

EFFECTIVENESS OF LIFE QUALITY GROUP TRAINING ON LIFE SATISFACTION AND HAPPINESS OF MOTHERS WITH PHENYLKETONURIA CHILD

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ABSTRACT

This research aims to study the effectiveness of life quality group training on life satisfaction and happiness of mothers with Phenylketonuria Child. The research is experimental with pre- post-test with control group. Statistic population includes all mothers with Phenylketonuria child with medical records in Amin Hospital of Isfahan, 100 individuals. 30 mothers were selected based on simple random sampling and divided in two test and control group. Diener Life Satisfaction Questionnaire and Oxford Happiness Questionnaire were used as tools. Life quality course was started with 7 sessions, weekly and each session 90 minutes. Gathered data was analyzed with ANCOVA test and show that there is a meaningful difference between symbols of life satisfaction and happiness in control and test group i.e. life quality training increases the life satisfaction and happiness of mothers with Phenylketonuria Child. According to psychological problems of these parents, life quality training courses can be used as intervention programs and reduce the side effects.

Keywords: *Phenylketonuria, Life Quality, Life Satisfaction, Happiness*

INTRODUCTION

Although there is a fast development of technology accompany with emerging and using various psychological approaches for treatment and training mental health, but needs of patients and their families to training is not paid enough attention. It seems Phenylketonuria children and their damaged families are among these category. Phenylketonuria is a genetic-metabolic disease. A child with Phenylketonuria has no symptom at the time of birth but at the end of first months, growth reduction followed by vomit, spasm and hair and eyes become brighter. As age increases, symptoms such as small size of head, Restlessness, lack of attention, repetition movements of hands and organs and mental retardation (Lehninger, 2004). So birth of a child with special problems can deeply effect on the family in such a way that these parents in compare to parents of normal children face more problems which effects on their psychological well being (Rohini, 2012). Such a birthday is one of the most stressful events in human life (Mc.conkey *et al.*, 2008).

Researches of Hasui and Chiejo *et al.*, (2002) show that having a child with disability is a difficult deal for the family. They face problems, such as lack of financial resources, lack of having leisure time and dangerous level of turmoil while at the same time they try to understand the behaviors of the patient. Members of such families report of fear and anxiety from disease symptoms and its expanses. Generally, such children put pressure on family and remove the family peace and stability and finally, postpone the mental revolution of other children and limit their promotion (Smeltzer, 2004). Parents of Phenylketonuria Children, especially mothers, feel contrasting emotions (love and hate), marital conflicts, lack of financial resources, anxiety, depression, anger, compatibility and limitations due to specific diet of such children. All these factors reduce the life quality severely.

According to definition of LQWHO (life quality world health organization), people understanding from their position in life is related to their culture, value system they are living in, foals, standards and priorities. Thus the subject is completely mental and not observable by others and is based on people understanding from various aspects of life (Nejat, 2008).

Life quality is not a new concept. It exists in Greece philosophy. Aristotle has mentioned that in happiness field. Kerkegaard *et al.*, (2008) paid attention to life quality in internal moods of people. In

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different sciences, there are different definitions for life quality base on various aspects and nature. For example, economists use favorite instead of life quality or psychologists use satisfaction or happiness (Omidi, 2008).

Improvement of life quality, as a numerous approaches in optimistic psychology, supports the life satisfaction matter in order to increase the happiness and life quality. In Life quality theory, emotional and excitement-happiness factors are mostly resulted from cognitive judgments of life satisfaction or in a time that person feels safety and happiness and his needs about job are satisfied. In the other word, life quality is the same as life satisfaction. (Frish, 2006)

Various researches on this field that include patient samples and their home caregivers show the effectiveness of life quality training on widerange of variables such as life quality, mood and relationships (Rodrigue, 2013), improvement in sexual self-efficacy and couples' marital satisfaction (Bass et al., 2013), stress reduction (Rodrigue et al., 2011) decrease in Obsessive - compulsive disorder and symptoms of anxiety and depression (Norberg et al., 2008; Abedi and Vostanis, 2010) and generally, improvement of in level of different cognitive performances (Rodrigue, 2007).

Life quality has a wide meaning with various aspects which any of them can cause a disorder in person's normal life. So the main question here is, is the life quality training effects on life satisfaction and happiness of mothers of children with Phenylketonuria? Thus the main theory is as follows: life quality training effects on life satisfaction and happiness of mothers of children with Phenylketonuria.

