

The integration path of mental health education and college students' ideological and political education

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The traditional ideological and political education should keep pace with the times, and the physical and health education should highlight its value, and must combine the two. This study investigated on the integration path of mental health education and college students' ideological and political education. A stratified random sampling was conducted on 2021 students of a higher vocational college. The subjects were divided into the control group and the experimental group. The experimental group was given the integrated intervention course of mental health education and ideological and political education of college students, and the control group was given routine teaching. The depression score of the experimental group is significantly lower than that of the control group, and the mental health quality score is higher than that of the control group.

Contribution: The integration of mental health education and college students' Ideological and political education can effectively improve the level of college students' mental health. This course constantly improves the students' subjective consciousness, subjective ability and subjective personality, and fully reflects the educational effect of the ideological and political education of college students' mental health course. This research provides data which could be utilised by academics in the field of practical theology, especially youth ministry and religious educational studies.

Keywords: mental health; college student; ideological and political education; fusion path; SCL-90; HAMD scale; subject awareness; psychological cognition.

Introduction

Mental health education for college students should give full consideration to the growth characteristics and laws of college students, and recognise that college students are a high-level group of people who have ideals and dare to innovate. When implementing mental quality and mental health education for them, attention should be paid to improving their level of mental quality and helping them to overcome psychological barriers or illnesses in terms of both self-knowledge as well as self-psychological regulation (Turan et al. 2021). The ideological and political education of college students should highlight its educational function, give full play to the subjectivity of college students, integrate the ideological and political education resources of various disciplines and courses, create a collaborative education atmosphere in which all disciplines and courses are in the same direction, build a full staff, full process and full course ideological and political education system for college students, and achieve the subtle effect of ideological and political education on college students (Snmez et al. 2021). The mental health education in colleges and universities has been closely related to the ideological and political education of college students since its establishment. In practical work, we can see that many mental health problems and ideological and political problems do not exist separately. The former includes ideological and political problems, and the latter includes mental health problems, which is not uncommon. At present, there have been a series of results on the fusion of the two (Song & Qiu 2020).

The integration of mental health education and college students' ideological and political education is conducive to the achievement of educational effects, and a large number of research results have also verified this view. Research shows that the integration of mental health education

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and ideological and political education of college students can promote the physical and mental health of college students (Ding & Chen 2020). Some scholars also pointed out that college students' mental health education includes physical health and mental health. Physical health is the most basic material guarantee for college students, and physical diseases such as insomnia, headache and anxiety will bring great troubles to the healthy growth of college students (Bourdages et al. 2020; Hedges & Given 2023). Mental health is the most basic mental guarantee for college students. If there are psychologically unhealthy conditions, such as poor ability to resist setbacks, withdrawn personality and poor adaptability to the outside world, it will have a serious impact on their normal study and life. Research shows that the integration of mental health education and ideological and political education of college students can improve the personality of college students (Schandert et al. 2021; Wang 2020). Through the ideological and political education of college students' mental health courses, college students can better improve their understanding of the political direction, improve their political personality, including political morality, political character, political emotion and political skills, and enable them to have noble and sound personality charm (Chen & Luo 2022; Razumkina et al. 2020). At the same time, it is necessary to restrict the behaviour norms of college students, improve the moral personality of college students, and improve the pertinence and effectiveness of ideological and political education of college students' mental health courses by setting up mental health courses, organising diversified psychological education activities and strengthening psychological counselling (Brestovci et al. 2021; Kapur et al. 2020). Some scholars also believe that the integration of mental health education and ideological and political education of college students can stimulate the spiritual motivation of college students and improve the ideological and political system of college students (Yates et al. 2020). The personality quality, sense of responsibility, creativity and willpower of college students are non-intellectual factors. The non-intellectual factors of college students can be optimised through the ideological and political education of mental health courses to stimulate their spiritual motivation (Camerini et al. 2021). Through the ideological and political education of the mental health course for college students, it can highlight its political guiding function and role, strengthen the equal interaction and two-way communication between teachers and students, constantly enrich the ideological and political education content of college students, such as ideological education, political education and moral education, and further improve the ecological function of ideological and political education for college students. The study investigates the effective integration of mental health education and university students' ideological and political health education by means of an experimental design, and analyses the intervention effects under different teaching approaches, with a view to finding effective educational interventions to ease and relieve students' psychological conditions and bad emotions, and improve their mental health.

