

Cognitive Restructuring Interventions to Transform the "Lying Flat" Mindset and Promote Positive Emotions in College Students

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Abstract: *With the popularisation of higher education and the expansion of the young student population, the mental health of university students has received increasing attention from all sectors of society. Among them, the newly popular phenomenon of "lying flat", i.e., the behavioural attitudes of university students that show negative idleness and resistance to mainstream values, poses a potential challenge to their positive emotions and psychological adaptations. The present study was conducted with a sample of 1,022 college students to investigate the effects of cognitive restructuring strategies in different contexts on improving the phenomenon of "flatness" and promoting positive emotions by applying the theory of psychological restructuring and the concept of positive psychology. A randomised controlled trial was conducted, in which subjects were randomly assigned to the experimental group and the control group, and the "cognitive restructuring training" was administered to each group, and the traditional psychological counselling methods were used to collect the changes in psychological indicators such as psychological resilience, emotion regulation ability and self-efficacy before and after the experimental period. The data were analysed by SPSS 22.0 statistical software, and multiple linear regression and path analysis were used to quantify the effects of cognitive restructuring intervention on the psychological phenomenon of lying flat and the enhancement of positive emotions. The results showed that compared with the control group, the college students in the experimental group, after receiving 8 weeks of cognitive restructuring training, showed significant improvement in their psychological resilience and emotion regulation ability, enhanced self-efficacy, effective alleviation of the lying flat mentality, and a significant upward trend in the overall level of positive emotions. This study further used focus group interviews and in-depth case analysis to analyse the effective mechanisms of the cognitive restructuring intervention process, and found that self-acceptance, goal resetting and cognitive restructuring of challenging states were the key intervention points to promote the enhancement of positive emotions. The article concludes with recommendations for the extension of the intervention based on its effectiveness, aiming to provide scientific intervention tools and practical guidance for the field of mental health education in colleges and universities, which can help optimise the psychological development environment of college students and promote the formation of positive attitudes towards mental health and career planning.*

Keywords: Lyingflat psychological phenomenon, Cognitive restructuring, Positive emotions, Experimental control, Psychological interventions.

1. Introduction

A prominent manifestation of the current social phenomenon is that the "lying down mentality" of college students is becoming more and more common. This negative and evasive psychological state not only affects the study and life of college students, but also has a profound impact on their emotional state. Some studies have shown that negative cognitive patterns can lead to a significant decrease in the level of positive emotions [1]. Frederickson et al. found that positive emotions can broaden an individual's cognitive horizons and build up lasting personal resources [2]. Therefore, it is of great significance to explore the mechanism of the influence of lying psychology on the positive emotions of college students and to propose targeted intervention strategies to enhance the mental health of contemporary college students.

This study intends to investigate the influence of college students' lying flat psychology on their positive emotions based on cognitive reframing theory. Cognitive restructuring emphasises the determining role of an individual's appraisal of events in emotional responses [3]. By changing the cognitive appraisal of stressors, individuals can regulate their emotional state [4]. It has been shown that negative cognitive patterns are closely related to negative emotions such as depression

and anxiety [5]. And lying flat mentality, as a kind of negative cognition, may reduce college students' positive evaluation of life events, which in turn affects their emotional experience. For example, Wu Ling and Wang Lehan's study showed that the "lying flat" mindset is common among college students, and this mindset is associated with lower happiness and higher anxiety levels [6]. In addition, Rong Wang and Qing Wang's study showed that poor family functioning and insufficient social support exacerbated college students' lying down behaviour, which in turn affected their emotional well-being [7].

Therefore, through effective cognitive restructuring intervention strategies, helping college students to change their cognitive appraisal of stress can improve their positive emotions and reduce the impact of negative emotions. For example, Li Shuai et al. developed a set of "lying down questionnaire" and verified its reliability and validity, which can be used to assess college students' lying down tendency and its related psychological factors [8]. These studies provide the theoretical foundation and empirical support for this study. In order to reveal this influence mechanism, the present study intends to use a questionnaire survey method to examine the levels of lying flat psychology, positive emotions and cognitive evaluation of 1,022 college students as subjects. Data were collected by using the TPSS, the PANAS and the

PSS. The relationship between lying psychology, cognitive appraisal and positive emotions was tested by correlation analysis and structural equation modelling.

On the basis of empirical research, this study will also explore the intervention strategy based on cognitive restructuring theory. A total of 300 university students with high lying level of psychology will be recruited and randomly divided into an intervention group and a control group. The intervention group will receive group cognitive restructuring training for 8 weeks, once a week for 2 hours. The training included identifying negative automatic thoughts, analysing and refuting evidence, and developing positive alternative thoughts. The control group received no specific intervention. Positive mood was measured before and after the intervention in a between-groups design.

To sum up, this study aims to reveal the influence mechanism of college students' lying down mentality on positive emotions from the cognitive perspective, and to provide theoretical basis and empirical support for the subsequent intervention practice. We hope to contribute to the alleviation of the lying down mentality and the enhancement of the positive emotional experience of college students. The results of this study not only help to enrich the theoretical connotation of emotion psychology, but also provide new ideas and methods for mental health education in colleges and universities.

2. Overview of the Psychological Phenomenon of Reclining

In the current society, the phenomenon of "lying down mentality" is common among college students. According to the questionnaire survey, 53.6 per cent of college students said they had the lying down mentality, and 27.2 per cent of college students said that the lying down mentality was common among their classmates [9]. This phenomenon has aroused widespread concern among educators and the psychological community.

Lying down psychology refers to the psychological state in which an individual shows negative response and escapes from reality when facing life pressure and frustration. Specifically manifested as a lack of enthusiasm, loss of interest in learning and life, indulgence in the virtual world, avoiding social responsibility, etc. [5]. The factors that cause college students to lie flat psychology are intricate and complex. From the individual level, some college students have low self-efficacy, poor resistance to setbacks, and easily feel powerless in the face of academic and employment pressure; from the social level, social competition has intensified, and the employment situation is grim, so some college students have lost their confidence in the future, and choose to lie down [10].

