

Analysis on the Effect of Metacognition Intervention Combined with Group Psychological Counseling on College Students' Depression Psychology

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Abstract—To explore the effect of meta-recognition intervention combined with group psychological counseling on depression in college students, 200 college students with depression were randomly divided into study group (n =100) and control group (n =100), and the control group was treated with meta-recognitive intervention. The scores of HAMD (15.02-4.16), BDI (8.09-3.58) and DAS (125.16-6.42) after the intervention of the study group were significantly lower than those of the control group (P <0.05). The positive response score (25.23-3.72) after the study group was significantly higher than that of the control group, while the negative response score (8.92-1.13) was significantly lower than that of the control group. The difference between the two groups was statistically significant (P <0.05). So we can reach the conclusion that the combination of metacognitive intervention and group psychological counseling can reduce the depression mood of college students and improve their coping style and psychological intervention.

Keywords—college students; depression; metacognitive intervention; group psychological counseling; intervention effect

I. INTRODUCTION

Depression is an individual's common psychological disorder, which has an obstacle to the individual's psychological adaptation. Most college students face interpersonal problems, academic problems, economic pressure, life environment change, etc., meanwhile the psychological state of college students is not mature enough to sustain depression [1]. According to the investigation, the incidence of depression in Chinese college students is 12.86% [2]. Depression has a serious negative effect on the life and learning of college students, sometimes even a suicidal idea arises [3]. Therefore, this paper aims at discussing the effect of metacognitive intervention on the psychological intervention of college students' depression, and providing guidance and management for the depression mood of the college students.

On the basis of study background above, we conducted this analysis on the effect of metacognition intervention combined with group psychological counseling on college students' depression psychology, which can show us obvious comparison results.

II. METHODS

With the approval of the Medical Ethics Committee, 200 depressed college students from a college of science and technology were randomly divided into study group (n ≤ 100) and control group (n = 100). Criteria include: (1) BDI score ≥ 5, HAMD ≥ 7; (2) a strong willingness to change themselves; (3) participate in voluntarily and agree to sign an information letter. The excluded marks are as follows: (1) patients with communication disorders; (2) patients with mental system diseases; (3) patients with severe physical diseases; (4) those who quit halfway. In the study group, 46 cases were female, 54 cases were male, ages were from 16 to 23 (17.89 ± 1.24) years old. In the control group, there were 43 females and 56 males, aged from 16 to 22 (17.93 ± 1.47) years old. There was no significant difference in the basic data between the two groups, and the equilibrium was comparable (P > 0.05).

The control group was given metacognition intervention method. The psychological teacher explained the metacognition strategy method to the students, and input the accurate thinking as well as the behavior procedure through the positive strengthening and the long-term self-training, which could cause the university students to transfer the behavior training results into their personality and instruct them to record their own emotional change, experience the physical change under the positive and negative emotion. This method requires college students to carry on the aerobic training every day. By deep breathing training, progressive muscle relaxation and other training, these college students check and record

problems in daily life, explain and adjust the metacognition knowledge, which can consciously stimulate them to use metacognition technology to end the intervention when dealing with stress time.

Based on this, the study group divided these college students into 10 intervention teams, each team contains 10 persons, team psychological counseling was divided into 5 stages, once a week, 5 times in total. The first stage: the theme is mutual understanding, the goal is to understand the results and significance of psychological counseling in the team more quickly, to help the team members understand each other. The interactive content is interpersonal interaction snowball. The second stage: the theme is to open up and explore themselves. The goal is to help understand their inner state, objective evaluation and understanding of themselves, and help to explore the outlook in life and value linked with the content of personal self-portrait. it therapy. The third stage: the theme is understanding the team, the goal is to understand the persons' thoughts to improve the interpersonal interaction and the content is the sandbox game. The fourth stage: the theme is to interpret the mood and resolve the pressure, the goal is to understand the mood and pressure and grasp the imagination desensitization method, the content is the music relaxation method. The fifth stage: The theme is my future is not a dream, the goal is to explore the career and set up the personal goal, the content is the career discussion.

