Wang Y et al. (2023) A QUALITATIVE STUDY ON THE PSYCHOLOGICAL EFFECTS OF GROUP THERAPY WITH PHYSICAL GAMES FOR ENHANCING HAPPINESS PERCEPTION AND PHYSICAL FITNESS AMONG DOCTORS, NURSES, AND PATIENTS. Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte vol. 23 (93) pp. 170-184. **DOI:** <u>https://doi.org/10.15366/rimcafd2023.93.012</u>

ORIGINAL

A QUALITATIVE STUDY ON THE PSYCHOLOGICAL EFFECTS OF GROUP THERAPY WITH PHYSICAL GAMES FOR ENHANCING HAPPINESS PERCEPTION AND PHYSICAL FITNESS AMONG DOCTORS, NURSES, AND PATIENTS

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Recibido 10 de agosto de 2022Received August 10, 2022Aceptado 17 de octubre de 2023Accepted October 17, 2023

ABSTRACT

Objective: This study aims to explore the impact of group therapy, incorporating physical games for happiness perception training, on the psychological well-being and physical fitness of healthcare professionals and patients with depression in a psychosomatic ward. The focus is to provide a comprehensive understanding of the role of physical activity in enhancing therapeutic outcomes in clinical nursing. Methods: The study gathered data from 12 group-led nurses, 12 depressed patients participating in group therapy, and 6 supervising physicians in a large tertiary general hospital's psychosomatic ward in Sichuan Province. Utilizing the phenomenological method in qualitative research, we collected insights into the participants' psychological experiences and the role of physical games in therapy. The Colaizzi 7-step analysis method was employed to process and synthesize the data, with an added focus on physical fitness aspects. Results: Analysis revealed three core themes - "gains, opinions or ideas," and ten minor themes, including "releasing stress, managing emotions, minimizing suicidal ideation, and enhancing physical fitness." Participants reported significant improvements in emotional well-being, stress relief, and physical health due to the integration of physical activities into the group therapy sessions. Conclusion: The inclusion of physical games in group therapy for happiness perception training has dual benefits for patients with depression and healthcare professionals: psychological support and improvement in physical fitness. Clinical nursing staff should promptly provide appropriate health guidance, adjust group content and schedule, and incorporate physical fitness elements to enhance the quality of group therapy. This approach not only aids in active patient participation in treatment but also promotes holistic physical and mental health recovery, underscoring the importance of physical activity in psychological rehabilitation.

KEYWORDS: happiness perception training group; depression; qualitative research; group therapy

1. INTRODUCTION

Major depressive disorder (MDD) is the most common type of depressive disorder. Clinically, it is characterized by depressed mood, diminished interest, reduced volitional activity, lack of pleasure, etc. In severe cases, psychotic symptoms such as hallucinations and delusions may occur. Some patients have self-injurious and suicidal behaviors, which even lead to death (Petralia et al., 2020). The 2005-2017 Burden of Disease in China report shows that the disease spectrum leading to the most years lived with disability (YLD) loss is neck pain, followed by depression. Depression not only restricts the process of improving the healthy life expectancy of our population, but also increases the burden of disease and poses a more serious overall health risk to the population (Fitzmaurice et al., 2017). The happiness perception training group, through the five sensory experiential groups of smell, sight, taste, touch, and body dance, to help depressed patients to regain pleasant experiences or expand their happiness (Lee, Lim, & Lee, 2022; Rawdon et al., 2018). The purpose of this study was to interview 12 depressed patients who participated in the Happy Perception Training group psychotherapy, 12 nurses who led the group, and 6 supervising physicians, using a qualitative research method, to understand their real feelings about the treatment and to provide feedback and ideas for the further development of Happy Perception Training group psychotherapy (PARENTI, 2019; Wee, Ong, Syn, & Choong, 2018).

