucianism wisdom shapes rational cognitive models and adaptive thinking through concepts like "understanding the essence of things through systematic learning"("WenDaoJinShi") and "remaining calm regardless of circumstances"("QiongDaZiRuo"). Their historical case analysis of Confucian scholars, such as Confucius and Mencius, showed how the rational decision - making and long - term planning guided by "wisdom" (Zhi) can translate into resilience during adversity. In sum, Confucianism wisdom not only enriches the theoretical understanding of psychological resilience but also provides practical, culturally - rooted strategies for enhancing mental health in modern society.

1.4.5 Fidelity (Xin)

Liu and Wang (2018) study established a significant positive correlation between Confucianism "fidelity" (Xin) and psychological resilience, particularly among migrant children. This indicates that upholding the principles of "fidelity" (Xin) not only serves as a psychological buffer against stress but also enhances one's ability to adapt and bounce back from adversity. The research revealed that "fidelity" (Xin) functions through two main pathways: cognitively, by fostering positive beliefs about adversity and promoting problem - focused coping strategies, and socially, by acting as a social adhesive that helps build supportive networks. Psychologically, "fidelity" (Xin) provides a stabilizing belief system, enabling individuals to maintain emotional equilibrium during challenging times. These findings align with the broader understanding of how Confucianism virtues contribute to mental well - being, demonstrating that "fidelity" (Xin) is not just an ethical concept but a practical psychological resource. They emphasize the potential of integrating Confucianism like "fidelity" (Xin) into modern mental health interventions, especially for vulnerable populations, to enhance their cognitive, social, and emotional resilience in the face of stress and adversity.

1.5 The data from this study shows that there is a significant positive correlation ($r = 0.388$, $p < 0.001$) between mindfulness and psychological resilience. This indicates that cultivating mindfulness can significantly enhance individuals' ability to adapt to adverse situations and recover from them. This conclusion is consistent with the findings of Pidgeon and Keye (2014) initial study on 141 college students, which first confirmed this positive association and laid the foundation for subsequent research. Building on this, Oh et al. (2022) further discovered a similar significant positive correlation in different cultural backgrounds and age groups, thus confirming the cross-cultural universality of this relationship. Collectively, these studies have validated the theoretical connection between mindfulness and psychological resilience, and have also highlighted the significant value of mindfulness as a practical strategy based on empirical evidence in promoting mental health. Therefore, integrating mindfulness training into educational, healthcare, and community settings can help individuals develop the psychological resources necessary to cope with life challenges, which fully demonstrates the profound significance of these research findings in enhancing the overall level of mental health.

2. This study reveals that five factors affected the psychological resilience of adolescents in Dezhou City, Shandong province. Confucianism and sense of meaning in life significantly influence adolescents' psychological resilience at the 0.001 level. Fixed mindset is a significant predictor at the 0.01 level, while growth mindset and mindfulness show significant effects at the 0.05 level.

2.1 Confucianism significant affected the psychological resilience level of adolescents in Dezhou, Shandong, China, with a B value of 0.232, $P < 0.001$, the highest among all factors examined in this study.

As evidenced by Zhang (2015) and Luo et al. (2010), Confucianism, with the doctrines of the mean, benevolence, righteousness, and propriety at their core, have a profound positive impact on psychological well-being and resilience. Zhang (2015) found that internalizing these values helps cultivate a positive mindset, allowing individuals to view life's challenges as opportunities for growth. Similarly, Luo et al.

(2010) revealed that the Confucianism coping model encourages people to actively confront adversity and turn it into motivation for self-improvement. Together, these findings suggest that Confucianism provide a comprehensive framework for enhancing psychological resilience. By promoting cognitive transcendence and emphasizing long-term personal development rather than immediate stress relief, Confucianism enables individuals to reframe difficult situations, develop virtues such as perseverance and compassion, and maintain an optimistic attitude.

2.1.1 Benevolence (Ren)

This analysis concludes that the Confucianism virtue of "benevolence" (Ren) has a significant affected psychological resilience, playing a crucial role in modern society. As the core of Confucianism philosophy, "benevolence" emphasizes compassion, empathy, and respect for life, which can cultivate a positive attitude and a strong sense of responsibility, thereby enhancing individuals' ability to cope with life challenges.

As Tao and Qiyong (2012) explored the values of Confucianism benevolence and its universal application in extending love, providing foundational insights. Their research indicates that "benevolence" is not merely a moral concept but also a practical force that can contribute to the construction of a harmonious social environment. This, in turn, serves as a fertile ground for nurturing individual psychological resilience. Building on these earlier findings, Zhang (2015) research further delves into the mechanism by which "benevolence" impacts resilience. The study empirically demonstrates that "benevolence" acts as a catalyst in establishing robust social support networks. Such networks offer emotional comfort and practical assistance during difficulties, effectively acting as a buffer against stress. Moreover, the altruistic nature of "benevolence" encourages diverse perspectives and better emotional management, enabling individuals to transform challenges into opportunities for personal growth and positive social interaction.

In essence, "benevolence" enhances psychological resilience by improving interpersonal relationships and emotional intelligence, fostering a sense of

community, and providing a deeper sense of purpose. It serves as a guiding principle that not only enables individuals to endure adversity but also empowers them to emerge stronger, highlighting the enduring significance of Confucianism in promoting mental well-being.

2.1.2 Righteousness (Yi)

This study concludes that the Confucianism of "righteousness" (Yi), emphasizing moral responsibility, significantly affected psychological resilience, complementing "benevolence" (Ren). As Huaibin (2006) noted, "righteousness" (Yi)'s sense of responsibility, rooted in Confucius's idea, goes beyond action evaluation. "righteousness" (Yi) requires fulfilling self-duties (e.g., integrity, self-improvement) and social obligations (e.g., common good contribution). Building on this, Xie and Wong (2021) further explain that this dual responsibility affects mental health and resilience in two ways. Firstly, clarifying responsibilities reduces moral confusion and gives direction. Secondly, fulfilling them brings rewards like achievement, motivating problem-solving. When facing setbacks, "righteousness" (Yi) shifts individuals from a passive to an active mindset, improving skills, confidence, and self-efficacy. These effects enhance the ability to handle adversity and overall resilience. In short, "righteousness" (Yi) helps endure hardships and promotes growth and mental strength, consistent with previous research.