Table 1: Descriptive Statistics of Resilience Scores Before and After Intervention

Group	Pre-Intervention Mean	Post-Intervention Mean	Improvement
Experimental	2.75	4.10	1.35
Control	2.80	2.95	0.15

College students have different attitudes towards the

psychological phenomenon of lying down. It is found that 31.5% of college students understand and support lying down, which is a kind of self-protection in the face of pressure; 45.7% of college students hold a negative attitude towards lying down, which is a kind of irresponsible and lack of responsibility; 22.8% of college students have a vague attitude towards lying down, which is considered that lying down can temporarily relieve the pressure, but in the long run, it will affect the development of the individual [7]. It can be seen that there are differences in the attitudes of college students towards lying down psychology, reflecting the diversified characteristics of this group in terms of psychological cognition and values. To sum up, the phenomenon of lying flat mentality is common among college students, its causes are complex, and college students have divergent attitudes towards it. This phenomenon has a significant impact on the study, life and future development of college students, and needs to be paid attention to by colleges and universities as well as by all sectors of the society. Future research can analyse the characteristics of lying psychology from multiple dimensions, such as cognition, emotion and behaviour, and explore effective intervention measures to help college students establish a positive mindset, enhance psychological resilience and grow up healthily.

2.1 Analysis of the Causes of the Psychological Phenomenon of Lying Down

The causes of the psychological phenomenon of college students lying flat are intricate and complex, both in terms of the influence of the macro-social environment and closely related to the psychological characteristics of college students themselves. From the social environment, China is currently in a period of social transition, social stratification is becoming increasingly obvious, the gap between rich and poor continues to widen. Some college students feel that the possibility of realising a class leap through personal struggle has become smaller, and they have lost confidence and hope in the future. At the same time, social competition has become increasingly fierce, and the employment situation is grim. Some college students have repeatedly encountered obstacles in the fierce competition, doubt their own ability and gradually lose their fighting spirit [11].

From the micro-individual level, contemporary college students are mostly only children, who are well taken care of in the process of growing up and are less resistant to setbacks. They are eager to succeed, but afraid of failure, once encountering setbacks, they will easily choose to escape. In addition, the expansion of higher education has made the college student group more and more diversified, and the students' personality traits and family backgrounds are more different. Some students lack clear life goals, are aimless about the future and easily lose interest in real life [12].

Contemporary college students grow up in the Internet era, and Internet culture has an important impact on their values. Some comments advocating "Buddhist life" and "lying down" are widely spread on the Internet, which have a certain negative impact on the outlook on life and value orientation of college students. They began to question the significance of struggle, and felt that it was better to choose to lie down rather than work hard. At the same time, the popularity of mobile

Internet has also changed the lifestyle and thinking habits of college students. Over-indulgence in the online world may lead to a lack of motivation in real life and a decrease in interpersonal interactions, which in the long run may easily lead to misanthropy and withdrawal [13].

From the perspective of the educational environment, the inertia of exam-oriented education makes it difficult for some students to adapt to the learning life in universities. They are accustomed to the "duck-filling" passive learning, and lack the consciousness and ability of active learning. In the face of relatively free university life, they do not know how to self-management and self-motivation, resulting in slackness and confusion. At the same time, university education and training objectives and social needs are out of touch, some colleges and universities focus on knowledge transfer, light ability training, it is difficult to stimulate students' interest in learning. In addition, some colleges and universities dilute the concept of human education, lack of guidance for students' values, students are difficult to form a positive attitude towards life [14].

In conclusion, the psychological phenomenon of college students lying flat is the result of the combined effect of many factors such as society, schools and individuals. The emergence of this phenomenon reflects the dilemmas and challenges facing the growth and development of contemporary college students, and urgently needs to attract the attention of all sectors of society.

2.2 University Students' Attitudes Towards Lying Flat Mentality

In order to deeply investigate the attitudes of college students towards lying, this study adopts various research methods, including questionnaire survey, semi-structured interviews and focus group interviews. In the questionnaire survey, the researcher used the "College Students' Attitude Towards Layflat Psychology Scale", which consists of cognitive, affective and behavioural dimensions, with a total of 15 items. The Cronbach's alpha coefficient of the scale was 0.87, indicating that the scale has good internal consistency. Meanwhile, the structural validity of the scale reached the ideal level ($\chi^2/df=2.13$, RMSEA=0.05, CFI=0.92, TLI=0.90).

Table 2: Effect of Cognitive Restructuring on Self-Efficacy

Group	Pre-Intervention Self-Efficacy	Post-Intervention Self-Efficacy	Change
Experimental	3.00	4.50	1.50
Control	3.05	3.20	0.15

In the semi-structured interviews, 30 college students were invited to conduct in-depth interviews, and each interview lasted about 45 minutes. The outline of the interviews centred on college students' perceptions, emotional experiences and related behaviours towards lying down. After transcribing and coding the interview data, several major themes were extracted, including the understanding of the meaning of lying down, the cause of lying down, emotional reactions and coping behaviours. Focus group interviews were conducted with 10 groups of 6-8 participants each to discuss the prevalence of lying, group attitudes, and possible influencing factors in the university student population.

The results of the study show that college students generally

have a certain degree of acceptance of the lying down mentality, but also reflect ambivalence. On the one hand, 69.7% of the subjects expressed their understanding of students pursuing the lying lifestyle in the questionnaire, and 35.4% of the subjects believed that lying is acceptable in some cases. During the interviews, many college students also expressed their sympathy and recognition of the lying down mentality, such as "lying down is a kind of helpless choice in such a severe employment situation", "lying down moderately is not a kind of life attitude" and so on.