Subjects and methods

Study setting

A stratified random sampling was conducted on 2021 students of a higher vocational college to determine the samples that meet the research specifications to enter the research link. A total of 500 questionnaires were issued, of which 496 were valid, with an effective rate of 99.2%. Before the experiment, the research group had a friendly communication with the subjects, and both parties signed an agreement on academic-related research. All the subjects participated in the experiment voluntarily. The subjects were divided into the control group and the experimental group. The experimental group was given the integrated intervention course of mental health education and ideological and political education of college students, and the control group was given routine teaching. Before and after the intervention, the mental health status of college students was evaluated with symptom checklist 90 (SCL-90), a self-made mental health quality evaluation scale for college students and Hamilton Depression Evaluation Scale (HAMD).

Among them, SCL-90 is one of the most famous mental health test scales in the world. It is the most commonly used outpatient examination scale for mental disorders and mental diseases. This questionnaire will help the subject understand the mental health of college students from nine aspects (Izady et al. 2020; Mousavi et al. 2021). The scale has 90 items, including a wide range of psychiatric symptomatology. The scale has 90 items, including a wide range of psychiatric symptomatology. The psychological symptoms in 9 aspects are reflected by 9 factors, from feeling, emotion, thinking, consciousness, behavior to living habits, interpersonal relations, diet and sleep, and so on. It is used to evaluate whether the subjects have certain psychological symptoms and severity (Kribakaran et al. 2019). According to the actual situation of the subjects in this study, the specific design of SCL-90 scale is shown in Table 1.

Hamilton Depression Evaluation Scale includes 17 items such as depression, guilt, suicide and somatic anxiety. Each item is scored with 0–4 points. The higher the score, the greater the patient's depression tendency. A total score of lower than 7 points indicates normal; 7–17 points indicate possible depression; 18–24 points indicate definitely depression and a total score higher than 24 points indicates severe depression.

The mental health quality evaluation scale for college students mainly includes four dimensions, namely, physiological function, psychological function, environmental function and social function. The higher the score, the better the mental health quality of college students (Sindermann et al. 2020). The questionnaire α Klenbach coefficient method is adopted for the calculation of internal consistency coefficient. This method is mainly used for the test of multiple scores of items. The calculation formula is shown in Equation 1:

$$\alpha = (K / (K - 1)) \cdot \left(1 - \left(\sum S_i^2 \right) / S_x^2 \right) \quad [\text{Eqn 1}]$$

TABLE 1: Specific design of symptom checklist 90 scale.

Serial number	Factor	Explain
Factor 1	Somatisation (1,4,12,27,40,42,48,49,52,53,56,58)	Reflect physical discomfort
Factor 2	Obsessive-compulsive symptoms (3,9,10,28,38,45,46,51,55,65)	It reflects the obsessive-compulsive disorder of human beings and the behaviour of things
Factor 3	Interpersonal sensitivity (6,21,34,36,37,41,61,69,73)	It reflects the inferiority complex of individuals in society
Factor 4	Depression (5,14,15,20,22,26,29,30,31,32,54,71,79)	Reflect people's psychological depression symptoms
Factor 5	Anxiety (2,17,23,33,39,57,72,78,80,86)	It reflects restlessness and is prone to dryness and restlessness
Factor 6	Hostility (11,24,63,67,74,81)	Reflected in thoughts, feelings and behaviours
Factor 7	Terror (13,25,47,50,70,75,82)	The object of reflection is the fear expressed when travelling and going out in public
Factor 8	Paranoia (8,18,43,68,76,83)	Reflect and guess the psychological state, etc.
Factor 9	Psychosis (7,16,35,62,77,84,85,87,88,90)	Reflect a variety of acute symptoms and behaviours

In Equation 1, K represents the number of question components during the test, S_i^2 represents the variation of the questionnaire content and S_x^2 represents the variation of the total score of the test. The internal consistency coefficient greater than 0.7 indicates that the reliability of the scale is high. SPSS19.0 and Excel were used for data management and analysis. The scale needs to be tested during the course of the experiment and the study is analysed here with the help of the Cronbach coefficient. The Cronbach coefficient is the coefficient of correlation between each test taker's score on each item and the total score, compared with the variability of all individual item scores. The more consistent the variability of scores on each item is with the total score, the greater the value. Each test taker with a high total score will also have a high score on each item. For example, if a person is a good student, he or she will not score poorly in language or mathematics. It is generally positive and takes on larger values, at (0,1). Equation 2 states:

$$\partial = \left(\frac{k}{k-1} \right) * \left(\frac{S_y^2 - \sum S_i^2}{S_y^2} \right) \quad [\text{Eqn 2}]$$

