

The current situation of college students' mental health under the background of building ideological and political information database

Zhao Junping, Wang Xiaowei

Taiyuan University, Taiyuan, Shanxi, 030032, China

Keywords: College Students; Ideological and Political Education in Courses; Mental Health

Abstract: This study aims to enhance the mental health literacy of college students, strengthen the effectiveness of ideological and political education, and cultivate well-rounded socialist builders and successors. In terms of methodology, an ecological ideological and political course system for "Mental Health Education for College Students" was constructed, innovatively adopting a student-led resource co-construction model. The Symptom Checklist-90 (SCL-90) was used to assess the mental health of both experimental and control groups of college students. The data showed that the scores of freshmen on the 10 dimensions of SCL-90 and the average total score of SCL-90 were significantly higher than the asymptomatic threshold (1 point), and the total score of SCL-90 was also higher than the asymptomatic threshold (90 points), indicating that some freshmen showed multidimensional health conditions and the overall mental health level of freshmen was relatively low. The experimental group scored significantly lower than the control group in dimensions such as somatization, hostility, and paranoia, confirming the intervention efficacy of the ecological ideological and political course on mental health. In the comparison based on demographic variables, it was found that female participants scored higher than male participants in the depression dimension. Participants with left-behind experiences scored higher than those without such experiences in the dimensions of paranoia, psychoticism, and additional items. Based on these findings, six optimization paths are proposed: deepening the organic integration and practical transformation of ideological and political elements in courses; establishing a long-term mechanism for psychological support for special groups; improving mechanisms for fostering learning motivation and self-efficacy; building a dynamic process evaluation system; developing a multi-modal teaching resource matrix; and implementing a dual-qualified faculty development program for psychology and ideological and political education.

1. Introduction

On July 7, 2021, the Office of the Ministry of Education of China issued the "Notice on Strengthening Student Mental Health Management." This is the latest guidance document issued by the Ministry of Education regarding student mental health work. The document calls for further enhancing the relevance and effectiveness of student mental health efforts, strengthening professional

support and scientific management, and focusing on improving students' mental health literacy. It explicitly requires that universities offer a mandatory public course on mental health for undergraduate and junior college students ^[1]. This clearly demonstrates China's emphasis on the mental health of college students.

In recent years, the mental health issues of college students have become increasingly prominent. Faced with academic pressure, interpersonal troubles, employment anxiety, and emotional problems, some college students have experienced increased anxiety, depression, loneliness, and difficulties in emotional regulation, which have even led to extreme behavioral incidents. According to relevant research data, the proportion of college students experiencing psychological distress continues to rise, and the demand for psychological crisis intervention is growing ^[2-4]. At the same time, the high development of social media and the relative lack of real-life social interaction have also exacerbated students' psychological issues ^[5-7]. Therefore, how to guide college students to establish a positive mental health perspective and enhance their ability to adjust psychologically has become an important issue that higher education institutions urgently need to address. Offering courses on "Mental Health Education for College Students" is also highly necessary.

"Course Ideological and Political Education" is an innovative measure to implement the fundamental task of cultivating virtue and nurturing talent. Its core lies in integrating ideological and political education into various courses, achieving a unity between knowledge transmission and value guidance. Incorporating ideological and political elements into the course "Mental Health Education for College Students" not only enhances the ideological depth and humanistic care of the course but also, through discussions on psychological issues, permeates ideas such as socialist core values, humanistic concern, and social responsibility. Integrating mental health content with ideological and political content helps students form correct views on life, values, and the world, promoting their all-round development and social integration ^[8-10].

The effective implementation of ideological and political education in courses cannot do without the support of teaching resources. Currently, many teachers face issues such as scattered materials, scarce resources, and lack of targeted cases when promoting ideological and political education in courses, which seriously affect the integration of ideological and political elements into course teaching ^[11]. Therefore, building a database of ideological and political education materials is of great practical significance.

In summary, the course "Mental Health Education for College Students," as a program to enhance psychological qualities among college students, is an ideal vehicle for implementing ideological and political education in courses. However, without systematic, professional, and practical teaching resources, it is often difficult to deeply integrate ideological and political elements, which can also reduce the effectiveness of teaching. Therefore, organically combining the content of this course with the construction of a database for ideological and political education materials is an effective method to improve teaching quality and educational outcomes.

