

The Effectiveness of Positivism Group Psychotherapy Based on Frisch's Theory in Promoting Happiness and Life Satisfaction of Breast Cancer Patients

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Abstract

The main objective was to investigate the effectiveness of positivism group psychotherapy based on Frisch's Theory in promoting happiness and life satisfaction of breast cancer patients referring to counseling centers in Iran. We conducted a quasi- experimental design of pre- and post-test in which experimental and control groups were utilized. The statistical populations were people referring to three counselling centers in Iran in 2016. The experimental group received the psychotherapy intervention based on Frisch's approach. At the end, both groups took the post-test. The quality of life questionnaire OL-BC, the Oxford Happiness Inventory, and the Satisfaction with Life Scale were used as the measurement tools. Data were analyzed using analysis of covariance (ANCOVA) procedure by SPSS. Results showed that there is a significant difference between the mean scores of the experimental and the control groups in post-test. This means that the positivism group psychotherapy based on Frisch's theory was effective in promoting happiness and life satisfaction of breast cancer patients ($P < 0.01$). Furthermore, the results showed that the positivism group psychotherapy based on Frisch's theory increased post-test scores of the experimental group in variables of life satisfaction and happiness ($P < 0.05$). Results confirmed that the positivism group psychotherapy based on Frisch's theory can be used as an effective intervention to promote life satisfaction and happiness of breast cancer patients.

Keywords: Breast cancer; Frisch's theory; Happiness; Life Satisfaction; Positivism group psychotherapy.

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1. Introduction

Breast cancer is the most frequent type of cancer among women worldwide, especially in developed countries [1]. It is recognized as the second cause of death worldwide, following lung cancer [2]. The most common ages in which breast cancer appears, are between 35-55, while it is estimated that one in twelve women will be diagnosed with breast cancer in her lifetime [2,3]. Furthermore, in the developing countries, the 70% of the diagnosis is set in the third and fourth stage of breast cancer decreasing in such way the survivorship down to five years [1]. To be diagnosed with breast cancer and undergo cancer treatment can be a very stressful event and can bring not only uncertainty but also many difficulties in everyday life [4]. Despite the progress in medicine, breast cancer patients are dealing with many physical and mental problems and many research studies have shown that the quality of life in these patients is usually very low. [4,5,6,7]. Mental and physical problems, in addition to types of cancer treatments such as surgery, radiotherapy, chemotherapy, and hormone therapy can affect family life, work, social activities and sexual functioning of the patients [5].

Breast cancer, along with other types of cancer, is considered chronic conditions that do not change the fact that it is a life threatening disease. The specific treatments mentioned above, as well as their side effects, such as chronic fatigue, pain, nausea, hair loss, body image issues, and cognitive impairment [4, 7] are considered some additional stressors that often are associated with the psychological distress that cancer patients are facing. It is estimated that one-third of cancer patients are dealing with psychological problems, such as anxiety and depression. Among them, women and young people are at higher risk [7, 8].

Therefore, it is necessary to administer psychological interventions along with pharmaceutical advances to promote the quality of life, happiness and life satisfaction of patients with breast cancer. Many interventions have been proposed to promote psychological health, among which, short-term and inexpensive interventions seems to be more cost effective. A new approach has been introduced to the field in recent years called positive psychology. Positive psychology considers not only the treatment of the disorder, but also the return to normal state, psychological well-being, and true health. In this way patients feel the happiness and satisfaction besides the absence of the disease.

The author in [10] believes that before World War II, psychology had three major objectives. One of them was helping people to have a fruitful and satisfactory life, but after World War II, these objectives were neglected for some reasons. Therefore, Studies related to happiness reduced drastically in the years following World War II in a way that from every 100 articles published about psychological disorders, just one was related to happiness [10]. After 1960, studies of happiness increased and many organizations considered this issue in their research [11]. The author in [12] conducted extensive research on happiness in 1970s and 1980s. He designed a plan that included different techniques for increasing people's happiness. This plan, which was called 14 Fundamentals for Happiness, was designed based on 300 previous researches. These 14 Fundamentals for increasing happiness include keeping people involved, making them more active, spending more time in the community and stopping anxiety [12]. In addition to Fordyce's works, the authors in [13] created the Oxford Happiness Inventory (OHI) in Oxford University. The OHI follows the design and format of Beck's Depression Inventory, which is provided, when it is reversed. It helped to create many researches related to happiness in the following years

[13]. Finally, positive psychology was established formally in 2000 [14] and created a movement in studies related to happiness and positive abilities of human being.

