

## A Review of Positive Emotion Cultivation Strategies in Psychological Intervention of Cancer Patients

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Abstract: Cancer is not only a serious physical disease, but also a disease that has a profound impact on the mental health of patients. As one of the most concerned diseases in the 21st century, cancer patients and their families are often faced with huge psychological pressure, whether it is the treatment itself or the cost of treatment, living costs and other aspects. It often leads to anxiety, depression, fear, and uncertainty about the future. These psychological problems not only affect the quality of life of patients, but may also have a negative impact on the effectiveness of treatment. Therefore, psychological intervention is particularly important in cancer treatment. The purpose of this paper is to review the positive emotion cultivation strategies in psychological intervention of cancer patients, and explore the effects and effects of these strategies in improving patients' mental health and quality of life. This paper introduces the common mental health problems of cancer patients and their impact on treatment effect and quality of life, expounds the definition and theoretical basis of positive emotion, and discusses several major positive emotion cultivation strategies, including positive mindfulness psychology intervention, therapy, cognitive behavioral therapy, expressive writing, social support and group therapy, etc. These strategies are effective ways to help patients enhance positive emotions, reduce psychological burden and improve quality of life.

Keywords: Cancer Psychology; Psychological Intervention; Emotion Cultivation; Quality of Life;

#### 1. Introduction

#### 1.1 Research Background

Cancer is a major threat to human life in the

world and has become one of the world's important public health problems [1]. In 2020, China will have more than 4.57 million new cancer patients and more than 3 million deaths, with about 12,500 new cancer cases and 8,200 cancer deaths every day [1]. In 2018, there were more than 4.48 million new deaths in China and more than 2.86 million deaths. [2] In 2016, there were more than 4.06 million new deaths and more than 2.41 million deaths in China. [3] It can be seen that the incidence and mortality of cancer are increasing.

However, it is worth noting that in addition to the great physical pain, in the long process of anti-cancer, cancer patients often need to bear quite high psychological pressure, prone to negative and even negative emotions, and even psychological barriers. With the development and transformation of medical technology and medical model, people begin to pay attention to the role of psychological factors in the process of cancer onset, treatment and prognosis. According to the results of meta-analysis, 54.9% of Chinese adult cancer patients had depression symptoms and 49.7% had anxiety symptoms.

Moreover, the level of anxiety and depression symptoms is significantly higher than that of the normal population [4]. Other studies have shown that 37.0% of cancer patients have anxiety and depression comorbidities [5]. According to the survey of breast cancer patients conducted by Zhang et al. [6], 36.6% of the patients expressed anxiety symptoms, and believed that anxiety would affect the psychological and physical health of patients, and even cause complications resulting from reduced immunity, thus reducing the quality of life. Higher levels of anxiety and depression can also interfere with patients' medical decisions, reduce patient compliance, and increase the difficulty of coping with cancer treatment [7,8]. Therefore, how to help patients better cope with this major disease from the psychological level has become the

direction of more and more scholars.

#### 1.2 Literature Review

At the end of the 20th century, a group of psychologists led by Seligman launched the Positive Psychology Movement, calling for people's potential to be valued and explored, so as to make people more creative, full of love and hope, and more passionate about life [9]. Positive psychology advocates looking at and understanding people's strengths and abilities from an open and appreciative perspective [10]. The research content of positive psychology mainly includes positive emotion research (subjective level), positive personality research (individual level) and social organization positive research (collective level) [11]. In 2011, Seligman further supplemented and expanded happiness therapy and proposed PERMA model [12], which includes 5 elements of Positive emotion, Engagement, Relationship, Meaning and achievement.4 Also known as happiness PERMA. Compared with traditional psychology, it pays more attention to improving people's psychological state and enhancing people's positive experience [12]. Cancer patients will seek a variety of feasible paths to actively fight cancer, and take a positive way to fight the disease, which can avoid the interference of negative emotions.