2. Research methods

2.1 Research subjects

This study selected 226 freshmen from five classes of Taiyuan University in 2023 as research subjects and conducted a questionnaire survey. Among them, the control group (students not involved in building the ideological and political resources database) consisted of 89 students, while the experimental group (students involved in building the ideological and political resources database) included 137 students; there were 37 male students and 189 female students; 43 college students with left behind experience and 183 college students without left behind experience. (Since mental health education courses for college students are generally offered in the first semester of their freshman

year, only freshmen were surveyed).

2.2 Research methods

This study used a questionnaire survey method. The Symptom Checklist-90 (SCL-90) was used to investigate the current mental health status of college students in the experimental group (students involved in building the ideological and political resources repository) and the control group (students not involved in building the ideological and political resources repository). It also analyzes the current mental health status and characteristics of college students across five classes, aiming to better understand the mental health levels of college students.

2.3 Research tools

The Symptom Checklist-90 (SCL-90) was developed in 1975 by L.R. Derogatis and is widely used for screening psychological health problems. It demonstrates good reliability and validity, and can comprehensively reflect the psychological and behavioral profile of the individual being assessed. The checklist consists of ten factors: somatization, obsession-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia, psychoticism, and additional items, which together provide a relatively comprehensive picture of the individual's mental health status. The higher the score of Symptom Checklist-90 (SCL-90), the lower the level of mental health ^[12].

2.4 Data processing

The statistical software SPSS23.0 was used to analyze the data.

3. Research results

3.1 Basic descriptive statistical analysis of SCL-90 scores of freshmen

Table 1 Descriptive statistics of each dimension and the whole scale of SCL-90 for freshmen

| | N | Min | Max | M | SD |
|---------------------------|-----|-----|------|----------|---------|
| Somatization | 226 | 1 | 3.75 | 1.4311 | 0.55492 |
| Obsession-compulsive | 226 | 1 | 4 | 1.6642 | 0.66292 |
| Interpersonal sensitivity | 226 | 1 | 4 | 1.5954 | 0.64099 |
| Depression | 226 | 1 | 4 | 1.5027 | 0.68538 |
| Anxiety | 226 | 1 | 4 | 1.5111 | 0.61997 |
| Hostility | 226 | 1 | 4 | 1.4882 | 0.63663 |
| Phobia | 226 | 1 | 4 | 1.469 | 0.59536 |
| Paranoia | 226 | 1 | 4 | 1.4484 | 0.57309 |
| Psychoticism | 226 | 1 | 3.9 | 1.4965 | 0.56685 |
| Additional items | 226 | 1 | 4 | 1.4779 | 0.61538 |
| Average of total score | 226 | 1 | 3.94 | 1.5115 | 0.48283 |
| Total score | 226 | 90 | 355 | 136.0312 | 43.4548 |

According to the data in Table 1, the basic scores on the 10 dimensions of the SCL-90 and the average of total score among first-year college students can be observed. Taking into account the different number of items in each dimension and their average scores, the ranking is as follows: obsession-compulsive > interpersonal sensitivity > anxiety > depression > psychoticism > hostility > additional items > phobia > paranoia > somatization. The average scores of each dimension and the average of total score range from 1.4311 to 1.6642, all of which are higher than the theoretical value for asymptomatic individuals (1 point). This indicates that some first-year students exhibit positive symptoms in one or more dimensions. The total score of the SCL-90 is also higher than the theoretical value for asymptomatic individuals (90 points), suggesting that the overall mental health level of

college students is relatively low.

3.2 Comparative analysis of control group and experimental group

Comparison of SCL-90 scores between freshmen who did not participate in the construction of the ideological and political resource library (the control group) and freshmen who participated in the construction of the ideological and political resource library (the experimental group).

Table 2 Comparison of scl-90 scores among first-year students with and without participation in building the ideological and political information database

| | control group M±SD (n=89) | experimental group M±SD (n=137) | t | P |
|---------------------------|---------------------------------|---------------------------------------|--------|-------|
| Somatization | 1.64±0.59 | 1.30±0.48 | 4.546* | 0.00 |
| Obsession-compulsive | 1.71±0.70 | 1.64±0.64 | 0.819 | 0.414 |
| Interpersonal sensitivity | 1.66±0.68 | 1.56±0.61 | 1.16 | 0.247 |
| Depression | 1.53±0.68 | 1.48±0.69 | 0.539 | 0.59 |
| Anxiety | 1.55±0.64 | 1.49±0.60 | 0.749 | 0.454 |
| Hostility | 1.63±0.67 | 1.40±0.60 | 2.722* | 0.007 |
| Phobia | 1.52±0.56 | 1.44±0.62 | 1.039 | 0.3 |
| Paranoia | 1.57±0.58 | 1.37±0.55 | 2.547* | 0.012 |
| Psychoticism | 1.54±0.56 | 1.54±0.56 | 0.916 | 0.361 |
| Additional items | 1.53±0.64 | 1.47±0.57 | 1.02 | 0.309 |
| Average of total score | 1.59±0.48 | 1.44±0.60 | 1.959 | 0.051 |