The author in [10] introduced his theory about happiness in his book “authentic happiness [15]. He believed that happiness could be analyzed into three different elements, including positive emotion (the pleasant life), engagement, and meaning. The quality of life is one of the most basic concepts in positive psychology. Changing the belief that only scientific, medical, and technological advances, can promote the quality of life toward the belief that individual, family and social well-being is the result of a combination of these advances with individuals’ values and perceptions about well-being and environmental situations, is from the primary sources of tendency toward the quality of life [16].

The treatment based on the quality of life is a new approach in positive psychology. It is created to promote well-being and life satisfaction and to treat psychological disorders such as depression. This treatment, which is a combination of Beck’s cognitive approach and Mihaly’s Activity Theory with Seligman’s positive psychology, was designed by Frisch in 2006. In addition to those people who have a psychological disorder like depression, the target groups of the new treatment are normal and healthy individuals who want to experience a higher amount of well-being, psychological health and generally a better quality of life [17]. There is a consensus among experts that the quality of life considers the positive and the negative facts of life together [18].

The treatment based on the quality of life involves an approach for increasing life satisfaction which is described as the individuals’ assessment of different dimensions of their own lives[19]. In this model, the quality of life therapy is carried out by a cognitive-behavioral change in five fundamental concepts. These five major concepts, which are abbreviated as CASIO, include circumstances, attitudes, and standards of fulfillment, importance, and overall life satisfaction. CASIO includes five guidelines for creating satisfaction in different areas. It causes improvement in quality of life by creating satisfaction in the existing distance between what an individual desires and what he currently has [17]. The purpose of the quality of life therapy is to increase the professional self-care and internal richness and to prevent burnout.

It focuses on enhancing happiness by paying attention to problems and flourishing in all valuable areas of life. In the quality of life therapy, self-care is equivalent to internal richness and is defined as a sense of tranquility, comfort, concentration, affection, consciousness, and readiness to face the daily challenges of life in a thoughtful, romantic, compassionate and comprehensive way. Getting access to information related to happiness and satisfaction is not only effective in promoting effective treatments and future advancements, but also is in the implementation of supportive programs for highly rehabilitation interventions [17].

Research findings showed that the therapy based on the quality of life had a positive effect on the quality of life, self-efficacy and well-being of the mind in depressed patients. It also had a positive influence on the quality of life, mood disturbance, and social intimacy of patients with cirrhosis.

The present study focuses on 16 main areas of life and the Five-Factor Model (CASIO). It also aims to evaluate

the effectiveness of positivism group psychotherapy based on Frisch's theory on increasing happiness and life satisfaction in patients with the breast cancer referring to counseling centers in Mashhad, Iran.

2. Materials & methods

2.1. Research Design and Participants

This is a quasi-experimental study with pre- and post-tests in which an experimental group and a control group were utilized. The statistical populations of this research were individuals who referred to three counseling centers in Mashhad in 2016. The research sample included 30 individuals referring to the counselling centers. They were informed about the therapy sessions for increasing happiness and life satisfaction through an announcement, therefore they voluntarily enrolled in the treatment period. The research sample was randomly selected from a sample of available registered volunteers. However, there were some selection criteria including a minimum high school diploma and a maximum master's degree, being between the age of 35 to 55, not having acute mental illnesses, and not taking psychiatric drugs. The selected sample was divided into an experimental and a control group. According to the fact that the minimum sample population in experimental studies should be 15, each group was consisted of 15 patients. After the pre-test, the experimental group received the psychotherapy approach based on Frisch's theory in eight weekly sessions each lasting for two hours. In the end, both groups took the post-test. Data were analyzed using analysis of covariance (ANCOVA) procedure using SPSS. It should be noted that due to ethical considerations, the control group participants were on the waiting list and after conducting the study, they underwent this treatment. Table 1 shows the topic of each therapy session.

