

Effect of Naikan cognitive therapy on job burnout, self-efficacy, and general well-being of psychiatric staffs

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Abstract: This article is to explore the effects of Naikan cognitive therapy on job burnout, self-efficacy, and general well-being of psychiatric staffs. From May 2023 to April 2024, 100 psychiatric staffs from a psychiatric hospital in Suzhou were selected as research subjects and randomly divided into an observation group and a control group, each consisting of 50 cases. The observation group was intervened with NCT while the control group received standard psychological guidance. Before and after the intervention, MBI-HSS, GSES and GWB were administered to all subjects. Before the intervention, there were no significant differences in general conditions and assessment indicators between two groups. After the intervention, the emotional exhaustion and depersonalization factor scores of the observation group's MBI-HSS were significantly lower than before the intervention ($t=29.683, 31.857$, both $P<0.05$), and the observation group's scores were significantly lower than the control group's ($t=-8.437, -5.280$, both $P<0.05$); the personal accomplishment factor score was significantly higher than before the intervention ($t=-59.544, -11.855$, $P<0.05$), and the observation group's score was significantly higher than the control group's ($t=-8.113$, $P<0.05$); the observation group's post-intervention GSES score was significantly higher than before the intervention ($t=-17.538$, $P<0.05$), and the observation group's score was significantly higher than the control group's ($t=4.225$, $P<0.05$); the observation group's post-intervention GWB score was significantly higher than before the intervention ($t=-38.986$, $P<0.05$), and the observation group's score was significantly higher than the control group's ($t=13.199$, $P<0.05$). NCT can significantly reduce the level of job burnout among psychiatric staffs, and enhance their self-efficacy and general well-being levels.

Keywords: Psychiatric staff, Naikan cognitive therapy, Job burnout, Self-efficacy, General well-being

1. Introduction

In 1974, American psychologist Freudenberger first defined job burnout as a state of exhaustion, a negative emotional state ultimately caused by continuous emotional demands at work and interactions with others, particularly among workers in the helping professions. Maslach et al. ^[1] proposed that job burnout is a psychological syndrome in response to chronic emotional and interpersonal stressors at work. Self-efficacy refers to an individual's general ability and confidence in coping with a wide range of task demands or new situations ^[2]. For medical staff, self-efficacy mainly refers to their confidence in using their professional skills to complete a specific task, which greatly influences their work ^[3]. High self-efficacy can reduce occupational burnout and negative emotions ^[4-5]. General well-being is an important factor measuring mental health status and quality of life. It is a key theme in positive psychology, enhancing well-being benefits individuals in many aspects such as physical health, work, and social adaptation ^[6].

Multiple studies confirm that medical staff are a key group with a high incidence of job burnout. Due to the particularity of the psychiatric profession ^[7], medical staff in psychiatry experience higher levels of job burnout ^[8-11], with mild and moderate burnout being common, and their self-efficacy and general well-being are relatively low ^[12]. This not only affects the individual's psychological state, interpersonal communication, work efficiency, and personal career development, but also directly impacts the high-quality development of mental health services ^[13]. Therefore, developing effective intervention strategies is an important research direction in the academic field.

Naikan Cognitive Therapy (NCT) was proposed by Professor Li Zhentao and refined by Professor Mao Fuqiang. It integrates Naikan therapy and Beck's cognitive therapy. Following the three themes of Naikan, by recalling important personal relationships and feeling life events that have occurred from multiple perspectives, it allows individuals to re-experience emotional experiences such as satisfaction, gratitude, and guilt, shake and change entrenched self-centered consciousness, correct irrational cognitions, and harmonize the subjective and objective^[14]. In recent years, the application fields of NCT have continuously expanded, being used not only for various groups with mental disorders but also as a psychological health method for various populations. This study innovatively extends this method to the group of psychiatric medical staff, with a developmental and preventive goal, aiming to explore its intervention effects on occupational burnout, self-efficacy, and general well-being in this group, in order to provide new perspectives and methods for clinical psychological intervention.