2.1.3 Propriety (Li)

This study clearly concludes that the Confucianism concept of "propriety" (Li) makes a significant affected psychological resilience. With its core elements of respect, humility, prudence, and honesty, "propriety" (Li) not only systematically regulates social interactions but also remarkably strengthens an individual's ability to cope with stress. Specifically, at the micro level, "propriety" (Li) serves as the core criterion for interpersonal communication, guiding individuals to handle relationships properly. At the macro level, it provides dual support for the construction of psychological resilience by facilitating the formation of supportive social networks and cultivating individuals' self-discipline in emotional regulation.

This finding is highly consistent with the research conclusions of Ge et al. (2021). They also emphasize the crucial role of "propriety" (Li) in Confucianism thought in enhancing psychological resilience. Coincidentally, in Hu (2025) research, from a unique perspective of family rituals, the important value of "propriety" (Li) in contemporary social life is further revealed, which provides supplementary evidence for the positive correlation between "propriety" (Li) and psychological resilience from a lateral aspect. Considering these research results comprehensively, the reason why individuals who abide by the norms of "propriety" (Li) are better at dealing with adversity is that "propriety" (Li) can create a predictable social environment, effectively reduce uncertainty, and thus build a solid support system against stressors.

This fully demonstrates that social harmony formed under the guidance of Confucianism principles has a profound and non-negligible impact on an individual's mental health. Meanwhile, it also provides highly valuable theoretical evidence for constructing psychological resilience from both individual and social dimensions.

2.1.4 Wisdom (Zhi)

This study posits that Confucianism "wisdom" (Zhi) has a positive and significant affected psychological resilience. This finding resonates with Lihua et al. (2017) research, which indicates that Confucianism emphasizes enhancing wisdom through learning and practice. This enables individuals to utilize their knowledge and wisdom to find solutions in difficult situations, thus maintaining a positive mindset and tenacity. Gan et al. (2024) further validate this perspective by demonstrating that "wisdom" (Zhi) promotes cognitive restructuring and self-regulation, empowering individuals to face challenges rationally and proactively. Operating through a multi-faceted mechanism encompassing cognitive, emotional, and behavioral dimensions, "wisdom" (Zhi) combats negative thoughts, alleviates adverse emotions, and guides strategic decision-making. These studies collectively underscore the crucial role of "wisdom" (Zhi) in enhancing psychological resilience, highlighting the enduring

relevance of Confucianism philosophy in modern mental health research and offering a comprehensive approach for individuals to adapt and grow amidst adversity.

2.1.5 Fidelity (Xin)

This study concludes that the Confucianism of "fidelity" (Xin) exerts a significant affected psychological resilience by shaping self-efficacy and social trust. As a core ethical principle, "fidelity" (Xin) drives cognitive restructuring, prompting individuals to internalize the moral weight of commitments, thereby enhancing self-discipline and personal accountability. This finding aligns with Feng (2009) exploration of "fidelity" (Xin) in Confucianism philosophy, which emphasizes its central role in fostering self-regulatory awareness and building social trust. Moreover, Zeng et al. (2012) empirical research validates our conclusion, demonstrating that individuals committed to honesty enhance self-efficacy through positive reinforcement cycles and establish robust social support networks that buffer stress and strengthen resilience.

The impact of "fidelity" (Xin) on psychological resilience underscores the enduring relevance of Confucianism in modern psychological research. Integrating traditional ethical concepts into contemporary mental health frameworks offers valuable insights for enhancing human adaptability. By promoting moral cultivation and social cohesion, "fidelity" (Xin) provides a holistic approach to resilience-building, enabling individuals to persevere through adversity with greater determination and integrity. This not only bridges ancient wisdom with modern psychology but also highlights the practical significance of Confucianism philosophy in promoting psychological well-being.

2.2 This study concludes that the sense of meaning in life significantly affected psychological resilience of adolescents in Dezhou, Shandong Province, China, with a B - value of 0.228 and $P < 0.001$.

This finding aligns with Arslan and Yildirim (2021) theoretical framework, which posits that a strong sense of life meaning acts as an internal compass, providing purpose and direction that motivate individuals to persevere through challenges. It fosters existential worth, enabling a positive cognitive appraisal of setbacks as growth

opportunities rather than threats. Boreham and Schutte (2023) meta-analytic study further validates these findings, demonstrating that individuals with a heightened sense of meaning in life are more likely to reappraise stressors as chances for personal growth, engage in proactive coping strategies, and regulate emotions effectively. Notably, such individuals also exhibit greater resilience in the aftermath of traumatic events, finding purpose and hope even in adversity.

The significant impact of the sense of meaning in life on adolescent psychological resilience underscores its importance in modern mental health research. It implies that integrating meaning - cultivation into adolescent development interventions could be a pivotal strategy. By fostering a strong sense of meaning in life, adolescents can be equipped with the cognitive, emotional, and behavioral resources needed to navigate the challenges of adolescence, maintain mental well - being, and bounce back from setbacks more effectively. This bridges theoretical understanding with practical applications, highlighting the value of focusing on life meaning as a protective factor in adolescent mental health.

2.3 This study shows that growth mindset significantly affected psychological resilience of adolescents in Dezhou, Shandong Province, China, with a B-value of 0.154 and $P < 0.05$. It empowers individuals to view challenges as opportunities for growth, adopt positive coping strategies, and regulate emotions effectively when facing adversity.

This finding aligns with previous research by Tao et al. (2022), who also posited that a growth mindset enhances psychological resilience. Burnette et al. (2020) further demonstrated that a growth mindset bolsters self-efficacy and coping capabilities. The conclusion underscores the crucial role of a growth mindset in helping adolescents navigate the challenges of adolescence, including academic pressure and self-identity formation. Beyond individual benefits, fostering a growth mindset can create a supportive social and educational culture, enhancing collective resilience. Cultivating a growth mindset is thus essential for promoting adolescents' long-term mental well-being and resilience.

2.4 This study concludes that mindfulness significantly affected psychological resilience of adolescents in Dezhou, Shandong Province, China, with a B-value of 0.104 and $P < 0.05$. This statistically significant result not only quantifies the strength of the relationship but also underscores the importance of mindfulness as a contributing factor to adolescent mental health. The finding aligns with a burgeoning body of theoretical frameworks and empirical research that collectively highlight the multifaceted benefits of mindfulness for psychological well-being.

This finding aligns with Oh et al. (2022) theoretical framework, which posits that mindfulness operates through a dual - mechanism approach to boost psychological well - being. It also corroborates the empirical research of Liu et al. (2022), who found a consistent positive correlation between mindfulness levels and increases in psychological resilience over time, even after controlling for various confounding factors.