2. Method

2.1 Research Subjects

12 depressed patients hospitalized in the psychosomatic ward of a sizable tertiary general hospital in Sichuan Province from July to August 2022 were chosen for in-depth interviews using a purposive sampling technique. Inclusion criteria of patients: Meets DSM-5 (AmericanPsychiatricAssociation, 2013) diagnostic criteria for depression; educational experience in elementary school and above; informed consent; voluntary participation in Happy Perception Training group psychotherapy. Patient exclusion criteria: ①severe physical or neurological disease; ②severe suicidal self-injury and tendency to injure. Using a purposive sampling technique, 12 group-led nurses and 6 supervising doctors were chosen for in-depth interviews. Nursing and medical

staff exclusion criteria: internship, advanced training, and transfer staff; groups receiving training in unawareness, ignorance, and lack of experience with pleasure perception. A total of 12 depressed patients were eventually interviewed in this study, five male and seven female, with a mean age of (29.33 ± 10.61) years. Twelve group-led nurses were interviewed, six male and six female, with a mean age of (26.75 ± 4.14) years. Six supervising physicians were interviewed, two male and four female, with an average age of (34.67 ± 5.05) years, and the basic information of the interviewees are shown in Tables 1, 2, and 3.

NO		AGE	EDUCATION	MARITAL STATUS	DISEASE	DISEASE
	SEX				DURATION	DEGREE
P1	F	32	Training school	Married	3 years	
P2	F	20	Undergraduate	Unwed	2 years	
P3	М	28	Undergraduate	Married	5 years	
P4	F	28	Undergraduate	Married	4 years	
P5	М	17	High school	Unwed	6 months	
P6	М	30	Training school	Married	3 years	
P7	F	50	Junior High School	Divorced	4 years	
P8	М	39	High school	Married	12 years	
P9	F	21	Undergraduate	Unwed	1 years	
P10	М	16	High school	Unwed	1 years	
P11	F	27	Master	Unwed	2 years	
P12	F	44	Undergraduate	Divorced	6 years	

Table 1 Basic information of interviewed patients

Note: ①Mild to moderate depression; ②Severe depression

Table 2 Basic information of interviewed nurses

NO	SEX	AGE	EDUCATION	TYPE OF LEADING GROUPS
N1	F	29	Master	1234
N2	М	26	Undergraduate	134
N3	F	29	Master	12345
N4	М	25	Undergraduate	(4)(5)
N5	F	27	Undergraduate	234
N6	F	38	Undergraduate	12345
N7	F	22	Undergraduate	12345
8	М	27	Undergraduate	125
N9	F	23	Undergraduate	345
N10	F	26	Undergraduate	23
N11	М	24	Undergraduate	(1)(2)
N12	F	25	Undergraduate	15

Note: ①Smell perception training group; ②Visual perception training group; ③Taste perception training group; ④Touch perception training group; ⑤Dance perception training group

NO	SEX	AGE	EDUCATION	TYPES OF GROUPS EXPERIENCED
D1	F	28	Master	(1)(3)(4)(5)
D2	М	39	PhD	245
D3	F	33	Master	(12345)
D4	F	30	Master	23
D5	М	38	Master	123
D6	F	40	PhD	(4)(5)

Table 3 Basic information of interviewed doctors

Note: ①Smell perception training group; ②Visual perception training group; ③Taste perception training group; ④Touch perception training group; ⑤Dance perception training group

2.2 Define the interview outline

According to the purpose of the study, relevant domestic and foreign literature was reviewed, relevant experts with more than ten years of experience in psychiatric specialties were consulted, and three graduate students who had received systematic study and training in qualitative research formed a group to develop a preliminary interview outline.

In the end, 12 depressed patients with a mean age of (29.3310.61) years were interviewed for this study, five of whom were men and seven of whom were women. Six male and six female group-led nurses with an average age of (26.75 4.14) years were interviewed. With an average age of (34.675.05) years, two male and four female supervising physicians were interviewed. Tables 1, 2, and 3 provide the fundamental details of the interviewees (Guest, Namey, & Chen, 2020).

Table 4 Outline of patient interviews

(1)Do you agree with the current combination of medication and happy perception training group?

(2)Do your family and friends support you in participating in the Happy Perception Training Group?

③Do you prefer to participate in the Happy Perception Training group or other groups?

(4) What have you gained or changed by participating in the Happy Perception Training group?

(5) Do you think the Happy Perception Training group is helpful to your therapy?

(6) How often do you attend the group? For example, how many times a week?

(7) On a scale of 0 to 10, with ten being very satisfied, how would you rate the Happy Perception group?

(8) Do you have any comments or suggestions for the Happy Perception Training Group?

Table 5 Outline of nurse interview	/S
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(1)Do you like Happy Perception Training groups?