#### 1.3 Research Significance

The importance of psychological intervention in cancer treatment has been widely recognized. Through psychological intervention, patients can be helped to reduce psychological burden, enhance positive emotions, enhance psychological and toughness. The purpose of this thesis is to study the positive emotion cultivation strategies in the psychological intervention of cancer patients, and analyze the effects and effects of these strategies in improving the mental health and quality of life of patients. Through systematic review and analysis of existing literature, we hope to provide theoretical support and practical guidance for clinical practice to help cancer patients better cope with psychological pressure and improve their quality of life.

#### 2. The Theoretical Basis of Positive Emotion



#### 2.1 Definition of Positive Emotion

Positive emotions refer to the positive emotions that individuals experience in the face of various things in life, such as pleasure, satisfaction and happiness. Positive emotions not only contribute to an individual's mental health, but also promote their physical health and social adaptability [13]. These emotions include joy, hope, gratitude, love, and contentment. which can increase individual's happiness and life satisfaction. Positive emotions can have a positive impact on individuals in various ways, such as: reducing stress hormone levels in the body, relieving anxiety and depression; Improve the function of the immune system and enhance the body's ability to repair itself; Helps build and maintain positive relationships and increases social support networks; Makes individuals more receptive to new information and perspectives, promotes creative thinking

### **2.2** The Role of Positive Emotions in Cancer Patients

and problem solving, and so on.

Research has shown that positive emotions play an important role in the recovery process of cancer patients. Positive emotions can not only relieve patients' anxiety and depression, but also enhance their immune function and improve the treatment effect. Studies have shown that positive emotions are associated with higher immune cell activity and lower levels of inflammation, which has important implications for the recovery of cancer patients. At the same time, positive emotions can improve the treatment compliance of cancer patients and make them more willing to actively cooperate with treatment, which not only helps to improve the treatment effect, but also reduces the adverse reactions during treatment. In addition to this, positive emotions help cancer patients build and maintain positive relationships and increase social support networks. Social support plays an important role in the recovery process of cancer patients, which can provide emotional support and practical help, and greatly reduce the psychological burden of patients.

Through the detailed discussion of the definition and mechanism of positive emotion, we can better understand the important role of positive emotion in the psychological intervention of cancer patients.



# 3. Positive Emotion Cultivation Strategies in Psychological Intervention of Cancer Patients

### 3.1 Implementation Methods of Positive Psychology Intervention

The positive psychology intervention is based on the PERMA model and aims to improve the mental health of patients by promoting positive emotions, feelings of engagement, relationships, meaning, and accomplishment. This includes positive emotions, patients are encouraged to record three things a day that make them feel happy or grateful. This "gratitude journal" can help patients focus on the positive aspects of their lives and improve their well-being; A sense of engagement helps the patient find activities to immerse themselves in, such as making art, gardening, or sports. Through these activities, patients can experience a "flow" state, that is, the feeling of being completely immersed in the activity; Relationships that facilitate patient interaction with family, friends, and support groups. Regular family gatherings or support group activities can be organized to enhance the patient's social support network; Meaning helps patients find meaning and purpose in life. This can be achieved by volunteering, participating in community activities, or pursuing personal interests; A sense of accomplishment, setting achievable goals, and encouraging patients to pursue and achieve those goals. A patient's sense of selfefficacy can be gradually enhanced by setting short - and long-term goals.

### 3.2 How to Implement Mindfulness Therapy

Mindfulness-based Stress Reduction, MBSR helps patients reduce anxiety and depression and improve mental resilience through Mindfulness meditation and breathing exercises. Specific implementation methods include: mindfulness meditation, instructing patients to practice mindfulness meditation for 10-20 minutes a day, using guided meditation audio to help patients focus on the present experience and accept their emotions and feelings; Breathing exercises teach patients deep breathing and abdominal breathing techniques to help them relax when they feel stressed. Patients may be advised to perform

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short breathing exercises several times a day; Mindful walking encourages patients to focus on the sensations of each step as they walk, cultivating awareness of the body and the environment. You can practice mindfulness walking in a park or in a natural environment.

