The effect of happiness training on self-esteem in the mothers of children with cleft lip and palate in Isfahan 2015

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Abstract:

BACKGROUND: Birth of a child with cleft lip and palate, as a crisis, can affect family relationships and interactions seriously and hence self-esteem in family members. The present study was conducted to investigate the effect of a happiness training program on self-esteem in the mothers of children with cleft lip and palate.

MATERIALS AND METHODS: In this quasi-experimental study, 64 mothers of children with cleft lip and palate referring to health-care team in the Isfahan University Medical Sciences were enrolled by convenience random sampling. Then, the program of happiness training was implemented within 10 sessions, and a questionnaire of demographic characteristics and Coopersmith Self-Esteem Inventory was filled out before and 2 months after the last session. The data were analyzed by descriptive and analytical statistics (paired t-test, independent t-test, Chi-square, and Mann–Whitney) in SPSS 20 (SPSS Inc: Chicago).

RESULTS: The mean age of the mothers in intervention and control groups was 33.3 ± 6.3 and 33.5 ± 5.8 years, respectively. The mean age of the children in the intervention and control groups was 6.34 ± 3.37 and 5.03 ± 3.36 years. Independent t-test indicated a significant difference in self-esteem mean score after training in the intervention and control groups. Moreover, paired t-test indicated a significant difference in self-esteem mean score between before and after training in the intervention group.

CONCLUSION: In the light of the effect of happiness training on the promotion of self-esteem in children with cleft lip and palate, this program can be used as a care intervention to reduce psychological and mental problems and to enhance adjustment in parents.

Keywords: Cleft lip and palate, Fordyce happiness training, mothers, self-esteem

Introduction

 Orofacial clefts (cleft lip, cleft palate, and cleft lip and palate) are the most common congenital head and neck malformations involving lip and hard and soft bones of jaw and palate and associated with dental disorders, facionalas malformations, and nutritional, respiratory, auditory, and verbal problems.[¹] This anomaly is the fourth leading congenital defect[²] with the frequency of 1–2.2/1000 live births worldwide.[¹] The highest and lowest frequencies of cleft lip and palate in the USA have been reported in the Native Americans (3.7/1000 live births) and blacks (0.3/1000 live births), respectively.[⁴] Several epidemiological studies in Iran have reported various incidence rates (3.77–77/1000 live births) for this anomaly in different regions (except west Iran).[⁵]

Most of the affected children face several problems in feeding, speech, esthetics,[⁶] and social relationships,[⁷] which can influence family relationships and interactions

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seriously.[3] Furthermore, these children communicate less often with their peers because of their appearance and speech, potentially causing psychological disorders for them.[9] This causes the parents of these children to experience psychological disorders such as anxiety, depression, and feeling of humiliation, as well.[9]

Indeed, children with such anomalies cause new and additional problems for their parents. Medical care and training and health-care requirements can affect parents’ adjustment and lead to significant outcomes such as economic, social, and emotional constraints. Moreover, changes in family structure and family members’ mental health may predispose them to adverse outcomes. Meanwhile, as mother is mainly assumed to care for, her mental tensions are more severe than others.[10] A study demonstrated that a child’s acquisition of disease could affect family’s lifestyle, develop anxiety and frustration in the child, and make him/her feel guilty.[11] Hasanzadeh’s study demonstrated that the mothers of children with cleft lip and palate are faced with chronic psychological disorders more often.[12]

Moreover, another study demonstrated that the mothers of infants with cleft lip and palate experience higher levels of stress than the mothers of healthy infants.[13] Certain feelings such as feeling guilty, frustration, and deprivation caused by the child’s disease make mothers isolated, unwilling to establish a relationship with the surrounding, feeling of inferiority and worthlessness, and sadness, leading to reduced self-esteem, and putting mental health at risk among them.[14] Self-esteem, one’s judgment about self, is the fourth need according to Maslow’s hierarchy of needs. Self-esteem is considered a pivotal and fundamental factor for socioaffective adjustment. In other words, a person with high self-esteem assesses oneself positively.[15]

High levels of stress cause parents to tend to exhibit inflexible manners, to adopt intimidating and aggressive parenting, and to benefit from health programs and services less often. Therefore, they fail to adopt the most appropriate therapeutic strategies for their children. This can have negative effects on children’s growth and lead to more destructive behaviors.[9]

Therefore, use of psychological training methods is vital for them to adjust further to psychological problems and promote their quality of life.