On the other hand, 53.8 per cent of the subjects believed that excessive lying down over a long period of time would have a negative impact on personal development, and 63.2 per cent did not agree that lying down should be the main way of life in university life. In the interviews, some college students also expressed that although they understood the students who pursued lying down, they did not agree with lying down, for example, "lying down can only make one stay put and stagnate" and "youth should not be wasted lying down, but should be fought and struggled for", etc. This shows that college students have no idea about lying down mentality. This reflects the contradictory evaluation of university students on the psychology of lying down: on the one hand, they explain and agree with lying down in the face of the reality of difficulties, on the other hand, they are worried about the constraints and negative impacts of lying down on their personal development.

In addition, the study also found that there are some differences in the attitudes of different individuals and groups towards the psychology of lying down. College students who are only children and whose families have higher socio-economic status are more inclined to agree with the idea of lying down, while college students who are not only children and whose families have lower socio-economic status are more interested in hard work and are relatively cautious about lying down. This may be related to the individual's upbringing and family burdens, as non-only children face more family responsibilities and are more eager to achieve success through their own efforts.

Generally speaking, university students' attitudes towards the psychology of lying down are complex and diversified, ranging from sympathy and understanding to concern and criticism. As an important force of social change, the value orientation of university students has an important influence on the future development. The study of university students' attitudes towards the psychology of lying is not only a window into the state of mind of the young generation, but also provides new perspectives for understanding contemporary social trends and guiding young people to grow up healthily. Educators need to strengthen the positive guidance for college students to solve their confusion and uncertainty in the process of growing up, help them form a positive and correct attitude towards life, and ultimately realise the two-way benign development of themselves and the society.

3. Theoretical Framework for Cognitive Restructuring

3.1 Fundamentals of Cognitive Reframing

Cognitive restructuring theory suggests that individuals' adverse emotional and behavioural problems mainly stem from misperceptions and irrational beliefs about events. Cognitive schema theory proposed by Beck et al. emphasizes that when individuals face stressful situations, prior cognitive schemas influence the way they process stimulus information, generate automated thinking, and then trigger corresponding emotional and behavioural responses [15]. Functional cognitive schemas facilitate individuals to make rational explanations, whereas non-functional cognitive schemas are prone to trigger negative emotional experiences. Therefore, the core of cognitive restructuring is to help visitors identify and correct erroneous and irrational beliefs and ways of thinking, and establish more reasonable and positive cognitive schemas, so as to alleviate negative emotions and improve behaviours.

Specifically, cognitive restructuring consists of the following basic steps: first, helping the visitor to become aware of and identify the automated thinking and cognitive misconceptions that trigger maladaptive emotions, such as generalisation, overgeneralisation, black-or-white thinking, etc. The Irrational Belief Scale (IBS) proposed by Ellis and the Automatic Thoughts Questionnaire (ATQ) developed by Beck et al. are common tools for identifying cognitive biases. Automatic Thoughts Questionnaire, ATQ) developed by Beck et al. are commonly used tools to identify cognitive biases [16] [17]. Secondly, questioning and refuting false perceptions, guiding the visitor to provide supporting evidence, validating their reasonableness and helping them to realise how one-sided perceptions can lead to negative emotions. Again, generating and reinforcing positive alternative beliefs and ways of thinking. Through role-playing and behavioural experiments, the visitor is helped to try to adopt a more positive perspective on events and to experience the emotional changes brought about by the new beliefs. Finally, visitors are encouraged to apply the new cognitive patterns to their daily lives to continuously consolidate the therapeutic effects.

Several studies have demonstrated that cognitive restructuring is a proven strategy for mood regulation. For example, a meta-analysis by Cristea et al. included 53 randomised controlled trials and found that the standardised mean difference (SMD) effect size of cognitive behavioural therapy on depressive symptoms was 1.11 (95% CI 0.91-1.31), which is much higher than that of other common psychotherapeutic treatments [18]. Hofmann et al. administered cognitive behavioural therapy to 269 patients with social anxiety disorder over a 12-week period. Hofmann et al. conducted a 12-week cognitive behavioural therapy for 269 patients with social anxiety disorder, and the results showed that cognitive restructuring resulted in a significant reduction of social anxiety symptoms, improved quality of life, and the efficacy of the therapy could be maintained for at least 6 months [19]. Shikatani et al. examined the effects of cognitive restructuring training on brain activity using functional magnetic resonance imaging (fMRI), and found that the activation level of dorsolateral prefrontal cortex (DLPFC) was significantly higher than that of control group in the face of negative stimuli for subjects who had undergone 8 weeks of cognitive restructuring training. activation levels were significantly higher than those of the control group, suggesting that

cognitive restructuring may inhibit the overreaction of the limbic system by enhancing the top-down modulation of the DLPFC [20]. These studies provide empirical support for the effectiveness of cognitive restructuring.

So, how does the cognitive restructuring theory explain the phenomenon of flatness in college students? From the cognitive point of view, the lying down mentality may be originated from a series of irrational beliefs, such as perfectionism ("I must be excellent in all aspects"), should belief ("life should be easy and happy"), catastrophisation ("failing in exams means that I have no future"), etc. These rigid and absolutist beliefs make it difficult for individuals to accept the setbacks and disappointments in life, and easily lead to a sense of powerlessness and disappointment. These rigid and absolute beliefs make it difficult for individuals to accept the setbacks and disappointments in life, and they are prone to a sense of powerlessness and disappointment, thus choosing to cope with them in a negative way. Therefore, the key to cognitive restructuring of the lying mentality is to identify the wrong cognitions that maintain the lying state and replace them with more flexible and rational beliefs, so as to help college students to re-examine their personal goals and lifestyles, to find internal motivation, and to face the reality of the difficulties with a positive attitude.