Note: * indicates $P < 0.05$. The same below.

According to the data in table 2, there are significant differences between first-year students in the control group and those in the experimental group on the scl-90 dimensions of somatization, hostility, and paranoia. The first-year students who did not participate in building the ideological and political information database scored significantly higher in somatization, hostility, and paranoia than those who did participate. In other words, the mental state of first-year students who participated in building the ideological and political information database is better in terms of somatization, hostility, and paranoia compared to those who did not participate.

3.3 Demographic analysis of SCL-90 scores in first-year students

3.3.1 Comparison of gender differences in SCL-90 scores among freshmen

Table 3 Comparison of SCL-90 scores by gender of freshmen

| | male M±SD (n=37) | female M±SD (n=189) | t | P |
|---------------------------|------------------------|---------------------------|--------|-------|
| Somatization | 1.32±0.47 | 1.45±0.57 | -1.28 | 0.202 |
| Obsession-compulsive | 1.63±0.60 | 1.67±0.68 | -0.345 | 0.731 |
| Interpersonal sensitivity | 1.54±0.54 | 1.61±0.66 | -0.568 | 0.57 |
| Depression | 1.29±0.54 | 1.54±0.70 | -2.53* | 0.014 |
| Anxiety | 1.38±0.46 | 1.54±0.64 | -1.703 | 0.093 |
| Hostility | 1.36±0.52 | 1.51±0.66 | -1.386 | 0.167 |
| Phobia | 1.37±0.55 | 1.49±0.60 | -1.143 | 0.254 |
| Paranoia | 1.34±0.43 | 1.47±0.60 | -1.232 | 0.219 |
| Psychoticism | 1.39±0.51 | 1.52±0.58 | -1.196 | 0.233 |
| Additional items | 1.47±0.48 | 1.48±0.64 | -0.032 | 0.974 |
| Average of total score | 1.41±0.36 | 1.53±0.50 | -1.439 | 0.151 |

According to the data in table 3, there is a significant difference in depression scores on the scl-90 between first-year students of different genders. Female first-year students scored significantly higher in depression than male first-year students. In other words, the psychological condition related to depression among female first-year students is worse than that of their male counterparts.

3.3.2 Comparison of SCL-90 scores of freshmen with and without left-behind experience

Table 4 Comparison of SCL-90 scores of freshmen with and without left-behind experience

| | with left behind experience M±SD (n=43) | without left behind experience M±SD (n=183) | t | P |
|---------------------------|--|--|--------|-------|
| Somatization | 1.41±0.52 | 1.44±0.56 | -0.290 | 0.772 |
| Obsession-compulsive | 1.81±0.73 | 1.63±0.64 | 1.575 | 0.117 |
| Interpersonal sensitivity | 1.74±0.73 | 1.56±0.62 | 1.609 | 0.109 |
| Depression | 1.55±0.73 | 1.49±0.68 | 0.531 | 0.596 |
| Anxiety | 1.68±0.67 | 1.47±0.60 | 1.960 | 0.051 |
| Hostility | 1.55±0.64 | 1.47±0.64 | 0.755 | 0.755 |
| Phobia | 1.55±0.67 | 1.45±0.58 | 1.009 | 0.314 |
| Paranoia | 1.64±0.56 | 1.40±0.57 | 2.407* | 0.017 |
| Psychoticism | 1.71±0.62 | 1.45±0.54 | 2.745* | 0.007 |
| Additional items | 1.68±0.64 | 1.43±0.60 | 2.391* | 0.018 |
| Average of total score | 1.63±0.51 | 1.48±0.47 | 1.742 | 0.083 |

According to the data in table 4, there are differences in the scl-90 dimensions of paranoia, psychoticism, and additional items between first-year students with and without left-behind experience. The first-year students with left-behind experience scored significantly higher in paranoia, psychoticism, and additional items than those without such experience. In other words, the psychological condition of students with left-behind experience is worse in terms of paranoia, psychoticism, and additional items compared to students without left-behind experience.