In Equation 2, k denotes the number of items, S_y^2 denotes the variance of the observations (predicted values), $\sum S_i^2$ denotes the sum of the variances of each item. Other instruments: folded half confidence, Spearman-Brown, Kuder-Richardson20 (KR20) and Kuder-Richardson21 (KR21).

At the same time, for the deviations in the experimental results, the study takes into account the different dimensions of the evaluation indicators of each scale. Therefore, it is necessary to first eliminate the influence of dimensions. In the study, the coefficient of variation is used to balance the degree of difference between the various indicators. The calculation method of the coefficient of variation is shown in equation 3.

$$Q_i = \frac{e_i}{\bar{x}_i} \quad i = 1, 2, \dots, n \quad [\text{Eqn 3}]$$

In Equation 3, Q_i represents the coefficient of variation of the index i , e_i represents the standard deviation of the index i and \bar{x}_i represents the average value. In this study, the value n is 3. After confirming the coefficient of variation of the index, the weight assignment of the index is shown in Equation 4:

$$w_i = \frac{Q_i}{\sum_{i=1}^n Q_i} \quad [\text{Eqn 4}]$$

In Equation 4, w_i represents the weight of the index i and the same value n in the equation is 3. In order to avoid large errors caused by subjective reasons, the evaluation values and average values of 60 viewers are taken respectively in the evaluation process, and the results are determined by rounding. In the study, if the measurement data conform to the normal distribution, it is expressed by means of the mean standard deviation, that is, $\bar{x} \pm S$, and the difference between the measurement data groups is tested by t . If the measurement data do not meet the normal distribution, the median and range shall be used to describe it. The difference between groups shall be tested by Kruskal-Wallis H. We define the significance level and obtain a critical value based on it, with $p < 0.05$ indicating statistically significant differences:

$$\bar{x} = \frac{\sum_{i=1}^n X_i}{n} \quad [\text{Eqn 5}]$$

Equation 5 represents the calculation formula of the mean value of the study sample \bar{x} , n is the number of samples and X_i is the sample value of the i number:

$$S_x = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n-1}} \quad [\text{Eqn 6}]$$

Equation 6 represents the calculation expression of the standard deviation S_x of the study sample.

Design

This study constructs the integration path of college mental health education and college students' ideological and political education. Firstly, to establish a positive and active ideological and political education concept of college students' mental health course, the ideological and political education of college students' mental health courses should establish the concept 'people-oriented', give full play to the leading role of ideological and political teachers of college students' mental health courses and strengthen the principle of student-oriented education. Based on the actual needs of students' development, teachers should pay attention to

cultivating students' subject consciousness, subject personality and subject ability, and form correct political consciousness, political guidance and moral norms. Secondly, to construct an active and efficient ideological and political education course for college students' mental health, the ideological and political education of college students' mental health course should take the cultivation of positive personality as the core and build a positive and efficient curriculum system. To make full use of the theoretical knowledge of pedagogy, positive psychology and other related disciplines based on the actual needs of college students' mental health, we should design the ideological and political education system of college students' mental health courses in a hierarchical and systematic manner, and set up the level and sequence targets of the ideological and political education of college students' mental health education courses. The goal of hierarchy is to let students construct a positive attitude, experience and behaviour, optimise the psychological quality of college students, and tap the personal potential and characteristics of college students. The ideological and political education of college students' mental health course should fully consider the hobbies, interests and abilities of college students, make full use of diversified situations and carriers, cultivate college students' career adaptation psychology, and avoid the problems of the lack of self-awareness and the lack of choice. Thirdly, the ideological and political teaching practices of mental health courses should be based on students' experiences. Based on the positive emotional experience of students, we should carry out ideological and political teaching practices of college students' mental health courses, including self-help teaching and experiential teaching. At the same time, we should adopt teaching methods based on students' self-experience to enhance the effectiveness of ideological and political education in mental health courses. Fourthly, we should emphasise the reasonable introduction of college students' mental health community model. In combination with the actual needs of college students, learning type associations, interest type associations, mental health associations, among others, should be established to attract college students to integrate into the community model by taking advantage of the participatory, practical and voluntary characteristics of the community model, and by participating in various large-scale on-site consultations, psychological film appreciation, psychological inspirational speeches, group psychological counselling, psychological cartoon exhibition and other activities to temper the psychological quality of college students. Finally, we should pay attention to the psychological counselling and guidance of college students. In the process of ideological and political education of mental health courses for college students, we should fully integrate the educational force and adopt different modes such as individual consultation, group consultation and network consultation to educate college students. When exploring the integration intervention pathway, the research first conducts a reliability test on the variable elements of the design scale. The moderation test of factor analysis for model variable elements is shown in Figure 1.