This implies that mindfulness can serve as a protective factor for adolescents, equipping them with effective emotional and cognitive coping strategies. Mindful adolescents are better at regulating emotions, maintaining focus under pressure, and seeking social support, which contribute to a virtuous cycle of improved well - being. Given the rising prevalence of mental health issues among adolescents, integrating mindfulness - based practices into educational and mental health interventions offers a promising, evidence - based approach to promote their long - term mental health and resilience. As mindfulness is a trainable skill, it provides opportunities for scalable interventions tailored to adolescents' specific needs.

2.5 In conclusion, the fixed mindset, contrary to the growth mindset, significantly affected the psychological resilience of adolescents in Dezhou, Shandong Province, China, with B-value of -0.170, $P < 0.01$, showing that higher fixed mindset levels are associated with lower psychological resilience.

This finding aligns with Yeager et al. (2014) research, which indicates that adolescents with a fixed mindset (seeing personal traits as unchangeable) are more vulnerable to psychological stress. They tend to view failure as an indication of inherent flaws rather than a learning chance, which can trigger negative emotions and avoidance

behaviors, forming a self-defeating cycle that weakens psychological resilience. Similarly, Jia et al. (2022) study further validates the key role of mindsets in mental health. It explores the potential harm of the fixed mindset to psychological resilience and reveals its mechanism from multiple aspects.

Practically, helping adolescents overcome the fixed mindset is vital for improving their mental health. By guiding them to believe abilities can be developed and failure is part of growth, a growth mindset can be established, enhancing their psychological resilience and laying a foundation for long-term happiness and success.

Discussion

This research concludes that Confucianism, as the core of Chinese traditional culture, exerts a profound and multifaceted influence on the psychological resilience of contemporary adolescents, particularly evident in Dezhou, a hub of Confucian heritage. The Confucianism of benevolence, righteousness, propriety, wisdom, and fidelity infiltrate adolescents' cognitive frameworks through family, school, and social channels, serving as a developmental bedrock. For instance, benevolence encourages social support - seeking and altruistic coping, while righteousness guides moral decision - making.

The Confucian ideology of "constantly striving to become stronger" acts as a crucial regulator of psychological resilience, prompting positive attributions and emotional stability in the face of academic setbacks. Longitudinal studies confirm that adolescents embracing this spirit demonstrate enhanced adaptability and faster psychological recovery. Additionally, Confucianism provides a cultural foundation for constructing a sense of life meaning, which forms a virtuous cycle with psychological resilience.

Mindset and mindfulness also interact significantly with Confucianism. The growth mindset aligns with Confucianism ideals of self - improvement, while the fixed mindset contradicts them, impeding growth. Mindfulness, similar to Confucian self - reflection, regulates emotions and enhances self - awareness, complementing Confucianism. These elements Confucianism, life meaning, growth mindset, and

mindfulness intertwine to form a system that shapes adolescent psychological resilience, with the fixed mindset acting as a barrier.

Furthermore, Confucianism's intergenerational transmission through multiple social mechanisms not only influences individual behavior but also constructs a cultural community, playing a vital role in social order, cultural continuity, and national identity. Looking forward, future research should focus on integrating Confucian ideas with modern educational systems to promote the creative transformation of this cultural heritage, thereby enhancing its practical value in adolescent mental health education and cultural development.

5.5 Suggestion

Research shows that the psychological resilience of adolescents in Dezhou, Shandong Province, China is influenced by Confucianism, sense of meaning in life, growth mindset, mindfulness and fixed mindset. Here are some suggestions for adolescents in Dezhou, Shandong:

1) Suggestions for School

To support adolescents' psychological resilience, schools should include Confucianism, mindfulness, growth mindset, and career planning in both the curriculum and school activities. This can be done by teaching Confucian classics, offering career planning lessons, and using teaching methods that encourage effort and see challenges as learning opportunities. Mindfulness activities suitable for each age group should be part of the daily routine. Cultural programs such as role plays, contests, and classroom discussions on philosophical topics can help students reflect on themselves. Creating a supportive and inclusive classroom environment that values difference, promotes peer support, and encourages students to take risks and track their progress can further strengthen their emotional and academic development.

2) Suggestions for Family

Families play a key role in shaping adolescents' values, learning attitudes, and emotional well-being. Parents should promote Confucianism at home,

adopt positive approaches that turn failures into learning opportunities, and model a growth mindset through their own actions. Teaching mindful communication can also help children express their emotions openly and without judgment. In addition, parents can support learning by helping adolescents set clear and achievable goals, focus on the learning process rather than the outcomes, and encourage the use of diverse problem-solving strategies. This supportive environment fosters both academic growth and emotional resilience.

3) Suggestions for Society

To strengthen adolescents' psychological resilience, society should develop supportive community structures and raise public awareness. This includes establishing community learning centers, mentorship programs, and mindfulness services. Public campaigns can help promote Confucian values, a growth mindset, and mindfulness practices. Additionally, cross-sector collaboration and supportive policies from local governments are essential for ensuring long-term impact.

REFERENCES

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American psychologist*, 55(5), 469.
- Arslan, G., & Yildirim, M. (2021). A longitudinal examination of the association between meaning in life, resilience, and mental well-being in times of coronavirus pandemic. *Frontiers in psychology*, 12, 645597.
- Astin, A. W., Astin, H. S., & Lindholm, J. A. (2010). *Cultivating the spirit: How college can enhance students' inner lives*. John Wiley & Sons.
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, 1986(23-28), 2.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.
- Baumeister, R. F., & Leary, M. R. (2017). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Interpersonal development*, 57-89.
- Baumeister, R. F., & Vohs, K. D. (2002). The pursuit of meaningfulness in life. *Handbook of positive psychology*, 1, 608-618.
- Bernecker, K., & Job, V. (2019). Mindset theory. *Social psychology in action: Evidence-based interventions from theory to practice*, 179-191.
- Biegel, G. M., Brown, K. W., Shapiro, S. L., & Schubert, C. M. (2009). Mindfulness-based stress reduction for the treatment of adolescent psychiatric outpatients: A randomized clinical trial. *Journal of consulting and clinical psychology*, 77(5), 855.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Specia, M., & Velting, D. (2004). Mindfulness: A proposed operational definition. *Clinical psychology: Science and practice*, 11(3), 230.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development*, 78(1), 246-263.
- Bonanno, G. A. (2008). Loss, trauma, and human resilience: have we underestimated the

human capacity to thrive after extremely aversive events?

Bond, M. H. E. (1996). *The handbook of Chinese psychology*. Oxford University Press.