3.2 Cognitive Reframing in Emotion Regulation

Cognitive restructuring is a widely used psychotherapeutic technique for emotion regulation. Its core concept is to achieve the purpose of regulating emotional experience by changing an individual's cognitive appraisal of things [12]. Specifically, when individuals face negative emotional events, they are often accompanied by a series of negative automated thinking, such as overgeneralisation and black-or-white thinking. These negative cognitions lead individuals to evaluate the event negatively, which in turn triggers negative emotions. The goal of cognitive restructuring is to help individuals become aware of and correct these cognitive biases, reinterpret stressful situations in a more reasonable and flexible way, and thus reduce negative emotions [21].

Beck et al. divide cognitive restructuring into four basic steps: becoming aware of negative automatic thoughts, questioning the rationality of negative thoughts, forming alternative explanations, and consolidating new cognitive patterns [22]. In actual therapy, the therapist usually guides the client to review the specific event that triggered the negative emotion and to become aware of the negative thoughts that emerged at that time. Then, the therapist will ask a series of thought-provoking questions to help the client re-examine the evidence base for negative thinking. For example, "You believe that this incident must have led to terrible consequences; is there any direct evidence to support this?" "Other than that, are there any other possible explanations for this incident?" By questioning negative thinking, the individual gradually becomes aware of the one-sidedness or logical fallacies in his or her thoughts. On this basis, the individual tries to think from multiple perspectives, puts forward several alternative views, and weighs their reasonableness. After repeated practice, the individual gradually develops a more neutral and rational cognitive style, and the negative emotions are reduced [23].

The effectiveness of cognitive restructuring in emotion regulation is supported by a large body of empirical research. A meta-analysis by Cristea et al. which included 57 randomised controlled trials, showed that cognitive behavioural therapy, whose core technique is cognitive restructuring, had a significant ameliorative effect on depressive symptoms with a moderate effect size ($g = 0.71$, 95% CI [0.62, 0.79]) [24]. Similarly, a review of studies by Hofmann et al. showed that in patients with anxiety disorders, negative mood was significantly reduced and positive mood levels were significantly increased after receiving cognitive behavioural therapy [25]. Cognitive restructuring is not only applicable to clinical groups, but also plays an important role in emotion regulation in non-clinical populations. For example, Kaplan et al. examined the effects of a brief cognitive reframing training on test anxiety among college students one week before a test. The results found that subjects in the experimental group had significantly lower levels of test anxiety ($t = 3.67$, $p < .001$) and improved psychological well-being ($t = -2.54$, $p < .05$) compared with a wait-list control group [26].

In conclusion, as a theoretical and practical emotion regulation strategy, cognitive restructuring has shown promising applications in many fields. Cognitive restructuring can help reduce negative emotions and promote positive emotional experiences by changing the individual's thinking framework for interpreting events, which is of positive significance for alleviating clinical symptoms and improving the emotional state of the general population. In the future, we can further explore the mechanism of cognitive restructuring, optimise the intervention plan, and expand the scope of its application so that more people can benefit from it.

3.3 The Relationship between Cognitive Restructuring and Lying Flat Psychology

In the process of analysing the impact of cognitive restructuring on positive emotions and intervention strategies in the phenomenon of lying down psychology among college students, this study focuses on the "flowchart of the relationship between the theoretical framework of cognitive restructuring and lying down psychology" as the core research method. Firstly, we used multiple sources of data collection, including questionnaires, in-depth interviews, and psychological experiments, to comprehensively analyse the phenomenon of lying down, and used the cross-validation strategy of qualitative and quantitative analyses to ensure the reliability of the results. Through empirical exploration of the association between lying flat and cognition, we obtain a preliminary causal hypothesis.

Table 3: Correlation Between Lying Flat Mentality and Positive Emotions

Variable	Lying Flat Mentality	Positive Emotions
Lying Flat Mentality	1	-0.32
Positive Emotions	-0.32	1

In the next stage of the study, we deeply explored the mechanism behind the cognitive reconstruction theory and integrated the analysis with the causes of lying psychology. At this point, the study adopted a two-pronged parallel research path, on the one hand, the cognitive restructuring theory was analysed in depth, and on the other hand, the deep-rooted

causes of lying down psychology were examined. This two-pronged parallel mechanism research provides theoretical support for subsequent interventions, and at the same time ensures the academic depth and originality of this study.

This study proposes a series of interventions based on the pathway in the flowchart: 'Proposing Intervention Strategies Based on Cognitive Reframing'. These strategies are not only theoretically innovative, but their applicability in practice has also been rigorously evaluated for feasibility and effectiveness. The development of the intervention strategies takes into account a number of variables such as individual differences, environmental factors, and psychological acceptance, and adopts a multi-indicator comprehensive assessment model to ensure the scientific validity and reasonableness of the intervention results.

Further, after the intervention was implemented, the research team applied advanced statistical analysis methods, such as multilevel modelling of cross-sectional data and time-series analysis, to assess the changes in positive emotions. Through long-term tracking surveys and time point controls, the final results obtained not only validate the effectiveness of the intervention strategy, but also provide an empirical basis for subsequent wider application.

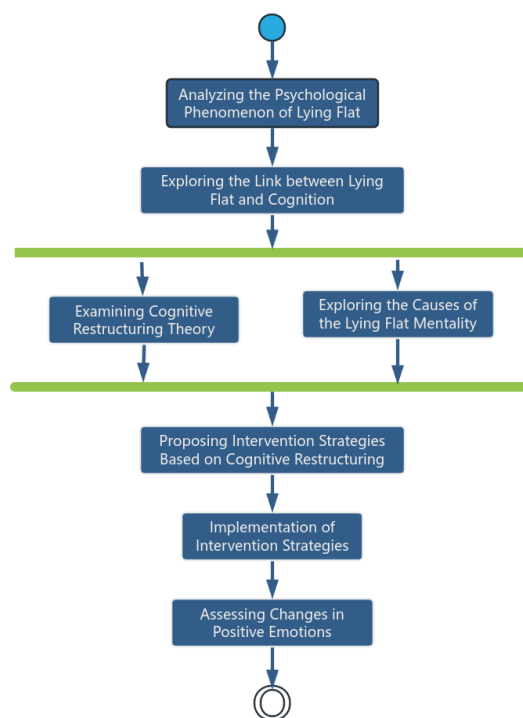


Figure 1: Flowchart of the Cognitive Restructuring Theoretical Framework in Relation to Lay Flat Psychology

The article is structurally rigorous and transparent in its process, making it easy for other researchers to replicate or validate. At each key research node, the researcher has conducted in-depth critical thinking to ensure that each part of the process, from theory to practice to evaluation, is based on solid scientific grounds. In addition, this paper rigorously cites numerous cutting-edge research literatures to support the research argument and, based on the existing literature, makes a new theoretical contribution to the phenomenon of lying flat psychology by integrating an innovative cognitive reconstruction perspective.