4. Discussion

A portion of first-year college students exhibit positive symptoms in one or several dimensions, indicating relatively low mental health levels. The results in Table 1 are related to the multifaceted pressures faced by college students, such as adapting to and developing university life, career choices, and academic pressure^[13], which contribute to their relatively low mental health levels.

Freshmen who did not participate in building the ideological and political information database had significantly higher scores in somatization, hostility, and paranoia than those who did participate. In other words, freshmen who participated in the construction of the ideological and political information database exhibited better psychological conditions in somatization, hostility, and paranoia than those who did not. A possible explanation for the results presented in Table 2 is that the integration of ideological and political content into the curriculum helps students develop correct outlooks on life, values, and the world, thereby facilitating their mental health development^[8]. This finding indicates that participation in the construction of the ideological and political information database for the course “Mental Health Education for College Students” contributes to the improvement of college students' mental health.

The depression score of female freshmen was significantly higher than that of male freshmen. The results in Table 3 may be related to the physiological and psychological characteristics of women. Estrogen makes women more sensitive than men, coupled with the change of hormone menstrual cycle, women are more emotional, and in social perception, they are prone to depression^[14].

The first-year students with left-behind experience scored significantly higher on the scl-90 dimensions of paranoia, psychoticism, and additional items than those without such experience. The results in table 4 may be related to the negative impact that left-behind experiences have on individuals. The mental health level of first-year students with left-behind experience is significantly lower than that of those without such experience. This is consistent with the findings of Wang Xinrui et al., who noted that college students with left-behind experience often lack parental love and support during their upbringing, receive little timely guidance from their parents, and are more likely to develop psychological problems when facing setbacks. Therefore, college students with left-behind experience tend to have lower levels of mental health ^[15].

5. Conclusions

(1) The average scores for each dimension of the SCL-90, as well as the average of the total score, range from 1.4311 to 1.6642, all of which are higher than the theoretical score for asymptomatic individuals (1 point). This indicates that some freshmen exhibit positive symptoms in one or more dimensions. The total score of the SCL-90 is also higher than the theoretical asymptomatic value (90 points), suggesting that the overall mental health level of college students is relatively low.

(2) Freshmen who did not participate in building the ideological and political information database scored significantly higher in somatization, hostility, and paranoia compared to those who did participate. Participation in the construction of the ideological and political information database for the course "Mental Health Education for College Students" contributes to the improvement of college students' mental health.

(3) Female freshmen scored significantly higher than male freshmen in depression. Freshmen with left-behind experiences scored significantly higher than those without such experiences in paranoia, psychoticism, and additional items.

6. Countermeasures and suggestions

6.1 Deepening the organic integration and practical transformation of ideological and political elements in courses

Based on the research findings, ideological and political education content should be more organically integrated into the "Mental Health for College Students" course. Through various teaching methods such as case analysis, role-playing, and group discussions, students can be guided to understand and apply mental health knowledge to solve practical problems, while also fostering their sense of social responsibility and collective awareness.

6.2 Establishing a long-term mechanism for psychological support for special groups

Special mental health measures are designed and implemented for female freshmen and students with left-behind experiences. For example, targeted mental health counseling and emotional education are provided for female students; personalized psychological counseling and social adaptation guidance are provided for students with left-behind experiences.

6.3 Improving mechanisms for fostering learning motivation and self-efficacy

Leverage the ideological and political education resource library to stimulate students' interest in learning and self-motivation. By setting learning goals, encouraging self-reflection, and providing achievement feedback, enhance students' pursuit of competence and altruistic orientation.

Educational institutions should encourage students' participation in constructing the ideological and political education resource library. By contributing to the development of this repository, students can experience a heightened sense of personal value and achievement, which in turn will further strengthen their learning motivation.

6.4 Building a dynamic process evaluation system

The mental health status and learning motivation of students are evaluated regularly, and the teaching effect of the course "Mental Health Education for College Students" is analyzed. This helps to adjust the teaching content and methods in time, so as to ensure the effectiveness and pertinence of educational activities.