Boreham, I. D., & Schutte, N. S. (2023). The relationship between purpose in life and depression and anxiety: A meta-analysis. *Journal of clinical psychology*, 79(12), 2736-2767.

Boullion, A., Withers, M. C., & Lippmann, M. (2021). Mindsets: investigating resilience. *Personality and individual differences*, 174, 110669.

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. *Handbook of adolescent psychology*, 2(Pt 1), 74-104.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, 84(4), 822.

Burnette, J. L., Knouse, L. E., Vavra, D. T., O'Boyle, E., & Brooks, M. A. (2020). Growth mindsets and psychological distress: A meta-analysis. *Clinical Psychology Review*, 77, 101816.

Burnette, J. L., O'boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: a meta-analytic review of implicit theories and self-regulation. *Psychological bulletin*, 139(3), 655.

Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour research and therapy*, 44(4), 585-599.

Chang, W. C., & Lim, L. L. (2007). Resilience and well-being in an Asian context- Singapore. *Journal of Psychology in Chinese Societies*, 8(1), 47-69.

Charness, G., Le Bihan, Y., & Villeval, M. C. (2024). Mindfulness training, cognitive performance and stress reduction. *Journal of Economic Behavior & Organization*, 217, 207-226.

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, 18(2), 76-82.

- Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of general psychiatry*, 60(8), 837-844.
- Creswell, J. D., & Lindsay, E. K. (2014). How does mindfulness training affect health? A mindfulness stress buffering account. *Current directions in psychological science*, 23(6), 401-407.
- De la Fuente, J., Santos, F. H., Garzón-Umerenkova, A., Fadda, S., Solinas, G., & Pignata, S. (2021). Cross-sectional study of resilience, positivity and coping strategies as predictors of engagement-burnout in undergraduate students: implications for prevention and treatment in mental well-being. *Frontiers in psychiatry*, 12, 596453.
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random house.
- Dweck, C. S. (2016). The remarkable reach of growth mind-sets. *Scientific American Mind*, 27(1), 36-41.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological review*, 95(2), 256.
- Dweck, C. S., & Yeager, D. S. (2019). Mindsets: A view from two eras. *Perspectives on Psychological science*, 14(3), 481-496.
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (2013). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *Adolescents and their Families*, 74-85.
- Ehrlinger, J., Mitchum, A. L., & Dweck, C. S. (2016). Understanding overconfidence: Theories of intelligence, preferential attention, and distorted self-assessment. *Journal of Experimental Social Psychology*, 63, 94-100.
- Emmons, R. A. (2003). Personal goals, life meaning, and virtue: Wellsprings of a positive life.
- Epel, E., Laraia, B., Coleman-Phox, K., Leung, C., Vieten, C., Mellin, L., Kristeller, J., Thomas, M., Stotland, N., & Bush, N. (2019). Effects of a mindfulness-based intervention on distress, weight gain, and glucose control for pregnant low-income

- women: a quasi-experimental trial using the ORBIT model. *International journal of behavioral medicine*, 26, 461-473.
- Fan, Y., Yang, Q., & Wang, Y. (2017). The Value of the Confucian Thought of "Benevolence Learning" for the Psychological Adjustment of Contemporary People. *Clinical Journal of Traditional Chinese Medicine*, 24(2), 4-7.
- Feng, X. M. (2009). What I've learned studying Xin (Trustworthiness).
http://tsoidug.org/papers_xin.php
- Ferrari, A. J., Charlson, F. J., Norman, R. E., Patten, S. B., Freedman, G., Murray, C. J., Vos, T., & Whiteford, H. A. (2013). Burden of depressive disorders by country, sex, age, and year: findings from the global burden of disease study 2010. *PLoS medicine*, 10(11), e1001547.
- Frankl, V. E. (1985). *Man's search for meaning*. Simon and Schuster.
- Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A., Lathia, N., Howarth, E., & Jones, P. B. (2018). A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): a pragmatic randomised controlled trial. *The Lancet Public Health*, 3(2), e72-e81.
- Gan, Y., Huang, H., Wu, X., & Meng, M. (2024). What doesn't kill us makes us stronger: insights from neuroscience studies and molecular genetics. *Current Opinion in Behavioral Sciences*, 59, 101431.
- Garland, E. L., Geschwind, N., Peeters, F., & Wichers, M. (2015). Mindfulness training promotes upward spirals of positive affect and cognition: multilevel and autoregressive latent trajectory modeling analyses. *Frontiers in psychology*, 6, 15.
- Ge, X., Li, X., & Hou, Y. (2021). Confucian ideal personality traits (Junzi personality): Exploration of psychological measurement. *Acta Psychologica Sinica*, 53(12), 1321.
- Gelman, S. A. (2003). *The essential child: Origins of essentialism in everyday thought*. Oxford University Press.
- Giang, T.-V., & Huynh, V.-S. (2022). The impact of Confucianism on social and emotional health of Vietnamese adolescents: a phenomenological study. *Acta psychologica*,

229, 103700.

- Gong, Z., Wang, H., Zhong, M., & Shao, Y. (2023). College students' learning stress, psychological resilience and learning burnout: status quo and coping strategies. *BMC psychiatry*, 23(1), 389.
- Graberc, J. A., Brooks – Gunn, J., & Warren, M. P. (1995). The antecedents of menarcheal age: Heredity, family environment, and stressful life events. *Child development*, 66(2), 346-359.
- Grant, H., & Dweck, C. S. (2003). Clarifying achievement goals and their impact. *Journal of personality and social psychology*, 85(3), 541.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of psychosomatic research*, 57(1), 35-43.
- Gunnarsdóttir, S. (2021). *Growth vs. fixed mindset: the relationship between student's mindset, resilience and psychological well-being*
- Guo, M., Liu, H., & Yao, M. (2021). The Confucian value of benevolence and volunteering among Chinese college students: The mediating role of functional motives. *Sage Open*, 11(1), 21582440211006683.
- Hartmann, S., Weiss, M., Newman, A., & Hoegl, M. (2020). Resilience in the workplace: A multilevel review and synthesis. *Applied psychology*, 69(3), 913-959.
- Ho, D. Y. (1995). Selfhood and identity in confucianism, taoism, buddhism, and hinduism: Contrasts with the west. *Journal for the theory of social behaviour*.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of consulting and clinical psychology*, 78(2), 169.
- Hong, Y.-y., Chiu, C.-y., Dweck, C. S., Lin, D. M.-S., & Wan, W. (1999). Implicit theories, attributions, and coping: a meaning system approach. *Journal of Personality and Social psychology*, 77(3), 588.
- Howe, N., & Strauss, W. (2009). *Millennials rising: The next great generation*. Vintage.
- Hu, A. (2025). Family rituals in today's China: Unveiling empirical patterns and participant