### **3.3** Implementation of Cognitive Behavioral Therapy

Cognitive Behavioral Therapy, CBT, helps patients establish a positive cognitive framework by changing negative thought patterns. This includes cognitive restructuring, which helps patients identify and challenge negative thoughts and replace them with more positive and realistic ones. Practice by recording negative thinking and alternative Behavioral activation. thinking. encourages patients to engage in meaningful activities, increases positive experiences, and reduces avoidance behavior. An activity plan can be developed to gradually increase the amount of patient activity. Exposure therapy gradually guides patients to face fearful and anxious situations, reduces avoidance behavior, and enhances coping ability. This can be done by simulating situations or actual exposure.

### 3.4 Implementation Methods of Expressive Writing

Expressive Writing encourages patients to express their feelings and reduce their psychological burden through writing. Specific implementation methods include: emotional expression, guiding patients to write down their feelings and experiences, releasing inner pressure and pain. Patients may be advised to practice writing once a day or once a week; Meaning construction: Helps patients re-examine and understand their experiences through writing, and find meaning and purpose in life. Can provide writing topics such as "Things I am most grateful for" or "my vision for the future"; Journal writing encourages patients to record their feelings and thoughts every day to cultivate selfawareness and emotional regulation. Patients may be advised to record positive events and feelings of the day in a journal.

### 3.5 Implementation of Social Support and Group Therapy

Social support and group therapy provide emotional support and practical help by

building a support network. Specific implementation methods include: support groups. organizing cancer patients participate in support groups, experiences and emotions, and providing mutual support and encouragement. Group discussions or events can be held regularly; Family support, encourage patients to maintain communication with family members, enhance understanding and support of family members. Family members can be advised to take psychoeducational courses to learn how to better support the patient; Community resources help patients take advantage of community resources, such as counseling, volunteering, and rehabilitation activities, and strengthen social support networks. Can provide contact information and community resources.

### 3.6 Implementation Methods of Art Therapy

Art Therapy helps patients express their emotions through creative activities, reduces burden, promotes psychological and psychological and emotional healing. Specific implementation methods include: visual arts, encouraging patients to express their inner feelings and ideas through painting, sculpture or other visual art forms. A variety of art materials, such as paints, brushes, paper and clay, can be provided to help patients create; Music therapy, using music appreciation and music creation, helps patients express emotions and regulate emotions. Instruments and musical tools can be provided to encourage patients to try their hand at creating their own musical compositions; Drama therapy, through role-playing and theatrical performance, helps patients explore and express inner conflicts and emotions. Drama workshops can be organized to encourage patients to participate in acting and writing; Dance therapy: The use of dance and physical movement to help patients release emotions and reduce stress. Dance classes or free dance activities can be organized to encourage patients to express their emotions through their bodies.

### 4. The Implementation Method of Positive Emotion Cultivation Strategy

#### 4.1 Personalized Intervention



Individualized intervention refers to the formulation of individualized psychological intervention programs according to individual differences and needs of patients. The application of personalized intervention in cancer patients mainly includes the following strategies:

Assess the needs of the patient: Through psychological assessment, understand the psychological state and needs of the patient. For example, questionnaires and interviews are used to understand patients' emotional states, social support and coping strategies. Commonly used assessment tools include the Baker Depression Scale (BDI), self-rating Anxiety Scale (SAS) and Quality of Life Scale (QOL). These tools enable a comprehensive assessment of a patient's mental health and help to develop individualized interventions.

Development of intervention plan: According to the evaluation results, the development of personalized psychological intervention plan. For example, based on the needs and preferences of the patient, choose appropriate positive emotion cultivation strategies such as mindfulness therapy, cognitive behavioral therapy, or art therapy. The intervention program should include specific goals, methods and timelines, and be agreed with the patient to ensure its feasibility and effectiveness.