Table 1: Topics of positivism group psychotherapy sessions based on Frisch's Theory

| | |
|----------------------------|---|
| The first session | Greeting, expressing the aims, introducing the course, talking about the quality of life, satisfaction, and happiness, taking the pre-test, getting feedback |
| The second session | Reviewing the previous session, defining the quality of life and its dimensions, talking about the family tree, finding some individuals' problems, getting feedback |
| The third session | Reviewing the previous session, introducing CASIO, starting from C as the first strategy and its effect on in people's quality of life |
| The fourth session | Reviewing the previous session, introducing CASIO, starting from A as the second strategy and its effect on in people's quality of life |
| The fifth session | Reviewing the previous session, introducing SIO as the third, the fourth and the fifth strategy for increasing the life satisfaction, introducing the principles of the quality of life |
| The sixth session | Reviewing the previous session, talking about the principles of the quality of life and presenting them, explaining how they can increase life satisfaction |
| The seventh session | Reviewing the previous session, continuing the discussion of the principles of the quality of life. talking about the relationship domains and applying the important principles on those domains |
| The eighth session | Reviewing the previous sessions, summarizing the points, training the participants of how they can apply the principles of the quality of life in different dimensions, taking the post-test |

2.2. Instruments

2.2.1. The Quality of Life Questionnaire in Patients with Breast Cancer OL-BC

This questionnaire was designed by the National Cancer Center of Hope' California to examine the quality of life of women with breast cancer, and includes 43 questions in 4 domains of physical, psychological, social and religious health. Participants were required to answer the questions based on a 4 point Likert scale (at all, low, moderate, high). In this survey a high score indicates a low quality of life while, a low score means a high quality of life. After interpretation, bisecting was utilized to assess the validity of the instrument. Pearson correlation coefficient was estimated for two halves of the instrument and the reliability of the instrument was confirmed by correlation coefficient of 0.76.

2.2.2. The Satisfaction with Life Scale

A very good internal consistency for life satisfaction with alpha = 0.87 and excellent retest reliability with a correlation coefficient of 0.82 over a 2 month period has been reported. The observed concurrent validity for the life satisfaction scale indicates its positive correlation with other life satisfaction scales, 9 other scales of well-being and self-esteem questionnaire. Negative correlation was also found between the level of life satisfaction and neuroticism scales, excitement and a checklist of clinical symptoms.

2.2.3. The Oxford Happiness Inventory

Argyle, Martin and Crazland developed this questionnaire in 1989. They reversed Beck's Depression Scale and obtained 21 items. Eleven further items were added to cover aspects of happiness, which were not otherwise included and 29 items were retained in the final scale. In the following years, the questionnaire was changed and published as Oxford Happiness Questionnaire (OHQ).

3. Results

Table 2: The descriptive statistics of demographic variables in both control and experimental groups

| Demographic variables | Index | Experiment | | Control | |
|-----------------------|---------------|------------|-----------------------------|-----------|-----------------------------|
| | | Frequency | Percentage of the frequency | Frequency | Percentage of the frequency |
| Age | from 35 to 45 | 9 | 60% | 10 | 67% |
| | from 46 to 55 | 6 | 40% | 5 | 33% |
| Job | Housewife | 5 | %33 | 3 | 20% |
| | employee | 10 | %67 | 12 | 80% |
| Marital status | Single | 4 | 27% | 5 | 33% |
| | Married | 11 | 73% | 10 | 67% |

3.1. The Analysis of Table (2)

In the experimental group, nine participants were within 35 to 45 years old and six were within 46 to 55 and in the control group, 10 participants were within 35 to 45 and five were within 46 to 55. In terms of job in the

experimental group, five participants were homemakers, and 10 were employees and in the control group three participants were homemakers and 12 were employees. In terms of marital status in the experimental group, four participants were single and 11 married and in the control group, five participants were single and 10 married.

Table 3: Table of descriptive statistics indices of research variable scores

| Variable | Group | Phase | Number | The lowest | The highest | Mean | Standard deviation |
|--------------------------|-----------|------------|--------|------------|-------------|---------|--------------------|
| Life satisfaction | Pre-test | Experiment | 15 | 7.00 | 19.00 | 11.5333 | 3.50238 |
| | | Control | 15 | 5.00 | 21.00 | 11.4667 | 3.87052 |
| | Post-test | Experiment | 15 | 22.00 | 31.00 | 26.2667 | 2.78944 |
| | | Control | 15 | 7.00 | 19.00 | 11.4000 | 4.04969 |
| happiness | pre-test | Experiment | 15 | 18.00 | 43.00 | 27.8667 | 8.40805 |
| | | Control | 15 | 19.00 | 44.00 | 27.8000 | 6.77390 |
| | post-test | Experiment | 15 | 45.00 | 68.00 | 56.6667 | 6.37704 |
| | | Control | 15 | 18.00 | 50.00 | 27.9333 | 9.16879 |

3.2. The Analysis of Table (3)

As seen in table 3, for the life satisfaction variable the lowest amount is related to the control group in pre-test, and the highest amount is related to the experimental group in post-test.