- consequences. *Chinese Journal of Sociology*, 2057150X251328487.
- Huaibin, J. (2006). Confucian Coping and Its Role to Mental Health. *Acta Psychologica Sinica*.
- Hughes, Z., Ball, L. J., Richardson, C., & Judge, J. (2023). A meta-analytical review of the impact of mindfulness on creativity: Framing current lines of research and defining moderator variables. *Psychonomic Bulletin & Review*, 30(6), 2155-2186.
- Huo, Y., Chen, Y., & Guo, Z. (2013). An exploration on the inter complementary optimistic psychological thoughts of the Confucianism and Taoism in the traditional Chinese culture *Acta Psychologica Sinica*, 45(11), 1305–1312.
<https://doi.org/https://doi.org/10.3724/SP.J.1041.2013.01305>
- Hwang, K.-K. (2001). The deep structure of Confucianism: A social psychological approach. *Asian Philosophy*, 11(3), 179-204.
- Jaidumrong, N., Mahapoonyanont, N., Songsang, N., & Gudmundsson, M. (2023). Effect of growth mindset on the academic achievement of students. In Proceedings 8th International Conference on Education and Social Science (ICESS-2023) In *"New Approaches in Education and Social Science"*, Songkhla, Thailand.
- Jia, X., ZHANG, Y., & QIU, J. (2022). The impact of mindsets on emotional well-being of college students: a Chain mediating model of perceived stress and resilience. *Journal of Southwest University Social Science Edition*, 48(4), 202-209.
- Jing. (2007). *What Confucianism can contribute to psychological counseling* Acta Psychologica Sinica.
- Johnson, D., Dupuis, G., Piche, J., Clayborne, Z., & Colman, I. (2018). Adult mental health outcomes of adolescent depression: A systematic review. *Depression and anxiety*, 35(8), 700-716.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: past, present, and future.
- Kabat-Zinn, J., & Hanh, T. N. (2009). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. Delta.
- Karwowski, M. (2014). Creative mindsets: Measurement, correlates, consequences.

Psychology of Aesthetics, Creativity, and the Arts, 8(1), 62.

- Keng, S.-L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical psychology review*, 31(6), 1041-1056.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, 62(6), 593-602.
- Kim, H. S., Sherman, D. K., & Updegraff, J. A. (2016). Fear of Ebola: The influence of collectivism on xenophobic threat responses. *Psychological Science*, 27(7), 935-944.
- Kim, Y., Boulware, J. N., Nusbaum, H. C., & Henly, A. (2024). Civic virtues, wisdom, and psychological resilience. In *The Self, Civic Virtue, and Public Life* (pp. 21-36). Routledge.
- Kumpfer, K. L. (2002). Factors and processes contributing to resilience: The resilience framework. *Resilience and development: Positive life adaptations*, 179-224.
- Lancaster, L. C., & Stillman, D. (2003). When generations collide: Who they are, why they clash, how to solve the generational puzzle at work. (No Title).
- Leong, D., & Kiat, K. H. (2023). *A Conception of Yi (義) Harmony, Fairness and Justice in Management. A Prospective Inquiry Framework*. SSRN.
- Lerner, R. M., & Galambos, N. L. (1998). Adolescent development: Challenges and opportunities for research, programs, and policies. *Annual review of psychology*, 49(1), 413-446.
- Li, J. (2015). Rediscover lasting values: Confucian cultural learning models in the twenty-first century. In *Re-envisioning Chinese Education* (pp. 130-147). Routledge.
- Li, T., & Hou, Y. (2012). The Psychological Structure and Verification of Confucian-style Coping *Journal of Educational Science of Hunan Normal University*, 11(3), 11-18.
- Lihua, Z., Gui, C., Yanghua, J., Liqiong, L., & Jian, C. (2017). Self-compassion and confucian coping as a predictor of depression and anxiety in impoverished Chinese undergraduates. *Psychological Reports*, 120(4), 627-638.

- Liu, F. R., Song, X. Q., Shang, X. P., Wu, M. F., Sui, M. L., Dong, C., & Liu, X. K. (2020). [Meta-analysis of the prevalence of depressive symptoms among adolescents (Translated title)]. . *Chinese psychological Health Journal*, 34(2).
- Liu, J., & Wang, Q. (2018). The influence of daily stress on the sense of fidelity of migrant children: The moderating roles of social support and beliefs about adversity. *Psychological Development and Education*, 34(5), 548-557.
- Liu, X., Wang, Q., & Zhou, Z. (2022). The association between mindfulness and resilience among university students: a meta-analysis. *Sustainability*, 14(16), 10405.
- Liu, Y. (2015). Is Confucianism Impacting the World Today? NAAAS Conference Proceedings,
- Lo, H. H., Wong, J. Y., Wong, S. W., Wong, S. Y., Choi, C., Ho, R. T., Fong, R. W., & Snel, E. (2019). Applying mindfulness to benefit economically disadvantaged families: A randomized controlled trial. *Research on Social Work Practice*, 29(7), 753-765.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American psychologist*, 57(9), 705.
- Lomas, T., Medina, J. C., Ivztan, I., Rupprecht, S., Hart, R., & Eiroa-Orosa, F. J. (2017). The impact of mindfulness on well-being and performance in the workplace: an inclusive systematic review of the empirical literature. *European Journal of Work and Organizational Psychology*, 26(4), 492-513.
- Lu, J., Xu, X., Huang, Y., Li, T., Ma, C., Xu, G., Yin, H., Xu, X., Ma, Y., & Wang, L. (2021). Prevalence of depressive disorders and treatment in China: a cross-sectional epidemiological study. *The Lancet Psychiatry*, 8(11), 981-990.
- Luo, M. C., Huang, X. T., & Su, D. (2010). The Impact of the Confucian Culture to Present Mental Health Services of Chinese. *Psychological Science*, 18(9), 1481-1488. .
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, 71(3), 543-562.
- Lutz, A., Slagter, H. A., Dunne, J. D., & Davidson, R. J. (2008). Attention regulation and monitoring in meditation. *Trends in cognitive sciences*, 12(4), 163-169.
- Macnamara, B. N., & Burgoyne, A. P. (2023). Do growth mindset interventions impact