2)What types of joy perception training groups have you led?

(3) Do you think the Happy Perception Training group is helpful to patients?

(4) In what specific ways?

(5) Which type of group do you think is the most helpful for patients?

Table 6 Outline of physician interviews

①Do you know about joy perception training groups?				
2)What types of joy perception training groups have you experienced?				
③Do you think that nurse-led perception training groups are helpful to patients?				
(4) What are the specific aspects of help?				
(5) Would you recommend your patients to participate in a Perception of Happiness group?				
(6) On a scale of 0 to 10, with ten being very satisfied, how would you rate the Happy Perception				
group?				
(7) Do you have any comments or suggestions for the Happy Perception Training Group?				

2.3 Happy Perception Training Group Psychotherapy

The happy perception training group psychotherapy treatment consists of olfactory group therapy, tactile group therapy, visual group therapy, taste group therapy, and dance group therapy, and is delivered over the course of ten sessions, with each session lasting approximately 60 minutes and being led by a nurse with the title of nurse practitioner or above,

A bachelor's degree or above, and having undergone professional training and examination (Lee et al., 2022). Table 7 displays the Happy Perception Training group psychotherapy curriculum, and Figure 1 displays a process and effect diagram.

TDEATMENT	THEME	MAIN CONTENT
TREATMENT		MAIN CONTENT
TIME		
1st treatment	Smell perception	Provide different scent materials, and after rehearsal
	training group	and guidance, members share the pleasant experience
		of a particular scent to improve olfactory sensitivity and
		enhance emotions.
2nd treatment	Visual	Pass around prepared objects and materials of
	perception	different colors, enjoy the feelings brought by colors,
	training group	and share and feel the energy generated by visual
		touch to colors.
3rd treatment	Taste perception	Try different foods and slowly feel how the food feels in
	training group	different parts of our mouth, either pleasant or
		unpleasant, and share in turn.

Table 7(a) Overview of the Happy Perception Training group psychotherapy program

TREATMENT TIME	THEME	MAIN CONTENT
4th treatment	eatment Touch Close your eyes, touch different objective perception sensation in your hands, imagine a scatter training group where this sensation occurred before, an feelings.	
5th treatment	Dance perception training group	Follow the group leader, learn dance moves or play games, and share the mutual communication, improved concentration, and vitality that physical activity brings.

 Table 7(b)
 Overview of the Happy Perception Training group psychotherapy program

Note: Treatments 6-10 continue in the second week

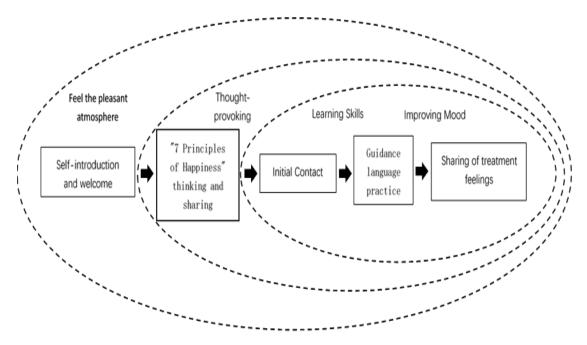


Figure 1 Schematic diagram of the flow and effect of happy perception training groups

2.4 Data gathering

The basic topic, purpose, and significance of the interview were discussed to the interviewees prior to the interview in a one-to-half structured face-to-face in-depth interview. With the interviewees' permission, the interview was taped. The place for the interview was a private, calm, and relaxed room used for one-on-one psychotherapy in the ward. All interviews took place within 48 hours of the group and lasted between 16 and 42 minutes (25.50±5.99). Twenty-one questions were posed, mostly on participants' willingness to continue taking part in the Happy Perception Training group as well as their emotional experiences, gains, opinions, and ideas both during and after the group.

2.5 Data analysis

Within 24 h after the interviews were completed, one researcher converted the content of the interview recordings into textual materials and used the Colaizzi 7-step analysis method (Colaizzi, 1978) to refine and analyze the initially organized interview textual materials and describe them in detail. The other two researchers repeatedly discussed the subject words to reach a consensus; if the views were not uniform, the research subjects were asked to verify them until a consensus was reached. The theme extraction group consisted of 3 people, all with master's degrees, who had received group training, passed the examination and studied qualitative research methodology.