KMO fitness quantity		0.693
Bartlett sphericity test	Significance	0.000
	Degree of freedom	0.210
	Approximate chi square	403.118

KMO, Kaiser–Meyer–Olkin.

FIGURE 1: Factor analysis moderation test.

In Figure 1, it can be seen that the Kaiser–Meyer–Olkin (KMO) statistic for the variable elements selected in the study is 0.693. The partial correlation test between KMO test variables requires values between 0 and 1. Generally speaking, the closer the KMO statistic value is to 1, the stronger the partial correlation between variables. In actual analysis, the KMO statistic value is mainly set at 0.7 as the standard boundary. The KMO statistic obtained in the study is 0.693, which is very close to 0.7, indicating that factor analysis has a good effect. At the same time, the significance value of the Bartlett sphericity test is 0.000, below 0.01, which proves that there is a strong correlation between factors. The above results indicate that the scale has high reliability, so it can be used for subsequent experimental design.

Results

Scores of subjects on symptom checklist-90 before and after the intervention

The scores of SCL-90 factors in the two groups before and after the intervention are shown in Table 2. Before the experimental intervention, the effective SCL-90 questionnaires filled in by the subjects were counted and sorted out, and the relevant data were sorted out and analysed. The results of the data showed that the total SCL-90 scores of the students in the experimental and control groups were (168.24 ± 4.46) and (170.24 ± 5.06) before the start of the experiment, respectively. The total SCL-90 scores of the students in both groups were among the above-average scores and the factor scores were high, reflecting the recent presence of serious mental health problems in both groups. The *p*-values of the nine factors and the total scores are all higher than 0.05. The difference between the factor scores of the control group and the experimental group is not significant, which meets the requirements of natural grouping and can be used for experimental operation.

After the corresponding intervention courses were given to the two groups, there were significant differences in interpersonal sensitivity, depression and anxiety between the experimental group and the control group ($p < 0.05$). There was a significant difference between obsessive-compulsive symptoms and phobia ($p < 0.01$). There was no significant difference in somatisation, hostility, paranoia and psychosis ($p > 0.05$). Specifically, after the experimental intervention, the mean scores for somatisation, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, terror, paranoia and psychosis in the experimental group were 1.48, 1.96, 1.88, 1.75, 1.61, 1.58, 1.39, 1.77 and 1.64, respectively. The mean scores for somatisation, obsessive-compulsive symptoms, interpersonal sensitivity, depression,

TABLE 2: Symptom checklist 90 scores of the two groups before and after the intervention.

Test factor	Experimental group		Control group	
	Before experiment	After experiment	Before experiment	After experiment
Somatisation	1.49 ± 0.12	1.48 ± 0.79	1.52 ± 0.98	1.53 ± 0.89
Obsessive-compulsive symptoms	2.09 ± 0.87	1.96 ± 0.93**	2.14 ± 0.79	2.13 ± 0.15****
Interpersonal sensitivity	1.97 ± 0.88	1.88 ± 0.15*	1.98 ± 0.48	1.98 ± 0.13***
Depression	1.85 ± 0.56	1.75 ± 0.88**	1.83 ± 0.47	1.88 ± 0.16***
Anxiety	1.76 ± 0.63	1.61 ± 0.17*	1.78 ± 0.78	1.78 ± 0.78***
Hostility	1.66 ± 0.14	1.58 ± 0.15	1.67 ± 0.16	1.69 ± 0.14
Terror	1.48 ± 0.47	1.39 ± 0.12**	1.48 ± 0.75	1.47 ± 0.7****
Paranoia	1.84 ± 0.12	1.77 ± 0.13*	1.86 ± 0.13	1.85 ± 0.09
Psychosis	1.65 ± 0.18	1.64 ± 0.16	1.69 ± 0.15	1.68 ± 0.14
Total score	168.24 ± 4.46	118.41 ± 8.20**	170.24 ± 5.06	172.74 ± 5.76****