Research Design

The method of this research is experimental with (test and control group) and pre- and post-test. Life quality training is the independent variable while life satisfaction and happiness are dependent variables. The research diagram is as follows:

Random	T2	X	T1	R_E
Random	T2	-	T1	R_C

MATERIALS AND METHODS

The statistic population includes all mothers of children with Phenylketonuria attended in Amin hospital of Isfahan in 2013, approximately 100 individuals.

Research sample was 30 individuals selected via random selection and divided in two categories (15 tests and 15 control group).

First of all 80 children with Phenylketonuria out of 100 were selected and their mothers filled out the Diner life satisfaction and Oxford happiness questionnaires. In life satisfaction, 43 individuals got point 14 and below and in happiness 72 individuals got point below 44. Among these mothers, those with point below 14 in life satisfaction and below 44 in happiness (41 indiv) were selected and finally 30 were selected in divided in two test and control group.

Measurement Tools

Data was gathered by Diner life satisfaction (SWLS) and Oxford happiness questionnaires.

Life Satisfaction Questionnaire: This scale designed by Diner et al (1985) and measures the cognitive wellbeing of the person with 5 items, each with 7 choices from 1 to 7 (completely disagree to completely agree). Reliability and validity of this questionnaire is checked I several researches (Lewis et al., 1999; Radhakrishnan et al., 2002; Arindel et al., 1991).

Ashoor Mohammad Koochaki calculated the validity as 0.83 via Kronbach Alpha and with re-test method as 0.69.

Joseph announced that the positive correlation between this scale and Oxford Happiness index (Argale, 2001).

Higher score means higher life satisfaction. This index is a useful questionnaire in Iranian psychological researches (narrated by Adel, 2009).

Oxford Happiness Questionnaire: The list of 29 items was firstly introduced by Argale and Lo (1989; narrated by Kar, 2004). Argale et al., (1989; narrated by Kar, 2004) reported the Alpha coefficient as 0.9 in 347 subjects. The questionnaire is designed with 29 items, each with 6 Likert choices and 5 sub-scales

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which are as follows: life satisfaction, Self-esteem, Subjective well-being, Satisfaction and positive mood. Correlation of OHQ with Bradbury Emotion Scale, Argale Life Satisfaction and Beck Depression Index is 0.32, 0.57 and -0.52, respectively which shows the validity of the index (Kar, 2004).

Reliability of the test was checked via re-test method after 7 weeks and the result was 0.78.

Research Method

The method was experimental with pre- post-test and control group. After coordination with health center of Isfahan province, health administration and finally Amin Hospital of Isfahan, 80 children with Phenylketonuria out of 100 were selected randomly and and mothers filled out the questionnaires and 41 mothers out of 80 were selected and finally, 30 mothers selected via simple sampling and divided in 2 test and control groups and trained separately with the independent variable (life quality training). Training length was 7 weeks, 1 session per week and each session 90 min in group form. Context of session were as follows:

First Session: Introduction and definition of life quality.

Second Session: Defining basics of life quality training and determining 5-way model (CASIO).

Third Session: Introducing goals, values, spiritual life and relationships.

Forth Session: Introducing self-respect, health and learning.

Fifth Session: Introducing job aspects and retirement, recreation and helping.

Sixth Session: Introducing aspects of creativity, money and life indices.

Seventh Session: Introducing aspects of environment. Home, friends and society.

Training mothers of children with phenylketonuria was done in Amin Hospital in Isfahan. Control group receives no training. At the end of training sessions, general health post-test, life satisfaction and happiness was performed for both test and control group and data were analyzed by covariance.

RESULTS AND DISCUSSION

Results

Effectiveness of life quality training on life satisfaction and happiness of mothers with phenylketonuria children was checked via MANCOVA analysis. Life quality was the independent variable and life satisfaction and happiness were dependent variables.

Table1: average and standard deviation of life satisfaction and happiness in test and control group in pre- post- tests

Variable	Stage	Statistic index	Average	Std
Life satisfaction	Pre-test	test	11.40	1.95
		control	10.80	2.30
	Post-test	test	15.41	0.63
		control	11.20	1.82
Happiness	Pre-test	test	25.20	4.70
		control	21.13	2.92
	Post-test	test	35.33	4.15
		control	21.20	2.88

As is shown in table 1, average scores of life satisfaction in test group in pre-test is 11.40 which reaches 15.41 in post-test. And life satisfaction of mother increased. In control group average scores of life satisfaction in pre-test was 10.80 and in post-test it was 11.20, which is not considerable.