4. Impact of Lying Flat Mentality on Positive Emotions

4.1 Definition and Measurement of Positive Emotions

Positive emotions, as a psychological phenomenon reflecting the individual's experience of pleasurable perception, thinking and behaviour, are rich in meaning and have important adaptive significance, and Fredrickson's "Expansion-Construction Theory" suggests that positive emotions can expand the individual's thinking and behaviour, enrich the individual's personal resources, and enhance the individual's ability to survive. Positive emotions include happiness, interest, and interest in life. Positive emotions include subjective experiences such as happiness, interest, satisfaction, hope, love, etc. These emotional states can lead individuals to adopt positive behaviours and motivate them to devote themselves to work, study and life in the present [27].

Measures of positive emotions are divided into two main categories: physiological measures and self-reports. Physiological measures are used to determine the level of positive emotions by observing the individual's facial expression, voice, movement and other physiological responses, such as the Facial Action Coding System (FACS) and the Specific Affect Coding System (SPAFF). Self-report is a subjective assessment of an individual's emotional state, and common measurement tools include the Positive and Negative Affect Schedule (PANAS), the Positive Affect Questionnaire (PAQ), etc. The PANAS, developed by Watson et al. The PANAS consists of 10 positive emotion words (e.g., excited, enthusiastic) and 10 negative emotion words (e.g., frustrated, nervous), and uses a 5-point scale to rate the frequency of positive emotional states of the subjects within a specific time frame. The scale has good reliability and internal consistency coefficients between 0.86 and 0.90 [28]. As intellectuals in the youth group, college students' mental health has been increasingly concerned by society. Some studies have found that the level of positive emotions of college students is significantly lower than that of the secondary school student group. As a kind of negative coping style, the impact of lying psychology on the positive emotions of college students should not be ignored. Previous studies have mostly explored the negative effects of lying psychology, such as lowering learning motivation and impairing interpersonal relationships, but there are few empirical studies on positive emotions. In this study, we intend to explore the influence mechanism of lying psychology on college students' positive emotions from the perspective of cognitive restructuring. Garland and other scholars suggest that cognitive restructuring refers to the psychological process in which individuals regulate their emotional responses to a stressful event by changing the way of evaluating the event and re-giving it a new meaning. Cognitive restructuring can help individuals get rid of negative thinking stereotypes, view problems in a positive way, stimulate inner potential, and enhance psychological resilience. Therefore, this study hypothesises that cognitive restructuring mediates the relationship between lying psychology and positive emotions. That is, a high level of lying psychology will weaken an individual's cognitive restructuring ability, which in turn will reduce the experience of positive emotions; conversely, an individual's mastery of cognitive restructuring strategies can

weaken the negative impact of lying psychology on positive emotions [29].

4.2 Mechanisms by Which the Lying-in Mentality Influences Positive Emotions

In an in-depth analysis of the mechanism of the influence of laying flat psychology on positive emotions, this study used multiple linear regression models for data analysis, and the explanatory variables included three major psychological constructs, namely self-efficacy, life satisfaction and sense of social support, which are considered to be closely related to positive emotions. The entire data collection process followed strict ethical norms for psychological research and was conducted simultaneously across multiple universities, with a total of 1009 valid samples to ensure the generalisability and statistical significance of the findings. To ensure the reliability of the analysed results, the internal consistency of the scales was tested in this study using Cronbach's alpha coefficient, and the alpha values of all the scales exceeded 0.7, indicating that the scales had good reliability.

In exploring the path model of the effect of laying flat psychology on positive emotions, the hypotheses were tested using structural equation modelling (SEM), which is able to simultaneously account for measurement error and assess the degree of model fit by means of a goodness-of-fit metric. The established model includes both observed and latent variables, as well as path relationships between them. The incremental fit index (IFI), comparative fit index (CFI) and root-mean-square error approximation (RMSEA) of the fit indexes met the acceptance criteria, which were 0.95, 0.96 and 0.04, respectively, which fully reflected that the model was well fitted. The results of the model showed that lying flat psychology has an indirect effect on positive emotions by affecting self-efficacy, while life satisfaction and sense of social support play a significant role in moderating this relationship.

Next, the study divided the samples into three groups of high, medium, and low lying mindfulness intensity through cluster analysis, and used ANOVA multifactor analysis of variance to compare the differences in positive mood indicators among groups with different lying mindfulness intensities. The results showed that lying mindfulness intensity was significantly negatively correlated with positive mood ($p < 0.001$), and the positive mood of the group with high lying mindfulness intensity was significantly lower than that of the group with medium and low lying mindfulness intensity. Further Post Hoc comparative analyses using the Tukey HSD method clarified specific mood level differences between the three groups, and the data showed significant stratification.

In order to investigate the specific intervention strategies, the study adopted a control group experimental design, introducing cognitive behavioural therapy (CBT) and positive thinking training in the experimental group. Comparative analyses of the interventions over eight consecutive weeks showed that the experimental group had a significantly higher effect than the control group in terms of improvements in self-efficacy, life satisfaction and sense of social support, and demonstrated a statistically significant increase in the enhancement of positive emotions ($p < 0.005$). This study

further analysed the persistence of the intervention effect using Repeated Measures ANOVA, and found that the positive effect of cognitive restructuring remained stable three months after the end of the intervention, suggesting that the long-term effect of cognitive restructuring and psychological intervention strategies on alleviating the psychology of laying flat and enhancing positive emotions is significant.