- students' academic achievement? A systematic review and meta-analysis with recommendations for best practices. *Psychological bulletin*, 149(3-4), 133.
- Maddi, S. R. (2004). Hardiness: An operationalization of existential courage. *Journal of humanistic psychology*, 44(3), 279-298.
- Markus, H. R., & Kitayama, S. (2014). Culture and the self: Implications for cognition, emotion, and motivation. In *College student development and academic life* (pp. 264-293). Routledge.
- Mascaro, N., & Rosen, D. H. (2005). Existential meaning's role in the enhancement of hope and prevention of depressive symptoms. *Journal of personality*, 73(4), 985-1014.
- Masten, A. S. (2012). Resilience in individual development: Successful adaptation despite risk and adversity. In *Educational resilience in inner-city America* (pp. 3-25). Routledge.
- Masten, A. S. (2014). *Ordinary magic: Resilience in development*. Guilford publications.
- Miao, M., & Cao, R. (2024). Mutually beneficial relationship between meaning in life and resilience. *Current Opinion in Behavioral Sciences*, 58, 101409.
- Mohamoud, A. M. (2024). The impact of growth mindset interventions on students' motivation, resilience, and academic achievement. *Multidisciplinary Journal of Horseed International University (MJHIU)*, 2(1), 102-125.
- Mohseni, M., Iranpour, A., Naghibzadeh-Tahami, A., Kazazi, L., & Borhaninejad, V. (2019). The relationship between meaning in life and resilience in older adults: A cross-sectional study. *Health Psychology Report*, 7(2), 133-138.
- Monkhouse, L. L., Barnes, B. R., & Hanh Pham, T. S. (2013). Measuring Confucian values among East Asian consumers: A four country study. *Asia Pacific Business Review*, 19(3), 320-336.
- Morales, J.-P., Ryan, B. E., Polito, V., Navarrete, G., Vergara, M., & Huepe, D. (2024). Can beliefs improve mental health? A dive into resilience during pandemic times in South America. *Social Sciences & Humanities Open*, 9, 100883.
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of personality and social psychology*, 75(1),

33.

NationalGeographicSociety. (October 7, 2024,). Confucianism. National Geographic Education. In.

Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and identity*, 2(2), 85-101.

Nurmi, J.-E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental review*, 11(1), 1-59.

Nussbaum, A. D., & Dweck, C. S. (2008). Defensiveness versus remediation: Self-theories and modes of self-esteem maintenance. *Personality and Social Psychology Bulletin*, 34(5), 599-612.

O'Connor, M., O'Reilly, G., Murphy, E., Connaughton, L., Hctor, E., & McHugh, L. (2021). Resilience mediates the cross-sectional relationship between mindfulness and positive mental health in early adolescence. *Journal of Contextual Behavioral Science*, 21, 171-175.

Oh, V. K. S., Sarwar, A., & Pervez, N. (2022). The study of mindfulness as an intervening factor for enhanced psychological well-being in building the level of resilience. *Frontiers in psychology*, 13, 1056834.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological bulletin*, 128(1), 3.

Piaget, J. (2016). Intellectual evolution from adolescence to adulthood¹. In *Cognitive and moral development, academic achievement in adolescence* (pp. 1-12). Routledge.

Pidgeon, A. M., & Keye, M. (2014). Relationship between resilience, mindfulness, and psychological well-being in University students. *International Journal of Liberal Arts and Social Science*, 2(5), 27-32.

Pinto, T. M., Laurence, P. G., Macedo, C. R., & Macedo, E. C. (2021). Resilience programs for children and adolescents: a systematic review and meta-analysis. *Frontiers in psychology*, 12, 754115.

Powell, A. E., & Davies, H. T. (2012). The struggle to improve patient care in the face of

- professional boundaries. *Social science & medicine*, 75(5), 807-814.
- Rees, C. S., Breen, L. J., Cusack, L., & Hegney, D. (2015). Understanding individual resilience in the workplace: the international collaboration of workforce resilience model. *Frontiers in psychology*, 6, 73.
- Ren, G., Yang, G., Chen, J., & Xu, Q. (2024). Traditional Value Identity and Mental Health Correlation Among Chinese Adolescents. *Behavioral Sciences*, 14(11), 1079.
- Robins, R. W., & Pals, J. L. (2002). Implicit self-theories in the academic domain: Implications for goal orientation, attributions, affect, and self-esteem change. *Self and identity*, 1(4), 313-336.
- Rossano, M. J. (2012). The essential role of ritual in the transmission and reinforcement of social norms. *Psychological bulletin*, 138(3), 529.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American journal of orthopsychiatry*, 57(3), 316-331.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, 69(4), 719.
- Savin-Williams, R. C., & Demo, D. H. (1984). Developmental change and stability in adolescent self-concept. *Developmental Psychology*, 20(6), 1100.
- Schleider, J. L., & Weisz, J. R. (2016). Implicit theories relate to youth psychopathology, but how? A longitudinal test of two predictive models. *Child Psychiatry & Human Development*, 47, 603-617.
- Schonert-Reichl, K. A., & Lawlor, M. S. (2010). The effects of a mindfulness-based education program on pre-and early adolescents' well-being and social and emotional competence. *Mindfulness*, 1, 137-151.
- Schroder, H. S., Yalch, M. M., Dawood, S., Callahan, C. P., Donnellan, M. B., & Moser, J. S. (2017). Growth mindset of anxiety buffers the link between stressful life events and psychological distress and coping strategies. *Personality and individual differences*, 110, 23-26.
- Seligman, M. E. (1975). *Helplessness: On depression, development, and health*. WH Freeman.

- Seligman, M. E. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Simon and Schuster.
- Shi, L., Jiao, J., & Mu, D. (2023). A cross-historical study on the changes of psychological resilience levels among Chinese college students. *Chinese psychological Health Journal/Zhongguo Xinli Weisheng Zazhi*, 37(10).
- Shi, W., Zhao, L., Liu, M., Hong, B., Jiang, L., & Jia, P. (2022). Resilience and mental health: a longitudinal cohort study of Chinese adolescents before and during COVID-19. *Frontiers in Psychiatry*, 13, 948036.
- Spero, C., & Hatstrup, K. (2020). The impact of mindset interventions on academic achievement: A meta-analysis. *Educational Psychology Review*, 32(3), 411-436.
- Steger, M. F. (2013). Experiencing meaning in life: Optimal functioning at the nexus of well-being, psychopathology, and spirituality. In *The human quest for meaning* (pp. 165-184). Routledge.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: assessing the presence of and search for meaning in life. *Journal of counseling psychology*, 53(1), 80.
- Steger, M. F., & Kashdan, T. B. (2009). Depression and everyday social activity, belonging, and well-being. *Journal of counseling psychology*, 56(2), 289.
- Steinberg, L. (2017). A social neuroscience perspective on adolescent risk-taking. In *Biosocial theories of crime* (pp. 435-463). Routledge.
- Susman, E. J., & Dorn, L. D. (2012). Puberty: Its role in development. *Handbook of Psychology, Second Edition*, 6.
- Tang, Y. (2008). The contemporary significance of Confucianism. *Frontiers of Philosophy in China*, 3, 477-501.
- Tao, C., & Qiyong, G. (2012). The values of Confucian benevolence and the universality of the Confucian way of extending love. *Frontiers of Philosophy in China*, 7(1), 20-54.
- Tao, W., Zhao, D., Yue, H., Horton, I., Tian, X., Xu, Z., & Sun, H.-J. (2022). The influence of growth mindset on the mental health and life events of college students. *Frontiers in psychology*, 13, 821206.