Implementation of intervention program: According to the intervention program, the implementation of personalized psychological intervention. For example, through individual therapy and group therapy, patients are helped to develop positive emotions. During implementation, the patient's progress should be evaluated periodically and the intervention regimen adjusted as needed to ensure the continued effectiveness of the intervention.

#### **4.2 Multidisciplinary Cooperation**

Multidisciplinary cooperation means that professionals from psychology, medicine, nursing and other disciplines work together to provide patients with comprehensive psychological intervention services. The application of multidisciplinary collaboration in cancer patients mainly includes the following strategies:

Establish a multidisciplinary team: A multidisciplinary team of professionals such as psychologists, doctors, nurses, social workers



and rehabilitation therapists will work together to provide psychological intervention services for patients. Team members should hold regular meetings to discuss the patient's treatment progress and adjustment plans.

Develop comprehensive a intervention program: according to the needs and conditions of patients, develop comprehensive psychological intervention program. For example, a combination of psychotherapy, medication and nursing interventions provides a full range of psychological support. The comprehensive intervention program should include psychological evaluation, treatment plan, medication management and nursing measures. Implementation of comprehensive intervention program: According to the comprehensive intervention program, the implementation of multidisciplinary cooperation in psychological intervention. For example, the effective implementation of the intervention program is ensured through regular team meetings and case discussions. Team members should work closely together to communicate the patient's treatment progress and adjustment plans in a timely manner.

#### 4.3 Continuous Intervention

Continuous intervention refers to the continuous provision of psychological intervention services throughout the patient's treatment process. The application of continuous intervention in cancer patients mainly includes the following strategies:

Regular psychological assessment: Through regular psychological assessment, understand the patient's mental state and needs changes. For example, through regular questionnaires and interviews, the patient's emotional state and social support are understood. The results of the evaluation should be recorded in the patient's medical file so that the intervention plan can be referred to and adjusted at any time

Adjust the intervention plan: Adjust the psychological intervention plan in time according to the evaluation results. For example, adjusting positive emotion cultivation strategies according to the needs of patients and changes in their condition. Interventions should be adjusted based on patient feedback and treatment outcomes to ensure the effectiveness of interventions.

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Provide long-term support: Help patients cope with psychological stress and emotional distress during treatment through long-term psychological intervention. For example, ongoing psychological support is provided through regular individual therapy and group therapy. Long-term support should include psychological counseling, emotional support and the use of social resources.

### **5. Evaluation of The Effect of Positive Emotion Cultivation Strategies**

#### **5.1 Evaluation Index**

The evaluation of the effect of positive emotion cultivation strategies mainly includes the following indicators:

Emotional state: The patient's emotional state was assessed through questionnaires and interviews. For example, the self-rating Anxiety Scale (SAS) and Self-Rating Depression Scale (SDS) were used to assess patients' anxiety and depression levels. These scales can provide quantitative data to help understand patients' mood changes and mental health status.

Subjective well-being: The subjective well-being of patients was assessed through questionnaires and interviews. For example, the Subjective Well-being Scale (SWLS) was used to assess a patient's level of subjective well-being. Subjective well-being is an important index to measure individual life satisfaction and happiness.

Social support: Patients' social support was assessed through questionnaires and interviews. For example, the Social Support Rating Scale (SSRS) was used to assess a patient's level of social support. Social support plays an important role in the mental health and recovery process of cancer patients.

#### **5.2 Evaluation Method**

The following methods are used to evaluate the effect of positive emotion cultivation strategies:

Questionnaire: A standardized questionnaire tool was used to systematically assess patients' emotional state, subjective well-being, and level of social support. For example, using tools such as the Self-Rating Anxiety Scale (SAS), Self-Rating Depression Scale (SDS), and Subjective Well-being Scale (SWLS), feedback data from patients is collected

regularly. These questionnaires can provide quantitative data for statistical analysis and comparison.

Interviews: Through semi-structured interviews, in-depth understanding of patients' emotional changes and psychological needs. Interviews can provide details and context that quantitative data cannot capture, helping to fully assess the effects of an intervention. Interviews can include the patient's emotional experience, coping strategies, and social support.