The observation index includes BDI, HAMD, and DAS, which were used to assess the status of depression before and after the intervention of two groups of patients, and the score was proportional to the degree of depression [4]. A simple coping style questionnaire (SCSQ) was used to evaluate the coping styles before and after the intervention of the two groups, including positive response and negative response to 2 dimensions, 20 entries, and the higher the score, the greater the tendency of the coping style will be [5].

III. STATISTICAL DATA ANALYSIS

Use SPSS 25.0 to calculate the data results, "%" represents the counting data, use x2 test, "±S" represents the measurement data. T test was used to indicate the data difference (P < 0.05).

A. Comparison of Depressive State between the Two Groups before and after Intervention

The scores of HAMD (15.02-4.16), BDI (8.09-3.58) and DAS (125.16-6.42) after intervention of the study group were significantly lower than that of the control group (P < 0.05). See Table 1.

TABLE I. COMPARISON OF THE DEPRESSIVE STATES BEFORE AND AFTER THE INTERVENTION OF THE TWO GROUPS (% S, MIN)

Group	Time	HAMD	BDI	DAS
Research group	before intervention	26.01±7.24	16.57±6.22	167.29±10.92
	After intervention	15.02±4.16*	8.09±3.58*	125.16±6.42*
<i>t</i>		13.162	22.963	9.576
<i>P</i>		0.000	0.000	0.000
Control group	before intervention	26.57±7.71	16.62±6.89	168.11±13.45

Cont. to TABLE I.				
	After intervention	19.86±4.75	12.79±4.30	145.53±7.75
<i>t</i>		7.299	13.334	4.239
<i>P</i>		0.000	0.000	0.000

* Comparison between groups, P < 0.05.

B. Comparison between the Two Groups of Intervention before and after Intervention

The positive response score (25.23-3.72) after the study group was significantly higher than that of the control group, and the negative response score (8.92-1.13) was significantly lower than that of the control group. The difference between the two groups was statistically significant (P < 0.05). See Table 2.

TABLE II. COMPARISON OF THE RESPONSES BEFORE AND AFTER THE TWO GROUPS OF INTERVENTION (POINTS S, POINTS)

Group	Time	Coping with	Negative coping
Research group	before intervention	18.96±2.58	13.76±1.41
	after intervention	25.23±3.72*	8.92±1.13*
<i>t</i>		13.850	26.693
<i>P</i>		0.000	0.000
Control group	before intervention	18.80±2.73	13.69±1.35
	after intervention	21.75±3.11	11.20±1.20
<i>t</i>		7.129	13.785
<i>P</i>		0.000	0.000

* Comparison between groups, P < 0.05.

IV. RESULTS

Depression is the main cause of college students' extreme behaviors like suicide, etc. Therefore, how to improve the psychological state of college students and reduce depression is the main focus of psychological teachers in colleges and universities at present. Group psychological counseling is to guide college students to discuss through setting up situations and problems, help them re-understand themselves in activities, produce the spiritual motive force of psychological and behavioral change, help them develop and improve themselves and shape mature personality [6]. Metacognition intervention is based on psychological counseling, aiming at helping college students to self-perception, reflection, supervision and control of their subconscious and other psychological activities. Meta-cognition is the system of practical operation includes the basic skills of psychological consultation, the hypnosis, the relaxation of the clinical operation technology and so on. It is necessary to practice the theory on its own as well as the visitors. It is also necessary to continuously promote the practice thought to the theory, so that the practical operation wisdom can be truly grasped.

In the meta-cognitive intervention, students should first observe which behaviors are subconscious behaviors, whether they can solve their bad behavior habits and consciously use this set of theories to explain their cognition, emotional feelings, thinking behavior and so on. The results of this study reveal that the HAMD, BDI, DAS scores of the study group were significantly lower than those of the control group after intervention (P < 0.05). After intervention, the positive coping score of the study group was significantly higher than that of

the control group, while the negative coping score was significantly lower than that of the control group ($P < 0.05$). The results indicate that metacognition intervention combined with group psychological counseling intervention can provide explanations, comfort and drum for college students. In order to improve the psychological state of the patient, the negative response is replaced with positive response [7].

V. CONCLUSIONS

According to the investigation study and statistical analysis results above, we can reach the conclusions that metacognitive intervention and group psychological counseling can effectively reduce the depression mood of college students and improve their coping style. Actually, the psychological intervention effect is prominent, which will be quite worthy to popularize.

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