It also shows that the lowest mean is related to the control group in post-test and the highest mean is related to the experimental group in post-test.

For the happiness variable, the lowest score is related to the experimental group in pre-test and the control group in post-test. It also shows that the highest score is related to the experimental group in post-test and the lowest mean is related to the control group in pre-test and the highest mean is related to the experimental group in post-test.

Table 4: Levine’s test results for checking the homogeneity of variances

| Variable | F | Degree of freedom’s numerator (df1) | Degree of freedom’s denominator (df2) | Level of significance (Sig) | Results of test |
|--------------------------|-------|-------------------------------------|---------------------------------------|-----------------------------|---------------------------|
| Life satisfaction | 1.108 | 1 | 28 | 0.302 | Variances are homogeneous |
| happiness | 0.615 | 1 | 28 | 0.440 | Variances are homogeneous |

The results presented in table 4 shows that the homogeneity assumption of variances about the life satisfaction variable was met (F=1.108, sig=0. 302). It also shows that the homogeneity assumption of variances about the happiness variable was met (F=0.615, sig=0. 440).

Table 5: Results of the homogeneity test slope of the regression line

| Variable | Sum of squares | Degree of freedom | Mean squares | F Statistics | Level of significance (Sig) |
|---|----------------|-------------------|--------------|--------------|-----------------------------|
| Group interaction and life satisfaction | 26.292 | 1 | 26.292 | 2.251 | 0.146 |
| Group interaction and happiness | 199.752 | 1 | 199.752 | 3.904 | .059 |

As table five shows, factor analysis of covariance of group interaction with life satisfaction and happiness variables are not significant (F= 2.251, sig= 0.146 for life satisfaction and F= 3.904, sig= .059 for happiness). Therefore, the homogeneity assumption of the regression slope is met for all variables.

3.3. Inferential Analysis of Data

To test the research hypotheses, one-way analysis of covariance (ANCOVA) was run. In this section, each research hypothesis is considered separately. The first hypothesis states that the positivism group psychotherapy based on Frisch's theory improves the life satisfaction in patients with the breast cancer. To investigate this hypothesis, one-way analysis of covariance (ANCOVA) was run. The results are presented in table 6.

Table 6: The results of one-way analysis of covariance (ANCOVA) comparison of the mean post-test scores of life satisfaction of experimental and control groups with pre-test control

| Variable | Source of changes | Sum of squares | Degree of freedom | Mean squares | F Statistics | Level of significance (Sig) | Eta Squared (η^2) | Statistical power |
|-------------------|-------------------|----------------|-------------------|--------------|--------------|-----------------------------|--------------------------|-------------------|
| Life satisfaction | Pre-test | 8.537 | 1 | 8.537 | .698 | .411 | .025 | 0.127 |
| | Group | 1655.265 | 1 | 1655.265 | 135.432 | 0.000 | .834 | 1.000 |
| | Error | 329.966 | 27 | 12.222 | | | | |

As shown in table 6, there is a significant difference between women with breast cancer in experimental and control group in terms of life satisfaction at the significance level of 0.05 (F= 135.432, Sig= 0.000). This means that positivism group psychotherapy based on Frisch's theory has a significant effect on life satisfaction. In other words, according to the average life satisfaction of women with breast cancer in the experimental group compared to the average of the control group, positivism group psychotherapy based on Frisch's theory promoted the life satisfaction of the experimental group. Furthermore, the difference in the scores of the experimental and control group or the effectiveness of positivism group psychotherapy based on Frisch's theory is ($\eta^2=0.834$). This shows that 83 percent of the difference in life satisfaction post-test scores is related to the positivism group psychotherapy based on Frisch's theory. Statistical power is 1.000. This means that there is not the probability of Type II error.

The second hypothesis states that the positivism group psychotherapy based on Frisch's theory increases the happiness in patients with breast cancer. To investigate this hypothesis, one-way analysis of covariance (ANCOVA) was run. The results are presented in table 7.