3. Results

30 respondents' interview data was carefully read, compiled, and examined. Ten additional themes were found, including "relief of stress and regulation of emotions, decrease in suicidal ideation, improvement in nursepatient relationships, increased professional identity of nurses, increased trust in medical services, group membership, group leader, cost adjustment, and group length. Three primary themes—gain, general impression of the group, and opinions or suggestions—were further developed based on the ten secondary themes, which included things like "release of stress to regulate emotions, weakened suicidal thoughts, increased confidence in family support for recovery, improved nurse-patient relationship, increased professional identity of nurses, improved trust in medical services, group members, group leaders, cost adjustment, and group length."

PRIMARY THEME	SECONDARY THEME	UMBER OF MENTIONS
Harvest	Release stress and regulate emotions	23
	Reduced suicidal ideation	8
	Increased confidence in family support recovery	for 4
	Improved nurse-patient relationship	6
	Increased professional identity of nurses	3
	Increased trust in medical services	3
Overall feeling about the group	Group Members	5
	Group Leaders	7
Comments or suggestions	Fee Adjustment	1
	Group Hours	2

Table 8 Them	e distribution table
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3.1 Harvest

3.1.1 Release stress to regulate mood

Low mood, lost interest, and low energy are the basic symptoms of depression, and patients frequently report feeling like life is not enjoyable (Crouse et al., 2021). According to interviews, taking part in a group psychotherapy program that focuses on pleasure perception could dramatically improve patients' depressed emotions. P5: "I've always had very high expectations from my parents, and the stress of studying has caused me to isolate myself and lack social skills. I sensed that the pressure was becoming too great to handle as the college admission examinations drew near. I gained courage and learnt to speak with people in the Dance Perception training group. I also learned to express my actual inner feelings and to release any internal strain." P9: "I was about to receive my bachelor's degree when the epidemic hit. and because I couldn't find a job that I liked, I was in a bad mood and prone to losing my temper and sob when I ran into difficulties. After taking part in the Happy Perception Training group psychotherapy, I learned that I was not the only one experiencing various forms of pain; some patients were even worse than I was. We then encouraged one another to share our experiences and learn how to calm ourselves down before solving problems in the future."

3.1.2 Reduced suicidal ideation

All of the 12 depressed patients who participated in this interview had suicidal ideation, and seven of them had a history of suicide attempts. According to recent research by the World Health Organization, suicide is the fourth leading cause of death among 15-29year olds.(Qiao et al., 2022) Also, the coronavirus pandemic and subsequent economic recession may have a powerful and detrimental effect on mental health and increase the prevalence of mental disorders and suicidal behavior.

(Farooq, Tunmore, Wajid Ali, & Ayub, 2021) Interviews revealed that suicidal ideation was significantly lower in patients who participated in the Happy Perception Training group therapy than in those who did not. P2: "I once attempted to end my life by committing suicide, feeling that nothing in the human world was worthwhile for me to stay. However, through visual, taste, and touch groups, I gradually realized that there were many things that I had enjoyed or had not tried yet and that none of these could be experienced if I gave up my life easier."

3.1.3 Family support increases confidence in recovery

Feelings of loneliness and helplessness in patients with depression can lead to increased depression, resulting in reduced active medical behavior and poor prognosis. A study of 114 veterans with a history of depression showed that family support was negatively associated with depressive symptoms and a history of suicide (Bell et al., 2018). Interviews revealed that some Happy Perception Training group patients reported new gains from inpatient treatment. P12: "I have never had a positive attitude toward inpatient treatment; I was taking medication in the hospital and at home, and there was no difference in my life. I laughed with my daughter and reminisced about the food we used to eat together, and I realized that I could have such a good relationship with my daughter and that my relatives were so supportive. Now I try not to think about sad things, and I am more relaxed and confident in my recovery, and I will actively participate in future follow-up appointments.

3.1.4 Patient-nurse relationship improvement

Improving nurses' ability to care and empathize helps improve nursepatient relationships, enhance nurses' job satisfaction, and facilitate the management of hospital human resources. N1: "I used not to understand very well why patients would suddenly cry and instantly get depressed; by leading groups and talking to them in-depth, I learned why some patients have these symptoms while being able to go to the root cause to calm them down the next time they are in a bad mood." N5: "Most of the time, I think I am a very ordinary person, and all I can do is take care of each patient carefully. By leading the group, I help patients relieve their stress through some positive thinking and learn ways to self-regulate their emotions, which makes my job very rewarding and helps me build a trusting patient-care relationship with my patients."