- Tedeschi, R. G., & Calhoun, L. G. (2004). " Posttraumatic growth: conceptual foundations and empirical evidence". *Psychological inquiry*, 15(1), 1-18.
- Triandis, H. C. (2001). Individualism – collectivism and personality. *Journal of personality*, 69(6), 907-924.
- Triandis, H. C. (2018). *Individualism and collectivism*. Routledge.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of personality and social psychology*, 86(2), 320.
- Tugade, M. M., & Fredrickson, B. L. (2007). Regulation of positive emotions: Emotion regulation strategies that promote resilience. *Journal of happiness studies*, 8, 311-333.
- Ungar, M. (2011). The social ecology of resilience: addressing contextual and cultural ambiguity of a nascent construct. *American journal of orthopsychiatry*, 81(1), 1.
- Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family process*, 42(1), 1-18.
- Wee, C. (2011). " XIN", TRUST, AND CONFUCIUS'ETHICS. *Philosophy East and West*, 516-533.
- Werner, E. E. (1995). Resilience in development. *Current directions in psychological science*, 4(3), 81-84.
- Wong, P. T. (2013). *The human quest for meaning: Theories, research, and applications*. Routledge.
- World Health Organization. (2017). *Depression and other common mental disorders: global health estimates*.
<https://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf>
- World Health Organization. (2022). Mental disorders. <https://www.who.int/news-room/fact-sheets/detail/mental-disorders>
- World Health Organization. (2024). Mental health of adolescents.
<https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>

- Wu, M. S., Yan, X., Zhou, C., Chen, Y., Li, J., Zhu, Z., Shen, X., & Han, B. (2011). General belief in a just world and resilience: Evidence from a collectivistic culture. *European Journal of Personality, 25*(6), 431-442.
- Xi, J., Zeng, Y., & Zuo, Z. (2015). Tracing the origin of Chinese resilience ideology *Chinese Journal of Clinical Psychology, 23*(3), 555-559.
- Xie, Q., & Wong, D. F. K. (2021). Culturally sensitive conceptualization of resilience: A multidimensional model of Chinese resilience. *Transcultural Psychiatry, 58*(3), 323-334.
- Xu, K. (2009). Confucianism and the Value Priority in Traditional Chinese Culture.
- Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational psychologist, 47*(4), 302-314.
- Yeager, D. S., Hanselman, P., Walton, G. M., Murray, J. S., Crosnoe, R., Muller, C., Tipton, E., Schneider, B., Hulleman, C. S., & Hinojosa, C. P. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature, 573*(7774), 364-369.
- Yeager, D. S., Johnson, R., Spitzer, B. J., Trzesniewski, K. H., Powers, J., & Dweck, C. S. (2014). The far-reaching effects of believing people can change: implicit theories of personality shape stress, health, and achievement during adolescence. *Journal of personality and social psychology, 106*(6), 867.
- Yıldırım, M., & Arslan, G. (2022). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Current Psychology, 41*(8), 5712-5722.
- Yuan, M., Li, Y., Wang, Y., Wang, L., & Yuan, W. (2025). Perceived distress and life satisfaction among Chinese adolescents: A moderation model of growth mindset. *Personality and individual differences, 236*, 112997.
- Zeng, M. X., Li, J. B., & Nie, Y. G. (2012). Integrity behavior: On the perspective of psychology. . (Advances in Psychology,2), 65-71.

<https://doi.org/https://doi.org/10.12677/ap.2012.22011>

Zhang, K., Shi, J., Wang, F., & Ferrari, M. (2023). Wisdom: Meaning, structure, types, arguments, and future concerns. *Current Psychology*, 42(18), 15030-15051.

Zhang, Y. (2015). A Study on the Moderating Role of Taoist and Confucian Values in the Relationship between Life Events and Mental Health. Master's Thesis. *Beijing: Beijing Forestry University*.

Zhang, Y. (2021). The Impacts of Positive Psychology and Individualism on Mental Health Status of the Elderly in China: Evidence from Chinese General Social Survey Data.

Zhou, J., Liu, Y., Ma, J., Feng, Z., Hu, J., Hu, J., & Dong, B. (2024). Prevalence of depressive symptoms among children and adolescents in china: a systematic review and meta-analysis. *Child and Adolescent Psychiatry and Mental Health*, 18(1), 150.

Zhou, J. H. (2023). Research on the integration of Chinese excellent traditional culture into positive mental health education for college students. . *Advances in Psychology*, 13(11), 5075-5080.

<https://doi.org/https://doi.org/10.12677/AP.2023.1311639>



Appendix 1 Research Questionnaire

Theme. Factors affecting the psychological resilience of adolescents in Dezhou City, Shandong Province, in China.

