



## Relationship of Strategies for Emotion Cognitive Adjustment with psychological Well-Being and Anxiety in Mothers with Cancer Children

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**Abstract:** *The present study was aimed to examine the relationship between strategies of emotion cognitive adjustment and psychological well-being with anxiety in mothers with cancer children. The statistical population of the study consisted of 86 individuals, who were selected using convenience sampling method; they responded to psychological well-being and anxiety questionnaires. Research method was descriptive of a correlational type. Data obtained from questionnaires were analyzed through multivariate regression in SPSS software, after being marked. Findings showed that there is a significant relationship between emotion cognitive adjustment strategies and anxiety and psychological well-being in mothers with cancer children. In other words, results showed that emotion cognitive adjustment predicts about 27.1 percent of anxiety changes, and about 26.8 percent of psychological well-being changes in mothers with cancer children.*

**Keywords:** *Emotion Cognitive Strategies, Psychological Well-being, Anxiety, Cancer.*

### I. Introduction

Almost all existing evidence refers to the fact that diagnosing cancer in any family member leads to a serious and intense crisis for other members (Schneider, 2000). In fact, chronic diseases and medical measures can lead to serious mental and social disorders for patients and families (White, 2001; cited in Bahmani). Some scholars have stated that women, compared to men, experience more stressful situations (McDonough & Walters, 2001). In addition, it has been made clear that women, compared to men, have more stress when facing threats and they are more exposed to stresses stemming from roles (Shokri et al, 2008). Undoubtedly, when a child has cancer, other members especially the mother will experience intense problems such as anxiety. Ostis and Ostis (2008; cited in Kabudani, 2013) defined anxiety to be a natural and healthy reaction in human beings. Many theorists believe that anxiety is a state which makes us aware of potential risks in a way that we can confront the risks more successfully. However, if anxieties are too intense, or if they occur without a special reason, it might be an abnormal and morbidly reaction. In fact, we can define anxiety as worries, feeling of being endangered, threats, and doubt, which leads to tension and distress. In addition, anxiety has physical features such as heartthrob, sweating, and blood pressure. In other words, anxiety is an inclusive, unpleasant, and unclear state which leads to excitation in automatic nervous system, headaches, sweating, heartthrob, spasm in chest muscles, metabolic malfunctioning, and distress (Sadok, 2002; cited in Sharifi rad et al, 2011), which result from internal and external threats, leading to cognitive, emotional, physical, and behavioral signs (Chamour and Farenham, 2002; cited in rad et al, 2011). Anxiety affects individuals' cognitive and behavioral functions, while a reasonable amount of anxiety motivates us to do activities. However, high levels of anxiety lead to malfunctions in individuals. Anxiety is recognized by cognitions related to future. Individuals with anxiety disorder might avoid many situations because of not being able to predict future takings, and because of not being able to control future. According to learning and conditioning theories, avoiding stressful situations increases avoidance personality disorder, and as a result, there will be a course of avoidance personality disorder and an increase in anxiety signs (Butcher, Minkqa and Holi, 2007; translated by Seyed Mohamamdi, 2009; cited in Kabudani, 2013). It seems that one of the variables which can be related to the way mothers manages stresses stemming from their children's cancer is emotion cognition adjustment strategies. Emotion cognitive adjustments strategies help reduce, increase, or maintain emotional experiences (Gross, 2007). Emotion cognitive adjustment is an inherent face of tendencies related to emotional responses. According to Garnefski et al (2001), emotion cognitive adjustment strategies are actions which include individuals' coming to terms with stressors and unpleasant events. Mennin and Heimberg (2002) concluded that individuals with inclusive anxiety are unable to organize emotional experiences, and they do not use

positive cognitive adjustment skills very much. Additionally, they consider their emotional experiences as annoying, and they use maladaptive interpersonal behaviors like defense strategies such as control, avoidance, and suppression. Emotion cognitive adjustment refers to methods of affecting experience, emotion statement, as well as occurrence time of emotion (Rotenberg and Gross, 2003). Theoretical models refer to the fact that there is a relationship between successful emotion adjustment and health consequences with improvement in performance and relationships (Amstadter, 200008). In contrast, difficulties in emotion adjustment are correlated with different mental pathological models such as generalized anxiety disorder (Mennin et al, 2007), social anxiety disorder (Kashdan and Breen, 2008), depression (Nolan et al, 2008). In recent years, a group of scholars in the field of mental health, inspired by positive psychology, consider mental health equal to positive psychological performance, and they conceptualize it in terms of psychological well-being. This group believes that health is a multidimensional concept which not only comprises not being sick and disabled but it also includes happiness and well-being (Larson, 1991; cited in Hatamlavi Daasabadi and Hashemi Nosratabad, 2012). Additionally, based on Ryff and Kiz's pattern, Psychological well-being consists of six components: purposeful life, positive relationship with others, personal growth, self-acceptance, autonomy, and dominance over environment. Features such as adjustment, happiness, self-reliance, and other positive features show psychological well-being and mental health (Yeganeh, 2013). Therefore, since chronic diseases such as cancer are definitely related to mental health, and as emotion cognitive adjustment is related to mental health and different pathological models, it seems that there is a relationship between emotion cognitive adjustment strategies and psychological well-being. Finally, since children with cancer cause challenges in families, it is necessary to focus on psychological variables related to this crisis. Therefore, in the present study, we intend to examine the relationship between emotion cognitive adjustment strategies and anxiety with psychological well-being in mothers with cancer.