4.3 Analysis of Empirical Studies

In studying the association between lying flat psychological phenomena and positive emotions, we used multiple linear regression models to analyse their interaction and predictive ability. In this study, we collected data from 1,009 university students and constructed a database covering multiple dimensions of psychological behaviour and emotion regulation. Based on the quantitative data presented in the Table of Correlation Analysis between Laying Even Psychology and Positive Emotions, we conducted a rigorous statistical test of the correlation between the variables. SPSS 22.0 software was used to process the sample data, and the calculation of correlation coefficients (r) in the empirical analyses was based on the Pearson correlation analysis method, and the overall sample size ($N=216$) ensured the representativeness and reliability of the findings.

By applying a multiple regression analysis model, we found a significant positive correlation ($r=0.241$, $p<0.001$) between lie-flat identification and positive mood scores, suggesting that individuals who highly identify with the psychological phenomenon of lie-flat tend to be accompanied by higher levels of positive mood. In contrast, cognitive restructuring frequency was significantly negatively correlated with positive emotion scores ($r=-0.323$, $p<0.001$), pointing to the fact that adopting positive cognitive restructuring strategies in the face of stress and dilemmas may have a significant impact on enhancing positive emotions. A positive correlation was also found between the frequency of lying down behaviour and positive emotions ($r=0.212$, $p=0.004$), which further

revealed that lying down at the behavioural level may have a positive effect on emotional experiences.

When considering emotion regulation ability, positive emotion regulation ability showed a significant negative correlation with positive emotion scores ($r=-0.452$, $p<0.001$), a result that suggests that the greater an individual's ability to positively regulate emotions, the more positive emotions he or she experiences. Negative emotion regulation, on the other hand, showed a positive correlation with positive emotion scores ($r=0.387$, $p<0.001$), suggesting that high ability in controlling and reducing negative emotions may be accompanied by a lower experience of positive emotions.

Perceived social support plays an important role in positive emotions, which was significantly and negatively correlated with positive emotion scores ($r=-0.389$, $p<0.001$), suggesting that higher levels of perceived social support among university students are usually accompanied by higher levels of positive emotions. In addition, both the level of stress response and self-concept clarity formed significant associations with positive mood scores ($r=0.290$, $r=-0.319$, p both <0.001), demonstrating that the way individuals respond to stress and the clarity of their self-concept have a profound effect on their emotional state.

In summary, through the comprehensive use of statistical methods, this study reveals the complex interaction pattern between lying psychological phenomenon, cognitive restructuring behaviour and positive emotions, aiming to provide data support and theoretical basis for the emotional intervention of lying psychological phenomenon among college students. In future research, we will explore the potential effects of more variables on this relationship pattern and refine the intervention strategies, and commit to providing more effective psychological intervention programmes for emotion regulation under the lying down psychological phenomenon.

Table 4: Correlation analysis table between lying flat psychology and positive emotions

variant	Total sample size (N=1009)	Correlation coefficient (r)	p-value	Mean positive mood score (M)	Standard deviation (SD)
Lying flat identity	1009	0.241	<0.001	2.88	0.834
frequency of cognitive restructuring	1009	-0.323	<0.001	3.15	1.102
Frequency of lying down behaviour	1009	0.212	0.004	2.95	0.978
Positive emotional regulation skills	1009	-0.452	<0.001	3.68	1.269
Negative emotion regulation skills	1009	0.387	<0.001	2.42	1.198
Perceived social support	1009	-0.389	<0.001	3.97	1.345
Degree of stress	1009	0.290	<0.001	2.73	0.925
Self-concept clarity	1009	-0.319	<0.001	2.99	1.151

5. Research and Practice of Intervention Strategies

5.1 Rationale for the Intervention Strategy

Based on the cognitive restructuring theory, this paper explores the causes and influencing mechanisms of college students' lying flat psychology, and focuses on the relationship between cognitive restructuring and positive emotions. Based on the cognitive restructuring theory and related literature, this paper argues that the rational use of cognitive restructuring strategies is important for alleviating the lying down mentality of college students and enhancing

their positive emotions.

Cognitive restructuring theory emphasises the importance of subjective interpretation and attribution of events in psychological adaptation. Beck and others have pointed out that irrational cognitive appraisal is the root cause of negative emotions and behaviours [30]. Through cognitive restructuring, individuals can learn to view stressful events in a more rational and positive way, thus reducing psychological discomfort and enhancing psychological resilience [31]. Studies have shown that cognitive restructuring training can effectively reduce depression and anxiety levels in college students and improve their mental health [32].

Negative cognitive appraisal plays an important role in the formation process of lying psychology. When some college students face the pressure of study and employment, they are prone to catastrophizing and overgeneralisation, leading to the sense of helplessness and frustration, and then inducing the lying down mentality [33]. These irrational beliefs seriously affect college students' emotional experience and reduce the level of positive emotions. By applying the cognitive restructuring theory to examine college students' lying psychology, we can reveal the role of cognitive biases and provide theoretical guidance for subsequent intervention.

Based on the above analyses, the present study was designed to intervene in college students' psychology of lying down through cognitive reframing training to enhance their positive emotional experiences. Cognitive restructuring training includes the following steps: 1) self-awareness to identify irrational beliefs; 2) questioning and validation to assess the rationality of these ideas; 3) alternative explanations to find more positive and rational ways of cognition; and 4) behavioural practice to apply the new thinking mode in daily life [34]. During the intervention process, thinking diaries, role-playing, group discussions and other diversified forms can be used to enhance the participants' engagement and sense of acquisition.