6.5 Developing a multi-modal teaching resource matrix

Universities and colleges should develop and utilize diversified teaching resources, including multimedia materials, online courses, and interactive platforms, to enrich both the content and delivery formats of "Mental Health Education for College Students." By fully leveraging existing dedicated online platforms for this program, educational institutions can effectively harness the synergistic advantages of blended learning models.

6.6 Implementing a dual-qualified faculty development program for psychology and ideological and political education

Higher education institutions should implement interdisciplinary training programs that synergize mental health education with ideological and political education, aimed at enhancing faculty members' cross-disciplinary integration capabilities. This initiative will provide substantial pedagogical support for advancing ideological and political curriculum development. To augment these efforts, academic institutions should strategically incorporate external expertise by inviting distinguished scholars specializing in both mental health and political pedagogy. These experts may engage in campus activities such as delivering keynote lectures, conducting specialized workshops, and participating in collaborative research forums, thereby equipping educators with cutting-edge theoretical frameworks and evidence-based practices to elevate their professional competencies in dual-disciplinary instruction.

Acknowledgement

This study was supported by the 2022 Taiyuan University Teaching Quality and Teaching Reform Project (Jg202247); this study was also supported by the 2023 Taiyuan University Teaching Quality and Teaching Reform Project (Jg202338); this study was further supported by the 2023 Shanxi Province Higher Education Institutions General Teaching Innovation and Reform Project (J20231448).

References

- [1] Office of the Ministry of Education. Notice on Strengthening Student Mental Health Management [EB/OL]. Beijing: Ministry of Education of the People's Republic of China, 2021-07-07 [2024-10-07]. http://www.moe.gov.cn/srcsite/A12/moe_1407/s3020/202107/t20210720_545789.html.
- [2] Zhao Yang. Analysis of College Students' Mental Health under the Perspective of Higher Education Level Stratification [J]. Shanxi Youth, 2024(18):99-101.
- [3] Xu Hongyan. Investigation on the Mental Health Status of College Students and Its Influencing Factors [J]. Western Quality Education, 2024,10(15):106-109.

- [4] Li Danping. *Survey on the mental health status of college students released! College admission becomes the biggest risk factor* [N]. *China Youth Daily*, 2023-03-27 (004).
- [5] Ye Xinxin. *Analysis of the Mental Health Status of Post-00s College Students under "Gray Internet Public Opinion"* [J]. *New West China*, 2023 (06):143-146.
- [6] Wang Li, Wang Min. *Mental health status and educational countermeasures of college students in the network environment* [J]. *Knowledge Window (Teacher Edition)*, 2019(06):25.
- [7] Zhu Xiaoli. *The Influence of Media Content on College Students' Mental Health* [J]. *Higher Education Journal*, 2022,8 (30): 67-70.
- [8] Fu Yaqin, Li Feng, Zhao Zhifeng. *Review, Problems and Prospects of Ideological and Political Education in College Courses* [J]. *Educational Exploration*, 2025(03):61-67.
- [9] Zhang Chi and Wang Wenqian. *The context, logical shift and practical approach of "Course Ideology and Politics" in the New Engineering* [J]. *Education Exploration*, 2024 (12):49-53.
- [10] Qin Qiaoping, Xu Jin, Liu Xiang et al. *Reform exploration of integrating academic literacy education into ideological and political teaching in courses* [J]. *Higher Education Journal*, 2025,11(08):138-141.
- [11] Wang Hua, Tian Xiaohua. *Research on the Construction of Professional Course Ideological and Political Resources in Higher Vocational Education under the OBE Concept—Taking Taxation Practice Course as an Example* [J]. *Modern Vocational Education*, 2025(07):137-140.
- [12] Derogatis, L. R. *SCL-90-R: Administration, scoring, and procedures for the SCL-90-R* [M]. Baltimore: Johns Hopkins University School of Medicine, 1977.
- [13] Gao Ye, Luo Pingjuan, Xu Zonglin et al. *Research on the Influencing Factors of College Students' Mental Health Based on Big Data Technology* [J]. *Network Security Technology and Application*, 2023 (02):82-85.
- [14] Wang Lu. *Interpreting the emotional problems of women dominated by hormones* [N]. *Medical News*, 2024-03-14 (B05).
- [15] Wang Xinrui, Zhang Jieping, Han Buxin. *The Protective Effect of Social Support on the Mental Health of College Freshmen with Left-behind Experience in the Post-Pandemic Era* [J]. *Journal of Chengdu University of Technology*, 2024,27(01):107-112.