2. Objects and Methods

2.1 Objects

100 psychiatric medical staff from a psychiatric hospital in Suzhou were selected as research subjects between May 2024 and April 2025. Inclusion criteria: (1) Voluntary participation and signing of informed consent; (2) Work experience of more than 1 year. Exclusion criteria: (1) Medical staff on advanced studies or internships; (2) Medical staff who did not follow the intervention method of this project; (3) Medical staff receiving other psychological therapies. This study strictly adhered to ethical norms. Before enrollment, all participants voluntarily signed consent forms under full informed consent, and strict data confidentiality measures were implemented throughout the process. Participants were divided into two groups of 50 each using a random number table. The observation group consisted of 10 males and 40 females, aged 24-45 years, average age (27.53 ± 2.46) years. Work years ranged from 1-15 years, average work years (8.32 ± 1.01) years. Occupation: 12 doctors, 38 nurses. The control group consisted of 11 males and 39 females, aged 23-46 years, average age (27.61 ± 2.52) years. Work years ranged from 1-16 years, average work years (8.42 ± 1.11) years. Occupation: 11 doctors, 39 nurses. Comparing the general information of the two groups of subjects, the difference was not statistically significant ($P > 0.05$).

2.2 Methods

2.2.1 Intervention Methods

The observation group underwent a 7-day NCT intervention. Specifically, on Saturday and Sunday, except for lunch and dinner, they conducted concentrated Naikan at a designated location; from the following Monday to Friday, they conducted concentrated Naikan for 2 hours at noon at a designated location, and from 18:00-21:00 in the evening, they conducted dispersed Naikan. The specific intervention was as follows: The concentrated Naikan location for the observation group was the hospital meeting room (quiet and comfortable environment). Each research subject sat separately, and partitions were placed between the subjects. Each subject discussed and determined the Naikan objects with the instructor. The Naikan objects ranged from the closest person, the next closest, the third closest, to the less disliked, and the most disliked person. The time since their birth was divided equally into 6 segments for each Naikan object, and for each object, the six segments of Naikan were conducted focusing on the three Naikan themes: "what the other person has done for me," "what I have done for the other person," and "the troubles I have caused the other person." Finally, under the guidance of the instructor, cognitive therapy intervention was conducted, namely automatic thought identification, reality testing, and irrational cognition identification and correction. The Naikan Cognitive Therapy Guidance Manual^[15] was used to record the entire intervention process. Instructors were psychiatrists who had received specialized psychological training, with each instructor guiding 5 to 6 subjects, meeting with them every 1-1.5 hours to guide their Naikan cognitive operations, correct irrational cognitions, and address problems and insights that arose during the intervention.

The control group received standard psychological guidance simultaneously. The psychiatrists who had received unified psychological training were conducted as instructors, each instructor guided 5 to 6 research subjects, including venting, counseling, and reading mental health-related books. (1) Venting: The instructor learned about the subject's psychological status through conversation, encouraged them to talk about problems and pressures encountered at work, and guided them to express their emotions to reduce stress. (2) Counseling: Actively communicated with the subjects, provided comfort and

encouragement appropriately, and offered targeted counseling when necessary. (3) Subjects read mental health-related books and their reading situation was checked. The intervention time, location, and environmental arrangements for the control group were the same as those for the observation group.

2.2.2 Assessment Tools

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) was used to assess the degree of occupational burnout, the General Self-Efficacy Scale (GSES) was used to assess the level of self-efficacy, and the General Well-Being Schedule (GWB) was used to assess the level of general well-being.

① The MBI-HSS includes three dimensions; in the emotional exhaustion and depersonalization dimensions, higher scores indicate more severe occupational burnout; in the reduced personal accomplishment dimension, higher scores indicate less severe occupational burnout. All use a 7-point rating scale. The scores for the three subscales are obtained by summing the scores of their respective items^[16].

② The GSES was developed by Ralf Schwarzer et al. from Berlin University, Germany. The Chinese version was translated and revised by Zhang Jianxin and Schwarzer. It consists of 10 items, using a 4-point rating scale. The total scale score is obtained by adding up the scores of all 10 items and dividing by 10. Higher total scores indicate higher levels of self-efficacy^[17].

③ The GWB was developed by Fazio^[18]. After revision by Duan Jianhua^[19], it contains 18 questions, evaluating six factors of well-being. Higher total scores indicate greater well-being.

2.2.3 Assessment Method

The MBI-HSS, GSES, and GWB were administered to both groups of subjects once before and once after the intervention.