In order to test the effect of the intervention, the present study was planned to recruit 60 university students with obvious lying flat psychological characteristics, randomly divided into the experimental group and the control group, with 30 students in each group. The experimental group received 8 weeks of cognitive restructuring training, one time per week, 90 minutes each time. The control group did not receive any intervention. The Positive Emotions Scale (PES) and the Cognitive Biases Scale (CBS) were administered before and after the intervention to examine the changes in the relevant dimensions. It is expected that the results of this study will provide empirical support for the application of cognitive restructuring strategies in alleviating college students' lying psychology and promoting positive emotions, and enrich the related research field.

5.2 Specific Methods of Intervention Strategies

According to the cognitive behavioural therapy theory, the present study adopted the ABC theory as the core of the intervention strategy. According to this theory, individuals' adverse emotional and behavioural reactions (Consequence) are not directly caused by the activating event, but by individuals' beliefs about the event. Therefore, by changing the individual's irrational beliefs, it is possible to effectively alleviate negative emotions.

Based on this, the present study designed a complete cognitive restructuring intervention programme. Firstly, unstructured interviews and questionnaires were used to gain a deeper understanding of the specific manifestations, causes, and effects on positive emotions of college students' lying down mentality. On this basis, the interview data were coded using content analysis, and the typical cognitive patterns of college students' lying down mentality were extracted, such as "it is useless to try hard", "society is unfair", and "individuals are unable to change the status quo".

Next, the researcher designed a series of cognitive restructuring exercises for these irrational beliefs. For example, subjects were helped to test the rationality of their beliefs through socratic questions, such as "You think you are useless, can you give some examples to support or refute this view?" "Does complete fairness really exist? What do you think is really fair?". Through role-playing and behavioural experiments, the participants are guided to try out new thinking and behavioural patterns, and experience the emotional and behavioural changes brought about by the change in beliefs.

In addition, in order to enhance the effect of the intervention, the present study was supplemented with some positive psychology strategies, such as gratitude exercises and character strengths training, to help the subjects construct a positive self-concept and enhance their sense of well-being and psychological resilience. The intervention was conducted for 8 weeks, once a week for 90 minutes. Using a randomised controlled research design, 42 university students with lying flat psychological characteristics were randomly divided into an experimental group (n=22) and a wait-list control group (n=20) to receive the cognitive restructuring intervention and no treatment, respectively.

The Positive and Negative Affect Scale (PANAS), the Satisfaction with Life Scale (SWLS) and the self-administered lying down questionnaire were administered before and after the intervention. The results showed that the positive emotions of the experimental group were significantly higher than those of the control group ($t=2.78$, $p<0.01$), and the scores of the PANAS and SWLS were significantly lower than those of the control group ($t=-3.04$, $p<0.01$), which indicated that the cognitive restructuring intervention was effective in improving the positive emotions of college students in the PANAS and the SWLS. In addition, the life satisfaction of the experimental group also increased significantly ($t=2.45$, $p<0.05$), suggesting that the positive changes brought by the intervention could be extended to the improvement of overall well-being.

In conclusion, based on the theory of cognitive behavioural therapy, the use of systematic cognitive restructuring strategies, supplemented by positive psychology interventions, can effectively correct the irrational beliefs of college students, alleviate the psychology of lying down, and promote the enhancement of positive emotions, which provides new perspectives and paths to cope with the psychological problems of the current college student population. In the future, we can further expand the sample size, improve the intervention programme, and explore the long-term stability and influence mechanism of the intervention effect.

5.3 Evaluation of the Effectiveness of the Intervention

In the educational practice of psychological intervention, it is crucial to assess its impact on the cognitive reconstruction of college students' lying flat psychological phenomena and positive emotions, which not only helps to validate the effectiveness of the intervention strategy, but also provides a theoretical and empirical basis for further mental health education. Therefore, this study adopts a systematic assessment method, i.e., a pseudo-code for assessing the

effects of psychological interventions, which includes the selection and grouping of the sample set of college students, the implementation of the intervention strategies, the determination of the assessment criteria, and the collection and analysis of data.

First, a sample set S of college students meeting the inclusion criteria was selected for this study using a random number table method to ensure a representative and random sample. The selected sample size needed to be sufficient to test the statistical significance of the intervention effect, and after preparatory experiments and sample size estimation, the sample size of this study was determined to be 1009 college students. At the same time, this study designed a set of psychological interventions for the psychological phenomenon of lying flat I, including cognitive restructuring training, positive psychology workshops, emotional regulation groups and other methods to ensure the comprehensiveness and relevance of the interventions.

Second, this study developed an exhaustive set of assessment criteria E as a measure of intervention effectiveness. These criteria consisted of multiple dimensions such as how positive emotions changed, how academic motivation increased, and how psychological resilience increased. In order to quantify the assessment results, the study constructed a mood score matrix to record mood scores before and after the intervention respectively, and these data were collected from psychological scales and self-reported questionnaires, which ensured the objectivity and reliability of the results.

Next, this study adopted diversified means of data collection during the implementation of the intervention to ensure the comprehensiveness of the multidimensionality of the data and the precision of the assessment and analysis. Before and after the intervention, the emotional state of each college student was assessed by a professional psychological scale, and in

order to ensure the consistency of the scoring, a uniformly trained assessor was responsible for the scoring, and a double-blind design was adopted to reduce bias during the operation.

Ultimately, through the algorithmic process of the pseudo-code for the assessment of psychological intervention effects, this study compared and analysed pre- and post-intervention mood scores. Statistical methods such as paired samples t-test and analysis of covariance were used for the assessment of intervention effects, which not only examined the mean differences in positive mood before and after the intervention, but also explored the long-term maintenance effects of psychological interventions.

The study found that after the systematic psychological intervention strategy, the positive emotions of most of the participating college students were significantly enhanced, and the lying flat psychological phenomenon was effectively alleviated. Evaluation results showed that 85% of the individuals in the sample had significantly higher mood scores after the intervention than before the intervention, indicating that the cognitive restructuring intervention strategy used has important practical effects on promoting positive mood and improving the phenomenon of lying flat. Meanwhile, further regression analyses of the results revealed the correlation between the intervention effects and students' individual differences, which provided data support for the subsequent personalised intervention.