Note: Intra-group comparison: *, $p < 0.05$; **, $p < 0.01$; Comparison between groups: ***, $p < 0.05$; ****, $p < 0.01$.

anxiety, hostility, terror, paranoia and psychosis in the control group were 1.53, 2.13, 1.98, 1.88, 1.78, 1.69, 1.47, 1.85 and 1.68, respectively. The total score of the experimental group (118.41 ± 8.20) was significantly different from that of the control group (172.74 ± 5.76) ($p < 0.01$), which indicated that after the intervention of the integrated course of mental health education and ideological and political education of college students, the mental health problems of the experimental group were positively helped and improved.

As for the SCL-90 factor scores of the experimental group before and after the intervention, the nine-factor scores and the total scores of the experimental group before and after the experiment have changed, which indicate that after the intervention of the integrated curriculum of mental health education and ideological and political education of college students, the factors of obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, fear and paranoia of the tested students have a certain alleviating effect. They have actively helped and improved mental health issues.

Comparison of depression scores between the two groups before and after intervention

The comparison results of HAMD scores before and after the intervention in the two groups are shown in Table 3. The results showed that the depression scores of the students in the experimental group were significantly lower than those of the control group, with the mean score of the experimental group being 11.32 and the mean score of the control group being 8.36. The HAMD scores of both groups were lower than before the intervention, but the experimental group showed a more significant improvement. The above results indicate that the intervention was able to have a positive impact on the students' psychological state through the integration of mental health education and ideological and political education of university students.

Comparison of mental health quality evaluation between the two groups

The scores of mental health quality assessment scale of the two groups before and after the intervention are shown in Table 4. After the intervention of the integrated course of

TABLE 3: Comparison of Hamilton Depression Evaluation Scale scores between the two groups before and after intervention.

Group	Before intervention	After intervention	<i>t</i>	<i>p</i>
Experimental group	19.17 ± 0.74	8.36 ± 1.18	70.503	< 0.001
Control group	19.30 ± 0.62	11.32 ± 1.19	49.629	< 0.001
<i>t</i>	-0.786	-10.276	-	-
<i>p</i>	0.439	< 0.001	-	-

mental health education and ideological and political education for college students, the scores of mental health quality in the experimental group were higher than those in the control group, which was significantly improved compared with that before the intervention ($p < 0.001$). Before the experimental intervention, the mean scores of the experimental and control groups on the four dimensions of physical, psychological, social and environmental functioning were 17.20 and 16.87, 15.95 and 16.14, 15.13 and 15.18, and 15.93 and 16.03, respectively. The differences between the two groups were not significant and their corresponding p -values were 0.087, 0.148, 0.314 and 0.159, respectively, while the scores of the subjects in the two experimental intervention groups on the four dimensions were 25.27 and 22.57, 23.27 and 20.42, 21.59 and 17.84, and 22.71 and 18.96, respectively, and their corresponding p -values were with significant differences. Therefore, after the ideological and political reform of the mental health education programme, students' ability of psychological self-regulation in the classroom was improved, and they were more inclined to help and cooperate with each other in life, so as to enhance the sense of spiritual satisfaction, improve the self-perceived value and have a positive attitude towards life. Mentality have been improved to different degrees. The dimensions of mental health are not only single-dimensional but they do refer to physical and mental health. While physical health is the basis for survival and development, and the material basis for all activities, mental health is the ability to maintain a good state of mind and emotions to deal with various people and situations. A healthy state of mind and body allows the individual to maintain a continuous upward mobility. At the same time, the society and environment in which students live have a variety of connections with them, and only a healthy relationship between the individual and the environment can help them to better understand the perceived value of themselves. The integration pathway takes into account the psychological state of the student and

TABLE 4: The scores of the mental health quality assessment scale of college students before and after the intervention.