Behavioral observation: Evaluate the actual effect of positive emotion cultivation strategies by observing the behavioral changes of patients during the intervention. For example, look at a patient's engagement and emotional response in music therapy or art therapy. Behavioral observation can provide direct and objective assessment data.

Physiological indicators: Assess the impact of positive emotion cultivation strategies on physical health by measuring patients' physiological indicators, such as heart rate, blood pressure, and immune function. For example, studies have shown that positive emotions can lower heart rate and blood pressure and boost immune function. The change of physiological index can be used as the objective evidence of the effect of psychological intervention.

#### **5.3 Evaluation Result**

Through the evaluation of the effect of positive emotion cultivation strategies, the following conclusions can be drawn:

Improved emotional state: Positive emotion cultivation strategies significantly improved the emotional state of cancer patients and reduced anxiety and depression levels. For example, one study showed that cancer patients who participated in a positive psychological intervention had significantly lower levels of anxiety and depression than the control group. This indicates that the positive emotion cultivation strategy has a significant effect on alleviating patients' emotional distress.

Improved subjective well-being: Positive emotion cultivation strategy significantly improved the subjective well-being of cancer patients. For example, by keeping a gratitude journal and participating in music therapy, patients' subjective well-being improved



significantly. This indicates that positive emotion cultivation strategy can effectively improve patients' life satisfaction and happiness.

Enhanced social support: Positive emotion cultivation strategies significantly enhanced social support in cancer patients. For example, by attending support groups and art therapy, patients' social support networks are significantly expanded. This suggests that positive emotion cultivation strategies play a positive role in enhancing patients' social support.

Improved physical health: Positive emotion cultivation strategies also had a positive impact on the physical health of cancer patients. For example, studies have shown that positive emotions can boost immune function and lower heart rate and blood pressure. This indicates that the positive emotion cultivation strategy is not only beneficial to mental health, but also has a positive impact on physical health.

#### 6. Conclusions

This paper reviews the positive emotion cultivation strategies in psychological intervention of cancer patients, and discusses the effects and effects of these strategies in improving patients' mental health and quality of life. Cancer patients often face great psychological stress during diagnosis and treatment, including anxiety, depression and uncertainty about the future. Positive emotion cultivation strategy can significantly alleviate these psychological troubles and improve the emotional state and mental health of patients by improving their positive emotions. Research has shown that positive emotions not only help relieve anxiety and depression, but also enhance patients' mental resilience and coping ability.

Personalized intervention, multidisciplinary cooperation and continuous intervention are keys to ensure the effective implementation of positive emotion cultivation strategies. Individualized intervention According to individual differences and needs of patients, the development of individualized psychological intervention programs to ensure the pertinence and effectiveness of intervention measures. Multidisciplinary cooperation Through the cooperation of professionals from multiple



disciplines such as psychology, medicine, nursing, etc., to provide patients with comprehensive psychological intervention services to ensure the comprehensiveness and coordination of intervention programs. Continuous intervention Through regular psychological assessment and adjustment of the intervention program, to ensure continuous psychological support throughout the patient's treatment process, to help patients cope with psychological stress and emotional distress during treatment.

Although this paper summarizes the important role and effect of positive emotion cultivation strategies in psychological intervention of cancer patients, there are still some problems that need to be further studied. Future studies should further explore the combined effects of different interventions and evaluate their applicability and effectiveness in different patient populations. In addition, implementation of personalized. multidisciplinary cooperation and continuous intervention should be emphasized in clinical practice to ensure the effective application of positive emotion cultivation strategies.

In conclusion, positive emotion cultivation strategy plays an important role psychological intervention of cancer patients, which can significantly improve patients' mental health and quality of life. Through the integrated application of personalized, multidisciplinary cooperation and continuous intervention, cancer patients can better cope with psychological stress, enhance positive emotions, and promote physical and mental health.

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