Table 7: The results of one-way analysis of covariance (ANCOVA) comparison of the mean post-test scores of happiness of experimental and control groups with pre-test control

| Variable | Source of changes | Sum of squares | Degree of freedom | Mean squares | F Statistics | Level of significance (Sig) | Eta Squared (η^2) | Statistical power |
|-----------|-------------------|----------------|-------------------|--------------|--------------|-----------------------------|--------------------------|-------------------|
| happiness | Pre-test | 216.278 | 1 | 216.278 | 3.817 | .061 | ..124 | .470 |
| | Group | 6181.452 | 1 | 6181.452 | 109.085 | 0.000 | .802 | 1.000 |
| | Error | 1529.989 | 27 | 56.666 | | | | |

As can be seen in table 7, with pre-test control, there is a significant difference between women with breast cancer in experimental and control group in terms of happiness at the significance level of 0.05 ($F= 109.085$, $Sig= 0.000$). This means that positivism group psychotherapy based on Frisch's theory has a significant effect on happiness. In other words, according to the average happiness of women with breast cancer in the experimental group compared to the average of the control group, positivism group psychotherapy based on Frisch's theory increased the happiness of the experimental group. Moreover, the difference in the scores of the experimental and the control group or the effectiveness of positivism group psychotherapy based on Frisch's theory is ($\eta^2=0.802$) which indicates that 80 percent of the difference in post-test scores of happiness is related to the positivism group psychotherapy based on Frisch's theory. Statistical power is 1.000. This means that there is not the probability of Type II error.

3.4. Discussion

The resent study was conducted to investigate the effectiveness of positivism group psychotherapy based on Frisch's theory on life satisfaction and happiness of patients with breast cancer who referred to counseling centers in Iran in 2016. Results showed that there is a significant difference between the mean scores of experimental and control groups in post-test, which means that the positivism group psychotherapy based on Frisch's theory was effective in promoting patients' life satisfaction and happiness.

In his book entitled "Quality of Life Therapy: Applying a Life Satisfaction Approach to Positive Psychology and Cognitive Therapy". In this book, Michael Frisch proposes an integration of the positive psychology and cognitive therapy perspectives. The single most important message from this volume is that a new and expanded therapeutic perspective is needed that directly addresses issues of positive affect, life satisfaction, and contentment. The application of holistic cognitive therapy for affect, emotions and satisfaction with life is also addressed in this book. Treatment based on improving the quality of life involves an approach, which increases happiness therefore; it is an interventional approach in positive psychology. This approach is a kind of meaning therapy and helps the clients to find the most meaningful thing they need for their happiness and health now and

in future. It also helps the clients to get satisfaction with life in most important and valuable aspects by providing them with necessary skills.

Frisch's approach does not focus only on one aspect of life. It aims to increase life satisfaction in 16 main areas of life by providing cognitive strategies. It challenges the idea that people receive treatment just in one area because life satisfaction is affected by different dimensions and emphasizes the psychological health and the quality of life.

4. Conclusion

This study aimed to promote the quality of life and increase life satisfaction and happiness by changing priorities and improving satisfaction in previously neglected areas. In addition, by using some principles, individuals have been helped to increase their life satisfaction by changing their attitude, affection and happiness. The principles are listed below.

- the principle of acceptance and interest in one's body
- the principle of controlling emotional mood
- the principle of the failure quota
- the principle of going beyond the schemas and behaviors arising from the main family
- the principle of habits of happiness, the principle of humor
- the principle of intellectual rumination, the principle of individual wisdom
- the principle of paying attention to one's strength
- the principle of healthy recreation, and several other principles

By using the cognitive approach in this treatment, people were helped to assess their satisfaction with life, to improve the emotional dimension of their life with the most positive and at the least negative affect, and to conduct behavioral and emotional changes with behavioral exercises. This type of treatment is used for both clinical and non-clinical patients. Interventions for non-clinical groups are called instruction.

The term "improving the quality of life" covers both types of intervention, namely, instruction and therapy. This kind of treatment is one of the many approaches in positive psychology which supports the satisfaction approach by increasing happiness and quality of life based on which, the clients will learn the principles and skills that help them identify, search and fulfill their most important needs, goals and desires in valuable aspects of life. Satisfaction with life is also defined as the process of cognitive judgment in which a person compares his conditions with the criteria that he considers appropriate.

Since the positivism group psychotherapy based on Frisch's Theory is a new therapeutic and instructional approach, therefore; it is necessary to implement it for further exploration of its effects, applications, and outcomes. Due to the newness of the therapeutic variable, the present study had some limitations. In addition, because the participants were selected from the three centers, the generalization of the findings of this research should be followed with caution.

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