The first part of the personal information questionnaire includes age, gender, family location, grade level, annual family income

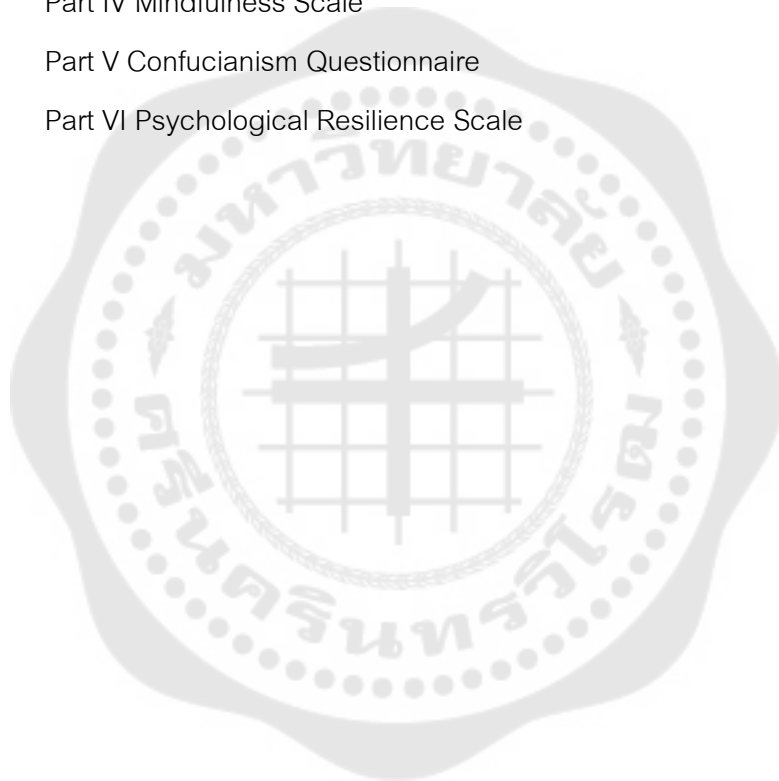
Part II Sense of Meaning in Life Questionnaire scale

Part III Mindset Scale

Part IV Mindfulness Scale

Part V Confucianism Questionnaire

Part VI Psychological Resilience Scale



Clarify

The purpose of this questionnaire is to study the factors affecting the psychological resilience of adolescents in Dezhou City, Shandong Province, China.

Students can freely express their views and opinions. There are no right or wrong answers. The scores will not be counted as part of the student's test scores. Students answer anonymously. All information is kept completely confidential and used solely for this study. Therefore, students are asked to answer as much as possible based on their own intuition, try not to modify their answers, and answer these questions based on their own experiences and feelings. Please answer all questions carefully and attentively. Your responses are truly invaluable. Thank you so much for your careful attention and assistance in helping me conduct this questionnaire. Your input will contribute significantly to a better understanding of the factors influencing adolescent psychological resilience.

Miss. LI JIAYE

Master of Educational Psychology and Guidance

Srinakharinwirot university

Table. Questionnaire for relevant variables

Section 1. Personal Information

1.what is your age?

- A. Under 12 years old
- B.12-14 years old
- C.15-17 years old
- D.18 years old and above

2.What is your gender?

- A. Male
- B. Female

3.What is your home location?

- A. Urban
- B. Rural
- C. Other

4.What is your grade level?

- A. Grade 10
- B. Grade 11
- C. Grade 12

5.What is your annual family income?

- A. less than \$30,000
- B. \$30,000-\$50,000
- C. \$50,000-\$100,000
- D.\$100,000-\$200,000
- E. More than \$200,000

Section 2. Sense of Meaning in Life. For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1.	I feel that there is a clear meaning and purpose in my life.					
2.	I find meaning in life even when things are difficult.					
3.	I believe that my existence is valuable to others and society.					
4.	I am hopeful and					

	expectant about the future.					
5.	I find things in life that make me feel fulfilled.					
6.	I find my life uniquely meaningful.					
7.	Even though life is difficult, I still feel that I have meaning.					
8.	My purpose in life keeps me motivated to overcome difficulties					

Section 3. Mindset, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	I believe that through hard work, I can improve my abilities.					
2	I am willing to face challenges, even if I may fail.					
3	I think failure is a part of learning, not the end.					
4	I like to try new methods to solve problems.					

5	I think my abilities are fixed and cannot be changed.					
6	No matter how hard I try, my intelligence level will not change much.					
7	I believe that some people are born with certain talents and cannot acquire them through acquired efforts.					
8	If I'm not good at something, then I can never make progress in these areas.					

Section 4. Mindfulness, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	I often pay attention to feelings and experiences in the present moment.					
2	When I am stressed, I can stay calm and focused on the task at hand.					
3	I am able to be aware of my emotions without overreacting.					
4	I often maintain a clear awareness of what I am doing.					

5	I am able to stay focused in my daily life without being distracted.					
6	I am accustomed to stopping and thinking first when faced with a challenge rather than reacting immediately.					
7	I will never damage items or make mistakes in answering questions due to carelessness, lack of concentration, or drifting thoughts.					
8	I am able to cope with stress and pressure in a calm and rational manner.					

Section 5. Confucianism, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the

corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	In daily life, I often show compassion and concern for others.					
2	I believe that by helping others, I can enhance my own sense of happiness and the meaning of life.					
3	Even in difficult					

	situations, I will adhere to what I believe is right.					
4	When facing moral dilemmas, I will make decisions based on my values, even if it may put me in an unfavorable position.					
5	I value politeness and etiquette and believe that they are crucial for maintaining harmonious interpersonal relationships.					
6	I can adjust my behavior according to different social occasions to ensure that my actions are appropriate.					

7	I like to explore new knowledge and truth, which helps me make wise decisions when facing challenges.					
8	I believe that through reflection and learning, I can gain valuable experiences and lessons from adversity.					
9	I value honesty and keeping promises and believe that this is the foundation for building stable interpersonal relationships.					
10	When I make a promise to others, I will definitely keep it no matter what					

	difficulties I encounter.					
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Section 6. Psychological Resilience, For the questions below, select the option that best reflects your actual situation. Indicate your choice by placing a "√" inside the corresponding parentheses. Likert Scale Questions (Positive Scoring, 1-5) 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

"Strongly Agree" means that you fully and wholeheartedly concur with the statement in the question.

"Agree" means that you mostly concur with the statement, yet may have some personal perspectives that differ slightly.

"Unsure" means that you have not settled on a definite stance regarding the statement and are still in a state of contemplation or indecision.

"Disagree" means that you do not accept the statement put forward in the question.

"Strongly disagree" means that you vehemently oppose the statement and possess your own distinct thoughts and viewpoints on the matter.

No.	Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
1	In the face of challenges, I can quickly adapt and find solutions.					
2	Even in the face of difficulties, I can maintain determination and					

	not give up easily.					
3	I trust my instincts, which help me a lot when making decisions.					
4	I can tolerate and deal with negative emotions such as anxiety and depression.					
5	I regard change as an opportunity for growth and am willing to accept new challenges.					
6	I feel safe in interpersonal relationships, which makes me more confident when facing changes.					
7	I believe that my actions can have a positive impact on the results.					
8	Even under pressure, I can maintain a clear mind					

	and make wise decisions.					
9	My beliefs or values provide support and comfort when I face difficulties.					
10	In the face of difficulties, I can quickly recover by relying on inner beliefs and external support.					

VITA