3.1.5 Increased professional identity of nurses

A decrease in nurses' professional identity seriously affects nurses' motivation and quality of care, which not only reduces job satisfaction but can also lead to an increase in turnover. (Labrague & De Los Santos, 2020) A positive sense of professional identity, on the other hand, not only improves skill levels but also motivates nurses to provide quality care to better meet patient needs. (Johnson, Cowin, Wilson, & Young, 2012) N4: "I have never liked my career very much, and I feel that nurses suffer from a lot of discrimination, low pay, and have to work night shifts because of their heavy workload. So I didn't have much idea about my career plan and even wanted to change my profession. Later, I received a systematic training of happiness perception training group and started to lead groups by myself, not only to help patients but also to help myself with stress relief and emotional regulation. Whenever this happens, I feel that my work is meaningful and can bring patients confidence in recovering from their diseases."

3.1.6 Increase in trust in medical services

Lack of trust in healthcare services not only seriously affects the ability of healthcare professionals to provide high-quality healthcare services but also increases patient dissatisfaction during the treatment process. Some studies have shown that, from a healthcare perspective, poor trust in healthcare services and strained doctor-patient relationships can often be attributed to two important factors: empathy and insufficient communication skills.(Xiao, Wang, Edelman, & Khoshnood, 2020) Good empathy and communication skills can effectively reduce doctor-patient tensions and improve the quality of healthcare services (Singh, 2016). D5: "In the past few years, the doctor-patient relationship has been tense, and there have been many incidents of injury to doctors. I would always observe my patient and his family at work, and sometimes I even felt that it took too much of my time and energy. Some time ago, I participated in a group psychotherapy session led by a nurse instructor for happy perception training and listening to the patient's statements; I was reflecting on whether my communication skills were lacking. When I encountered any problem, wouldn't it be possible that if I spoke in a different?".

3.2 Overall feeling about the group

3.2.1 Group members

Social ecology was first introduced to the exploration of human development by psychologist Bronfenbrenner in the 1970s, and a formal theoretical framework, social ecology theory, was established in the 1980s. Social ecology theory assumes that multiple ecological environments influence individual human development and have a significant impact on human behavior.

(Barbalat & Franck, 2020) In groups, therefore, group members have a significant influence on those who participate in the group. Many respondents reported that they gained good interpersonal relationships in the pleasure perception training groups. P11: "The Happy Perception Training group is full of positive energy, and I can learn a lot. I can relax quickly in the group, and under the guidance of the nurse teacher, I can slowly discover the small details of my life and appreciate the strengths and advantages of the group members."

3.2.2 Group Leaders

The qualification of the group leader is very important to carry out group work; secondly, the personal cultivation and quality of the group leader is also the key to the good effects of the group (Brooks et al., 2013). P10: "The nurses are very warm; I don't feel this warmth in other people." P1: "The nurses are very professional and guide us in an easygoing and simple way." N2: "After leading the group for a long time, I found that I was more able to identify and manage patients' emotions accurately and well; I felt like I was growing as a psychiatric nurse." D3: "I actually gained a lot from participating in the group led by the nurse teachers. The nurse teachers usually have more contact with

patients than we do, and a lot of information is more easily accessible to us through the slow guidance of the nurse teachers in the groups."

3.2.3 Comments or suggestions

The majority of patients said they had "no comments" about the Happy Perception Training group. Some patients felt that the group time was short and wanted more time for sharing and discussion. P7: "I like the group the most because I can say what I want to say in the group, and everyone is willing to listen to me, unlike outside, where no one listens to me. But the time is so short that every time I feel that there is still something I want to say." A very small number of patients also felt that groups were more expensive and wished that the price of groups could be reduced. P8: "The groups are quite good, and there is a lot to learn, but the cost is too expensive for people like us who are completely self-funded and really can't afford it."