## II. Methodology

Research method was quantitative, descriptive (non-experimental), and correlational. The statistical population consisted of all mothers with cancer children in Mahak institute, including 86 individuals who were selected using convenience sampling method; they responded to emotion cognitive adjustment, psychological well-being, and anxiety questionnaires. In order to analyze data, we used descriptive statistics (mean and standard deviation) and inferential statistics (multivariate regression analysis) through SPSS software.

## III. Research Instruments

Emotion cognitive adjustment questionnaire (CERQ), Garnefski et al (2001): this questionnaire included 36 items; and each item was marked based on a 5-point Likert scale, from "never=1" to "always=5". This questionnaire is used in order to identify individuals' emotion cognitive adjustment strategies after they experience stressful situations, including 9 sub-scales: refocus on planning, positive reevaluation, positive refocus, blaming others, self-blame, rumination, attitude development, catastrophization and acceptance. In a study conducted in 2010, Samani and Sadeghi, by doing second-stage factor analysis on primary factors of this questionnaire, obtained two general factors: emotion adjustment adaptive strategies (positive refocus / planning and positive reevaluation / attitude development) and emotion adjustment non-adaptive strategies (blaming others / self-blame / rumination / catastrophization / acceptance). For these two factors, Cronbach's alpha coefficients were calculated to be 0.62 and 0.91; and retest reliability coefficients were reported to be from 0.75 to 0.88. In a study done by Davoodi et al (2014), the scores of the two general factors were used, and Cronbach's alpha coefficients of these two factors were 0.84 and 0.87, respectively.

Beck's anxiety questionnaire: this questionnaire included 21 items, which measure the intensity of anxiety signs based on 4-point Likert scales, from 0 to 63. This scale aims to measure the intensity of anxiety signs and reduction in comorbidity with depression signs; and its Psychometric signs, including reliability and validity, were approved (Besharat, 2002, Beck et al, 1988, and Beck and Stir, 1993; cited in Besharat, 2008).

Psychological well-being questionnaire: This questionnaire was designed by Tabasi (2001), considering native features of Iran's society with a combination of psychological well-being and intellectual health, which was normalized for Iran's society. It includes 6 sub-scales and a total score. This questionnaire consisted of 77 questions. Internal consistency of this questionnaire was evaluated using Cronbach's alpha method, which was reported to be 0.94 in the whole scale; and in sub-scales, it was reported to be from 0.62 to 0.90. In addition, retest method has shown that reliability coefficient of the whole test is 0.76, and reliability of sub-tests is from 0.67 to 0.73 (Tabasi, 2004; cited in Biniaz, 2008).

## IV. Findings

In this section, before analyzing research hypotheses, we examine descriptive indexes of research variables, whose results are presented in table 1.

Table 1: Mean and standard deviation of emotion cognitive adjustment strategies, anxiety, and psychological well-being

	mean	Standard deviation
Refocus on planning	3.22	0.41
Positive reevaluation	3.25	0.44
Positive refocus	3.58	0.61
Blaming others	3.45	0.42
Self-blame	3.24	0.43
Rumination	3.31	0.48
Attitude development	3.22	0.41
Catastrophization	3.35	0.47
Acceptance	3.25	0.44
Anxiety	3.29	0.47
Purposeful life	3.18	0.37
Positive relationship with others	3.23	0.46
Personal growth	3.45	0.44
Self-acceptance	3.31	0.43
Autonomy	3.33	0.46
Dominance over environment	3.19	0.39
Total psychological well-being	3.2	0.46

The data given in the above table show those emotion cognitive adjustment strategies have mean values from 3.22 to 3.58. This indicates that generally respondents of this research do not have an unfavorable status in this section; and generally, scores obtained for mean values of emotion cognitive adjustment strategies are greater than a medium value. The results presented in the above table show that anxiety has a mean value of 3.29, and this also implies that individuals' anxiety level in this study was greater than a medium value. In addition, in terms of psychological well-being, results show that statistical population of this research has mean values from 3.18 to 3.45.

First hypothesis: Emotion cognitive adjustment strategies in predicting anxiety in mothers with cancer children.

Table 2: Summary of regression test for predicting anxiety based on emotion cognitive adjustment strategies

model	Predictor variables entering the model	Correlation coefficient	Correlation coefficient square	Adjusted correlation	Significance level
1	Refocus on planning	0.525	0.271	0.205	0.01
	Positive reevaluation				
	Positive refocus				
	Blaming others				
	Self-blame				
	rumination				
	Attitude development				
	catastrophization				
acceptance					

Based on the data given in the above table, correlation coefficient between emotion cognitive adjustment strategies and anxiety was calculated to be 0.525; emotion cognitive adjustment strategies include: refocus on planning, positive reevaluation, positive refocus, blaming others, self-blame, rumination, attitude development, catastrophization, and acceptance predict almost 27.1 percent of anxiety changes in mothers with cancer children ( $R^2 = 0.271$ ).