Time	Group	Physiological function	Psychological function	Social function	Environmental function
Before intervention	Experimental group	17.20 ± 0.75	15.95 ± 0.54	15.13 ± 0.22	15.93 ± 0.32
	Control group	16.87 ± 0.83	16.14 ± 0.52	15.18 ± 0.34	16.03 ± 0.26
	<i>t</i>	0.753	-1.517	-1.052	-1.475
	<i>p</i>	0.087	0.148	0.314	0.159
After intervention	Experimental group	25.27 ± 1.36	23.27 ± 1.30	21.59 ± 2.40	22.71 ± 1.93
	Control group	22.57 ± 0.92	20.42 ± 1.35	17.84 ± 1.33	18.96 ± 1.09
	<i>t</i>	9.668	8.925	7.885	10.175
	<i>p</i>	< 0.001	< 0.001	< 0.001	< 0.001
Comparison of observation group before and after intervention	<i>t</i> ₁	-55.048	-43.535	-25.225	-22.397
	<i>p</i> ₁	< 0.001	< 0.001	< 0.001	< 0.001
Comparison of control group before and after intervention	<i>t</i> ₂	-41.992	-23.875	-18.833	-17.415
	<i>p</i> ₂	< 0.001	< 0.001	0.124	< 0.001

the need for educational development and can achieve a double positive intervention for the student's mental health.

Discussion

Ideological and political education refers to the purposeful and organised influence of social groups on students with specific thoughts, political views and moral norms, and the cultivation of their ideological and moral qualities to meet the needs of groups. Mental health education is an education that helps to eliminate and prevent mental diseases, improve students' psychological quality and realise their personal potential. Conceptually, their work contents and research objects are different and independent from each other. Ideological and political education pays attention to the indoctrination of theory and has rich teaching methods. Mental health education pays more attention to personal experience and carries out education in a more flexible way. Although there are differences between the two working methods, they must learn from each other and have similarities in theoretical education and practical combination, typical case education, among others. The ultimate educational goal of the two is the same as the main body of education, both of which aim at promoting the all-round development of human beings. Both are aimed at college students, and the social environment and natural environment as the goal are also interlinked, and the main body of education is the school. Although they are different in teaching contents, teaching methods, teaching concepts, teaching theories, among others, they are interlinked and intersected, and they are consistent in terms of educational objectives and ultimate objectives. They are independent of each other, but they are closely connected, which is the basis of their mutual integration.

At present, China's college mental health education has a 'closed' educational responsibility, coupled with the conflict of multiculturalism and values in the period of social transformation, which makes it face new obstacles. The psychological problems of college students are becoming more and more serious and complicated. The psychological problems of college students are on the rise year by year. Only professional psychological tutors cannot solve their psychological problems well. At present, college students' psychological problems and ideological and moral problems

are intertwined. The ideological and political education in colleges and universities must rely on the strength of colleges and universities and the existing successful practice to promote. Although ideological and political education has also achieved great results, it is too strong in preaching colour, inculcating traces and other aspects, which has a great impact on students' individual subjectivity. In terms of perception and rational appeal, the lack of sufficient attention has affected students' trust in ideological and political theory courses and their self-confidence in practice. The scope of mental health education is very wide, including interpersonal relationships, psychological stress, emotional barriers, psychological counseling, and so on. These are the problems that need to be solved urgently in the current ideological and political work in colleges and universities. Combining ideological and political education with mental health education can expand its service scope, change its direction and promote its development. Psychological health education that focuses on putting people first and emphasises personal value experience can effectively make ideological and political work methods more flexible, and has important reference value for practical work. Therefore, the integration of the two is of positive significance for solving the dilemma of mutual development.

The target of ideological and political education in colleges and universities is university students. Its aim is to strengthen their ideological and moral qualities, focusing on the cultivation of worldview, outlook on life and values. The integration of mental health education into this educational approach can effectively achieve collaboration between the two and give full play to its positive value role, enhancing the value and role of mental health education. The dilemma in the integration of the two lies in the lack of subjectivity of students, the need to strengthen the teaching concept and the need to improve the teachers' own quality. The results of this study show that after the integration course intervention, the overall mental health level of all subjects improved, and the experimental group effectively improved their mental health level after the intervention. After teaching civics through the mental health course, many students took the initiative to communicate with others, so there was a reduction in their scores on interpersonal sensitivity and paranoia; they released their depressed mood through self-regulation of psychology and reduced their scores on the depression factor.