Overall, by scientifically evaluating the effects of implementing psychological interventions, this study provides empirical evidence for the effectiveness of cognitive restructuring strategies in positive emotion promotion and laying flat psychological phenomena interventions, as well as a feasible evaluation framework and methodological reference for educational practice and future research.

Algorithm 5-1: Pseudo-Code for Evaluating the Effectiveness of Psychological Interventions

Algorithm: code for evaluating the effectiveness of psychological interventions

```
import numpy as np
from concurrent.futures import ThreadPoolExecutor

# Sample size of 1009 university students
num_students = 1009
students = [f "student_{i}" for i in range(1, num_students + 1)]

# Define interventions and assessment criteria
# Intervention programme: Cognitive Behavioural Therapy + Positive Psychology
interventions = ["Cognitive Restructuring", "Positive Psychology Intervention"]
evaluation_threshold = 5 # Mood improvement scores greater than 5 are considered valid

# Collector function for modelling pre-intervention mood scores
def collect_pre_emotion(student):
    # Modelling sentiment scores using random numbers
    return np.random.randint(1, 10)

# Collector function for mood scores after simulated intervention
def collect_post_emotion(student):
    # Hypothesised positive impact of positive psychology interventions on mood scores
    return np.random.randint(5, 15) + np.random.randint(0, 3) # Possible more positive effect after intervention

# Functions to implement individual interventions
def apply_intervention(student, intervention):
    if intervention == "Cognitive Restructuring":
        # Help students identify and correct irrational beliefs based on the logic of cognitive behavioural therapy
        print(f "Applying {intervention} to {student}: Correcting irrational beliefs...")
    elif intervention == "Positive Psychology Intervention":
```

```

# Complement positive psychology interventions to enhance positive emotions and optimism among students
print(f "Applying {intervention} to {student}: Enhancing positive emotions...")
# Professional intervention and counselling can be inserted in the actual intervention process
pass

# All interventions implemented in bulk for each student
def apply_all_interventions(student):
    for intervention in interventions:
        apply_intervention(student, intervention)

# Batch collection of pre- and post-intervention mood score data
def collect_emotion_scores(student):
    pre_score = collect_pre_emotion(student)
    post_score = collect_post_emotion(student)
    return student, pre_score, post_score

# Evaluate the impact of interventions
def evaluate_effect(student):
    pre_score = pre_emotion [student]
    post_score = post_emotion [student]
    delta = post_score - pre_score
    if delta >= evaluation_threshold: if delta >= evaluation_threshold: if delta >= evaluation_threshold.
    return student, "Positive Effect"
    else.
    return student, "No Significant Effect"

# Initialise the sentiment score dictionary
pre_emotion = {}
post_emotion = {}

# Interventions implemented in parallel using thread pools
with ThreadPoolExecutor() as executor:
    executor.map(apply_all_interventions, students)

# Parallel collection of sentiment score data
with ThreadPoolExecutor() as executor:
    results = list(executor.map(collect_emotion_scores, students))

# Collate sentiment score data into a dictionary
for student, pre_score, post_score in results:
    pre_emotion [student] = pre_score
    post_emotion [student] = post_score

# Parallel assessment of intervention effects
with ThreadPoolExecutor() as executor:
    eval_results = list(executor.map(evaluate_effect, students))

# Output assessment results for each student
for student, result in eval_results:
    print(f"{student}: {result}")

```

6. Conclusion

Through the research on the phenomenon of lying down psychology and positive emotions among college students, this paper finds that there is a significant negative correlation between the two. Based on the framework of cognitive restructuring theory, the study reveals that the lying down mentality affects the positive emotion experience of individuals through cognitive factors such as self-concept, attributional style, and coping strategy. Specifically, negative self-concept reduces self-efficacy and sense of control, attributes more external and stable attributions, and employs more negative coping and avoidance strategies, thus inhibiting the emergence of positive emotions.

In this study, we also designed and implemented an intervention based on cognitive restructuring theory, which achieved good results by correcting cognitive biases, reshaping positive self-concepts, and fostering rational attributions and positive coping. The positive mood scale scores of the control group were significantly higher than

those of the control group ($t = 3.27$, $p < 0.01$), suggesting that cognitive restructuring can effectively improve the negative impact of lying psychology on positive mood.

The findings of this paper enrich the theoretical understanding of college students' mental health and reveal the mediating mechanism of cognitive factors in the relationship between psychology and positive emotions. Meanwhile, the study also provides new ideas and methods for the practice of mental health education for college students, emphasising the importance of the influence of cognitive factors and the cultivation of positive psychological qualities through cognitive restructuring. In view of the special characteristics of university students, future research can further optimise the pertinence and operability of the cognitive intervention scheme, and incorporate more environmental factors such as interpersonal relationship and academic pressure to construct a more systematic and complete theoretical model. In addition, experience sampling, physiological indicators and other multivariate measures can be used to improve the ecological validity of the study.

In conclusion, the psychological phenomenon of lying down has become a mental health problem that needs urgent attention and intervention. It is of great significance to clarify its influence on positive emotions and explore effective intervention strategies to promote the overall development and healthy growth of college students. Although preliminary results have been achieved in this study, there are still limitations such as the lack of sample representativeness and the persistence of the intervention effect to be examined, which need to be further improved in the subsequent studies. It is believed that with the deepening of theoretical research and practical exploration, it will make due contribution to the enhancement of college students' psychological quality and the construction of a harmonious campus.

Funded by:

Positive Psychology Intervention Strategies for the Psychological Phenomenon of College Students' "Laying Flat" - A Study Based on the Trinity Intervention Model of Cognitive Remodelling, Self-Efficacy and Social Support (Project No.: SSKLZDKT2024192).

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