2.2.4 Statistical Methods

SPSS 24.0 software was used for data analysis. Measurement data are expressed as ($\bar{x} \pm s$), and paired t-tests were used. $P < 0.05$ indicated a statistically significant difference.

3. Results

3.1 Comparison of MBI-HSS Scores Between the Two Groups Before and After Intervention

Table 1 Comparison of MBI-HSS Scores Between the Two Groups Before and After Intervention ($\bar{x} \pm s$, points)

| Group | n | Emotional Exhaustion | | Depersonalization | | Reduced Personal Accomplishment | |
|-------------|----|---|------------------|---|-----------------|---|------------------|
| | | Pre | Post | Pre | Post | Pre | Post |
| Observation | 50 | 26.37 \pm 4.11 | 14.20 \pm 3.32 | 13.03 \pm 2.77 | 5.60 \pm 2.79 | 23.17 \pm 3.60 | 38.13 \pm 3.12 |
| Control | 50 | 26.47 \pm 2.84 | 22.53 \pm 2.43 | 12.87 \pm 2.85 | 9.43 \pm 0.94 | 23.07 \pm 3.74 | 28.57 \pm 4.05 |
| t value | | -8.437*, 29.683 ^① , 8.635 ^② | | -5.280*, 31.857 ^① , 8.511 ^② | | 8.113*, -59.544 ^① , -11.855 ^② | |
| P value | | 0.000*, 0.000 ^① , 0.042 ^② | | 0.000*, 0.000 ^① , 0.048 ^② | | 0.000*, 0.000 ^① , 0.038 ^② | |

Note: "①" indicates comparison within the observation group before and after intervention, $P < 0.05$; "②" indicates comparison within the control group before and after intervention, $P < 0.05$; "*" indicates comparison between the two groups after intervention, $P < 0.05$. The same applies below.

The study showed in table 1 that there was no significant difference in the MBI-HSS dimension scores between the two groups before the intervention ($P > 0.05$). After the intervention, the emotional exhaustion and depersonalization dimension scores of the observation group's MBI-HSS were significantly lower than before the intervention ($t = 29.683, 31.857$, both $P < 0.05$). The emotional exhaustion and depersonalization dimension scores of the control group's MBI-HSS after intervention were also significantly lower than before the intervention ($t = 8.635, 8.511$, both $P < 0.05$). Furthermore, after the intervention, the observation group's scores were significantly lower than the control group's ($t = -8.437, -5.280$, both $P < 0.05$). The reduced personal accomplishment factor scores of both groups were significantly higher than before the intervention ($t = -59.544, -11.855$, $P < 0.05$), and the observation group's score was significantly higher than the control group's ($t = 8.113$, $P < 0.05$).

3.2 Comparison of GSES Scores Between the Two Groups Before and After Intervention

Table 2 Comparison of GSES Scores Between the Two Groups Before and After Intervention ($\bar{x} \pm s$, points)

| Group | n | Pre-intervention | Post-intervention |
|-------------|--------|--|-------------------|
| Observation | 50 | 2.64 \pm 0.18 | 3.29 \pm 0.34 |
| Control | 50 | 2.68 \pm 0.14 | 2.88 \pm 0.20 |
| <i>t</i> | -0.354 | 4.225*, -17.538 ^① , -7.823 ^② | |
| <i>P</i> | 0.732 | 0.000*, 0.000 ^① , 0.043 ^② | |

The study showed in table 2 that there was no significant difference in GSES scores between the two groups before the intervention ($P > 0.05$). The GSES scores after intervention were higher than before the intervention in both groups ($t = -17.538, -7.823, P < 0.05$). Meanwhile, the observation group's score was significantly higher than that of the control group ($t = 4.225, P < 0.05$).

3.3 Comparison of GWB Scores Between the Two Groups Before and After Intervention

Table 3 Comparison of GWB Scores Between the Two Groups Before and After Intervention ($\bar{x} \pm s$, points)

| Group | n | Pre-intervention | Post-intervention |
|-------------|--------|--|-------------------|
| Observation | 50 | 72.10 \pm 2.19 | 95.37 \pm 3.51 |
| Control | 50 | 72.53 \pm 2.05 | 80.93 \pm 3.19 |
| <i>t</i> | -2.635 | 13.199*, -38.986 ^① , -11.706 ^② | |
| <i>P</i> | 0.159 | 0.000*, 0.000 ^① , 0.049 ^② | |

The study showed in table 3 that there was no significant difference in GWB scores between the two groups before the intervention ($P > 0.05$). The GWB scores after intervention were higher than before the intervention in both groups ($t = -38.986, -11.706, P < 0.05$). Meanwhile, the observation group's score was significantly higher than that of the control group ($t = 13.199, P < 0.05$).