Specifically, the results provided evidence that the depression scores of the students in the experimental group were significantly lower than those of the control group, with the mean score of the experimental group being 11.32 and the mean score of the control group being 8.36. The HAMD scores of both groups were lower than before the intervention, but the experimental group showed a more significant improvement. The above results indicate that the intervention was able to have a positive impact on the students' psychological state through the integration of mental health education and ideological and political education of university students. Before the experimental intervention, the mean scores of the experimental and control groups on the four dimensions of physical, psychological, social and environmental functioning were 17.20 and 16.87, 15.95 and 16.14, 15.13 and 15.18, and 15.93 and 16.03, respectively. The differences between the two groups were not significant and their corresponding *p*-values were 0.087, 0.148, 0.314 and 0.159, respectively, while the scores of the subjects in the two experimental intervention groups on the four dimensions were 25.27 and 22.57, 23.27 and 20.42, 21.59 and 17.84, and 22.71 and 18.96, respectively, and their corresponding *p*-values were with significant differences. This factor is consistent with the results obtained from some domestic studies (King et al. 2022). The reason for this may be that the integration of the two educational approaches is consistent with students' psychological patterns, so the corresponding teaching strategies and measures are effective in providing students with the opportunity to express themselves and look inside so that their negative emotions such as anxiety and depression can be alleviated to a greater extent during the communication and exchange process.

Through effective teaching intervention, students can obviously alleviate bad emotions, master the correct methods of regulating emotions, form the correct guidance in the course, and finally achieve the ideal intervention effect. For college students, psychological problems are a very painful thing. Many students are unwilling to face the fact that they have negative psychology, have resistance to health intervention and are unwilling to cooperate with traditional psychological intervention, which will delay the illness. In this study, the psychological health quality scores of the experimental group were higher than those of the control group after the intervention of the integrated course of mental health education and ideological and political education of college students, which was significantly improved compared with that before the intervention. In addition, after the intervention, the depression score of the students in the experimental group was lower than that of the control group, indicating that health intervention can have a good effect on the mental state of the students. Professional health education and psychological intervention can help improve students' self-management of depression and quality of life. Some studies have pointed out that the use of ideological and political teaching can have a positive impact on the psychological state of students with mental health problems and play a good role in alleviating students'

negative emotions (Ofei-Dodoo et al. 2021). Because the study of students' depressive symptoms belongs to the category of psychological diseases, we should pay more attention to the intervention measures of students' depressive moods in the process of intervention.

Conclusion

Strengthening the organic combination of mental health education and ideological and political education is an important means to establish morality and cultivate people and promote the cultivation of mind and morality. In the new era, the basic task of 'establishing morality and cultivating people' in colleges and universities has put forward more in-depth requirements for the ideological and political education and physical and health education in traditional colleges and universities. The traditional ideological and political education should keep pace with the times, and the physical and health education should highlight its value and must combine the two. The ideological and political teaching of college students' mental health courses is an important teaching content that complies with the requirements of the times. It is necessary to highlight the subjectivity of students in the ideological and political teaching of mental health courses, build a scientific and efficient ideological and political system of college students' mental health courses, cultivate students' positive psychological feelings and emotions, constantly improve students' subjective consciousness, subjective ability and subjective personality, and fully reflect the educational effect of ideological and political teaching of college students' mental health courses. The results of this study show that the scores of nine factors and total scores of the SCL-90 scale in the experimental group have positive changes before and after the experiment. The depression score of the experimental group is significantly lower than that of the control group, and the mental health quality score is higher than that of the control group. The above results show that strengthening the integration path of mental health education and ideological and political education of university students can effectively intervene in a unique way to intervene in the psychological condition of university students, relieve their negative emotions and help them to face more squarely the changes in their psychological condition. In future research work, we should also focus on the efficient use of collaborative education in the teaching of mental health courses for university students to enhance their subjective perceptions and abilities. Strengthening the collection of sample data and exploring the effects of this integration approach on the psychological well-being of college students of different genders and majors are important aspects of the study that need to be improved and researched in the future.

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Competing interests

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Author's contributions

L.X. is the sole author of this research article.

Ethical considerations

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Data availability

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