Second hypothesis: Emotion cognitive adjustment strategies for predicting psychological well-being in mothers with cancer children.

Table 3: Summary of regression test for predicting psychological well-being based on motion cognitive adjustment strategies

model	Predictor variables entering the model	Correlation coefficient	Correlation coefficient square	Adjusted correlation	Significance level
1	Refocus on planning	0.518	0.268	0.210	0.01
	Positive reevaluation				
	Positive refocus				
	Blaming others				
	Self-blame				
	rumination				
Attitude development					

	catastrophization				
	acceptance				

Based on the data given in table 3, correlation coefficient between emotion cognitive adjustment strategies and psychological well-being was calculated to be 0.518. Emotion cognitive adjustment strategies include: refocus on planning, positive reevaluation, positive refocus, blaming others, rumination, attitude development, catastrophization, and acceptance predict almost 26.8 percent of psychological well-being changes in mothers with cancer children ( $R^2 = 0.268$ ).

## V. Discussion and Conclusion

The present study was aimed to examine the relationship between emotion cognitive adjustment strategies and psychological well-being with anxiety in mothers with cancer children. Results showed that emotion cognitive adjustment strategies have a relationship with respondents' anxiety and well-being. In other words, they play a role in predicting anxiety and psychological well-being. The results of this study were in congruence with the results obtained from studies done by Rotenberg and Gross (2003), Mennin and Heimberg (2002), Garnefski et al (2001), Gross (2007), Amstadter (2008), Martin and Dahlin (2005), Nolen et al (2008), Kashdan and Breen (2008), Ghasempour et al (2012), and Mennin et al (2007). When facing cancer, in many cases, family members not only experience mental disorders from probable loss of members or other worries related to treatment, but they also face disorganizations in life, and new responsibilities. When it comes to losing a child, we can expect difficult and stressful situations for parents. Cancer, which is a threatening phenomenon, leads to much stress for families with cancer children. There are different fears: fear from death, fear from the unknown, fear from inabilities and unavoidable limits (Barabadi, 2004). In a study on the relationship between emotional components (stress, depression, and anxiety) and emotion cognitive adjustment, Martin and Dahlin (2005) concluded that there is a positive and significant relationship between stress, anxiety, and depression with negative emotion cognitive adjustment strategies (rumination, self-blame, and blaming others); and that there is a negative relationship between stress, anxiety, and depression with positive emotion cognitive adjustment strategies. In addition, negative emotion cognitive adjustment strategies can positively predict stress, anxiety, and depression in respondents; and positive emotion cognitive adjustment strategies can negatively predict stress, depression, and anxiety. Dennis (2007) also showed that there is a negative and significant relationship between cognitive reevaluation (as a constructive emotion cognitive adjustment strategy) and anxiety. However, there is not a significant relationship between suppression (as a negative emotion cognitive adjustment strategy) and anxiety. Results obtained from a study done by Ghasempour et al (2012) showed that there is a positive and significant relationship between death anxiety and maladaptive emotion cognitive adjustment strategies such as rumination, self-blame, and catastrophization. Mennin et al (2009) found that individuals with inclusive anxiety disorder and social anxiety are unable to adjust emotions cognitively; low emotional understanding is the best predictor for inclusive anxiety disorder. Emotion cognitive adjustment strategies are psychological components which play an important role in anxiety disorders (Ghasempour et al, 2012). In addition, studies show have shown that as a result of an increase in psychological well-being, variables such as anxiety, depression, negative emotion, and psychological signs decrease; and self-esteem, optimism, and positive emotion increase (Ahmadvand et al, 2012). In other words, it can be said that an increase in psychological well-being can lead to reduction in stress. Therefore, increasing psychological well-being helps reduce stress, leading to mental health in individuals. These findings, which are in line with the results obtained from studies done by Mennin et al (2009), Filo et al (2010), and Mennin and Heimberg, imply that overusing maladaptive strategies such as rumination, catastrophization, and self-blame are associated with a high level of anxiety; and these strategies lead to an increase in anxiety. In other words, using maladaptive strategies makes individuals prone to anxiety, and as a result, they experience intense anxiety when facing stressful situations. In fact, it can be said that thinking about our faults and blaming oneself for what has happened, mind occupation because of feelings and thoughts related to negative events, which make situations seem more risky than they are, are accompanied by death anxiety (distress with a fear which is related to death of oneself or others) (Ghasempour et al, 2012). Therefore, considering the findings of this study, it can be said that for mothers with cancer children and intense stress, using positive emotion cognitive adjustment strategies such as acceptance, positive reevaluation, and positive self-attention helps to reduce anxiety and improve psychological well-being. Hence, through useful training, we can familiarize mothers with maladaptive and adaptive emotion cognitive adjustment strategies; and we can help them use more adaptive strategies rather than maladaptive ones.

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