Results of table 1 show that happiness scores of test group in pre-test was 25.20 and in post-test it reached 35.33 which shows considerable differences. In control group average score in pre-test was 21.13 and in post-test it reached 21.20 which is not considerable.

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Table 2: Mancova analysis of life satisfaction and happiness

Parameter	Landa	F-test	Meaningfulness	Ata index
Group	0.135	80.421	0.001	0.865
Life satisfaction in post-test	0.256	36.356	0.001	0.744
Happiness in post-test	0.326	25.887	0.001	0.674

Results of table 2 show that life quality training effect on both life satisfaction and happiness so our theory is confirmed. Also one can conclude that life quality training has a meaningful effect on life satisfaction and happiness and effect on the first is much more than the later.

From table 2 it is obvious that the coefficient of independent variable cannot be zero as there is a meaningful difference between life satisfaction and happiness in control and test group, simultaneously and meaningfulness level of the variable (0.001) is less than test error (0.05). In other word, life quality training effects on life satisfaction and happiness of mothers with Phenylketonuria children, meaningfully, thus the theory is accepted. Ata coefficient show that 86% of changes in life satisfaction and happiness were due to life quality training. According to table 1, this effect is positive as the average of dependent variables in test group is more than control group.

Discussion

Research results show that: Life quality training has effect on life satisfaction of mothers with Phenylketonuria child.

Researches by Aghayouseifi and Seyfi (2013) and Rodrigou *et al.*, (2006) narrated by Frish (2013) show that life quality therapy decreases the anxiety and depression in patients and improve the life satisfaction and sense of being meaningful. Abedi and Vestaniz (2010) report that life quality therapy of parent effects on Obsessive - compulsive disorder and symptoms of anxiety in children and increased the life satisfaction and life quality in mothers which is in correlation with current research. Thus life quality training has effect on life satisfaction.

As the life satisfaction is the reflection of balance between person's wishes and his current situations (Nasiri and Jokar, 2009; Narrated by Hoseini *et al.*, 2011). Also, in life quality theory, life quality is the same as life satisfaction (Frish, 2006; translated by Khamse, 2010). Even if this theory is not based on the life satisfaction, but life satisfaction is always a part of life quality evaluations and theories (Gladis *et al.*, 1999; narrated by Khamse, 2010).

In determination of the results, one can say that total life satisfaction is to some extent the reflection of satisfaction in all valuable parts of life, people with increasing satisfaction in all fields, or most valuable ones, even in fields that are not focused now increase the total life satisfaction. Based in optimistic psychology, the most focus is on less important matters but total positive effect (Frish, 2006; translated by Khamse, 2010). In current research life quality training model is based on a mental well-being and life satisfaction with 5 stages, which stage 5 is directly related to total satisfaction. Also there are some basics and principles that help attendants to determine, follow and satisfy needs, goals and wishes in 16 important fields which increase the score of all items in life satisfaction questionnaire. Life quality training has effect on happiness of mothers with phenylketonuria child. Life quality training has effect on happiness of mothers with Phenylketonuria child. According to life quality theory, happiness achieved from satisfied need, wishes and important goals in life. The same is for minor goals of life (Frish, 2006; translated by Khamse, 2010). The aim of Life quality training is increasing skills and awareness to reinforce the will of attendances in changeable parts of satisfaction to achieve more happiness and success. Based on this theory, potential peoples can 50% control and effect on happiness maters. Because controlling goals and actions, compatible skills and even life situations can be learned (Frish, 2006; translated by Khamse, 2010). Results of the research show that Life quality training effects on life satisfaction and happiness of mothers of Phenylketonuria child.

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According to sever confusion in mothers of Phenylketonuria children, and as these mothers are focused on their child and ignored the other aspects of life, this lead to decrease in life satisfaction and happiness. Thus their ability and performance in other important fields of life such as personal, family, job, decreases and face child and family with damages and mental pressures. So in order to improve the life quality of mothers with Phenylketonuria child, current research aims to study its effects on life satisfaction and happiness of mothers. Furthermore, continuous improvement of psychological services to these patients and their families has important achievements in family and society (Awad and Voruqanti, 2008).

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