4. Discussion

4.1. Using the "medical-nursing-mental model" to motivate patients to participate in group therapy

The results of this interview showed that after participating in the nurseled group psychotherapy for happiness perception training, most of the patients had a better psychological experience, and their depressed mood and interpersonal relationships improved significantly. Participating in the group helps oneself and brings others a pleasant psychological experience at the same time so that patients can reap satisfaction and increase their motivation to participate in other treatments at the same time. However, there are still some patients who refuse to participate in group psychotherapy during their hospitalization due to various factors. Therefore, throughout the psychosomatic patients' hospitalization, the active role of physicians, nurses, and psychotherapists is utilized to encourage patients to participate in pleasure perception training group psychotherapy, to inform about the benefits of participating in group therapy, to mobilize family support systems, to improve patient's treatment compliance, and to accelerate the treatment process.

4.2. Improving nurses' professional knowledge of psychology and ability to conduct groups

The nurses' professional competence and the level of group leading influence whether patients participate in group therapy and the outcome after participating. Improving nurses' operability and ability to respond to emergencies during leading group therapy can help improve group quality. This requires that nurses enhance their self-learning of psychological expertise. At the management level, they should provide a platform for learning, create opportunities for outgoing learning, provide incentives to promote learning, and so forth. Strict screening of group leader nurses and developing a systematic training plan and assessment mechanism for group psychotherapy for pleasure perception training provide good guarantees for group conduct.

4.3. Enhance nurses' empathy ability to prevent empathy fatigue

Compared with other departments, psychosomatic nurses are more likely to suffer from more significant mental stress and belong to heavy empathy fatigue departments due to the unique nature of the working environment and nursing clients. According to Tian Feng'e's survey results,

(Praharaj, Salagre, & Sharma, 2021) nurses aged 31-35 are more prone to empathy fatigue, which may be related to more family burdens borne by this age group. This suggests that when choosing group leaders, nurses in this age group should be chosen second; nurses with extroverted personalities are less prone to empathy fatigue, which may be related to the fact that extroverts have more friends and have wider channels for self-direction of negative emotions. This suggests that this group is preferred when selecting nurses for group leadership. At the same time, as managers, they should be sensitive to the emotional changes of nurses and provide regular psychological counseling to alleviate destructive emotions and improve their psychological adjustment ability.

4.4. Limitations of this study

The results of this study are subjective descriptions and cannot be objective. However, the data of the interviewees were presented impartially and objectively to ensure authenticity of the data. This study only interviewed patients, and healthcare workers who participated in the Happy Perception Training group therapy in one hospital, and did not conduct a study of multiple hospitals, so the data results presented are limited geographically.

5. Conclusion

The findings of this study underscore the significant role that the integration of physical games in group therapy for happiness perception training plays in the psychological and physical well-being of healthcare professionals and patients with depression. The incorporation of physical activities into group therapy sessions has emerged as a pivotal element in enhancing both mental health outcomes and physical fitness levels. Firstly, the study reveals that engaging in physical games during group therapy sessions provides a unique avenue for stress relief and emotional management. This approach goes beyond traditional psychotherapy techniques by actively involving participants in physical activities, which are known to release endorphins and contribute to a sense of well-being. The reduction in symptoms like stress, anxiety, and suicidal ideation among participants is a testament to the effectiveness of this

integrative approach.

Secondly, the physical aspect of the therapy sessions contributes significantly to the overall physical health of the participants. Regular engagement in physical activities has been linked with improved cardiovascular health, better muscle tone, increased stamina, and overall physical fitness. For patients with depression, who often experience decreased physical activity and associated health issues, this is a crucial benefit. Furthermore, for healthcare professionals, particularly nurses and doctors who face high levels of occupational stress and burnout, the combination of physical games with psychological therapy offers a dual benefit. It serves as a form of self-care, helping them manage their mental health while also promoting physical wellness, which is often neglected in high-stress medical environments.

The study also highlights the importance of tailoring group therapy sessions to meet the specific needs of participants. The feedback from participants suggests that adjustments in the content and timing of the sessions, based on their psychological and physical fitness needs, could further enhance the efficacy of the therapy.

In conclusion, the integration of physical games in group therapy for happiness perception training presents a holistic approach to treating depression, beneficial for both patients and healthcare professionals. This method addresses the critical intersection of mental health and physical wellness, offering a comprehensive strategy for improving the quality of life and work in clinical settings. These findings pave the way for further research and the development of more integrative approaches in psychotherapy and clinical nursing practices.

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