4. Discussion

4.1 The Impact of Naikan Cognitive Therapy on Occupational Burnout of Psychiatric Medical Staff

The results show that after the intervention, the emotional exhaustion and depersonalization scores of the observation group were significantly lower than before the intervention and significantly lower than those of the control group, while the personal accomplishment score was significantly higher than before the intervention and significantly higher than that of the control group, proving that NCT is more effective than conventional psychological intervention methods in reducing the occupational burnout level of psychiatric medical staff. This result is consistent with previous studies. Lv Xue, studying 25 nursing staff, found that Naikan therapy can effectively improve the occupational burnout of nursing staff [20]. Li Xiao et al. used Naikan therapy to intervene in 50 psychiatric nurses, and the results showed that Naikan therapy can alleviate the occupational burnout of psychiatric nurses and can be used as one of the methods for occupational stress reduction in the future [21]. Huang Xiaoxia et al. proposed in a review that factors related to occupational burnout include anxiety, depression, sleep, and coping styles [22]. Previous studies have confirmed that NCT can reduce anxiety and depression, improve sleep, and promote positive coping styles [23-25]. This paper suggests that through NCT, Naikan practitioners gain insight into their self-centered consciousness, enhance feelings of being loved and connectedness with others, experience the joy of giving, strengthen positive emotions, and improve interpersonal harmony, thereby reducing anxiety and depression and improving sleep. By correcting irrational cognitions, they acquire new rational cognitions, enabling individuals to use more positive coping styles. Their self-confidence and sense of value increase accordingly, thus alleviating their sense of occupational burnout.

4.2 The Impact of Naikan Cognitive Therapy on the Self-Efficacy of Psychiatric Medical Staff

After the intervention, the self-efficacy score of the observation group was significantly higher than before the intervention and higher than that of the control group, proving that NCT, compared to conventional psychological intervention methods, can better improve the self-efficacy level of psychiatric medical staff. This is consistent with the conclusions of previous studies using Naikan therapy to enhance self-efficacy [23]. Professor Mao Fuqiang et al. believe that this benefit comes from NCT guiding individuals to recall experiences of important interpersonal relationships, identify and reconstruct the original irrational belief system, allowing them to realize the support received from sources, improve the level of perceived social support, enhance the sense of control over themselves and the environment, thereby increasing self-efficacy [23].

4.3 The Impact of Naikan Cognitive Therapy on the General Well-Being of Psychiatric Medical Staff

After the intervention, the general well-being score of the observation group was significantly higher than before the intervention and significantly higher than that of the control group, proving that NCT, compared to conventional psychological intervention methods, can better improve the general well-being level of psychiatric medical staff. This is consistent with the conclusions of previous studies using Naikan therapy to intervene in well-being [26]. Well-being includes two dimensions: one is the cognitive dimension, which is the individual's evaluation of their life satisfaction; the other is the emotional dimension, including positive and negative emotions. This paper suggests that through Naikan, practitioners review their past important interpersonal relationships, become aware of loving and being loved, re-experience the gratitude and warmth between people, perceive social support resources, transform originally negative emotions into positive ones, and simultaneously change the self-centered cognitive pattern, making their cognition more reasonable, thereby improving the level of general well-being.

4.4 Research Significance and Prospects

This study confirms that NCT can significantly improve the occupational burnout level of psychiatric medical staff, enhance their self-efficacy and general well-being levels. It is a psychological adjustment technique with significant effects, providing an evidence-based, highly operable practical method for the mental health care of psychiatric medical staff. It helps this group to better utilize their potential, improve work efficiency, and realize their life value, and is worthy of further promotion and application.

The sample size of this study is limited. Future research could expand the sample size and conduct long-term follow-up. Furthermore, this study is limited to psychiatric medical staff; whether its conclusions are applicable to other professional medical staff needs further verification. Subsequent research could improve external validity by expanding the sample range.

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