Happiness training is an approach to relieve mental disorders because people’s evaluation of themselves and their lives may encompass cognitive domains such as judgment about life satisfaction and/or emotional domains such as mood or emotions while they are responding to life events.[16] Happiness is associated with positive outcomes such as physical and mental health and optimal functioning.[17] In other words, happiness and health affect each other mutually.[18] Moreover, happiness training plays a significant role in enhancing self-efficacy and relieving anxiety and depression.[19-20] A study indicated that happiness affects life satisfaction and tolerance.[21]

The findings suggest that happiness has positive outcomes such as physical and mental health and optimal functioning.[16] Happiness training is effective to increase efficacy and reduce anxiety and depression.[18,19] North et al. study showed that happiness training causes changes in family relationships, increases efficacy, and reduces anxiety and depression.[22] A study conducted by Rabiei et al. using Fordyce happiness training to increase happiness in mothers in Isfahan, Iran, demonstrated positive impacts on the postpartum depression.[23]

Khodadadi Sangdeh et al.’s study demonstrated that positive group psychotherapy is effective in promoting health and leads to enhanced happiness in the mothers of children with special needs.[24] Fordyce found the development of happiness using a model to enhance happiness. More clearly, Fordyce happiness training leads to certain changes in the cognitive and affective status of people and helps them adopt a more positive attitude toward life events and respond to circumstances and situations optimistically and adaptively.[25]

Therefore, because parents play a fundamental role in maintaining psychosocial balance of family, and tension and pressure affect their mental-psychological health and hence the process of caring for children, and no study has yet been conducted to investigate the psychological interventions in the mothers of children with cleft lip and palate, then this study was conducted to investigate the effect of happiness training on self-esteem in the mothers of children with cleft lip and palate.

Materials and Methods

This quasi-experimental study was conducted from March, 2015, to December, 2015 (within 10 months). In this study, sample size was determined to include 32 people in each group based on the data of similar studies: \( d = \sqrt{\frac{s^2}{N}} \), \( \alpha = 0.05 \), \( \beta = 0.2 \).[26]

The Ethical Approval of the Research and Technology Deputy of the Isfahan University of Medical Sciences (293076) and relevant authorities was provided for this study protocol.

The study was conducted at cleft lip and palate clinic of Faculty of Rehabilitation, the Isfahan University of Science and Technology.
Medical Sciences. Sampling was done in the patients referring to this clinic. For sampling, the patients were enrolled by convenience random sampling so that the first referring individual with inclusion criteria was assigned to intervention group and the second to control, continuing till a desired number of participants were included in the two groups.

Because dropout was likely, first, forty people were enrolled in the intervention group. Then, according to the exclusion criteria or because of not attending more than two sessions, some of them were excluded.

Inclusion criteria were: having Iranian nationality, literacy, and ability to discuss and debate in training sessions, and children of 10–12 years with cleft lip and palate (given psychological effects on family due to an affected child within this age range), and no previous participation in similar training. The exclusion criteria were: not attending two consecutive and/or one-fourth of all sessions, withdrawing from participation in the study, and complete mental health and consciousness (emergency severe conditions throughout the study).

In this study, happiness training was considered an independent variable, self-esteem-dependent variable, and children’s age, gender, mothers’ education, and occupation underlying variables. The researcher filled out pretest questionnaires after she described the research purposes for participants and received written consent from them. The time needed to fill out the questionnaires was determined two hours for both groups before and after the intervention.

Then, the training sessions were scheduled, and the classrooms of the Faculty of Rehabilitation were appointed as a location to hold sessions with participants' consent in the intervention group.

Consisting of eight cognitive components and six behavioral components, teaching materials were offered according to Fordyce approach. The materials for each session were as follows:[23,28]

First session: Introducing participants to each other, reviewing sessions’ structure, relevant regulations and protocol, and training techniques of getting more active; second session: Techniques of enhancing social relationships and intimacy; third session: Techniques of expressing emotions and developing optimism and positive thinking; fourth session: Techniques of decreasing expectations and appreciating; fifth session: Living at present; sixth session: Techniques of giving value to happiness and resolving problems and negative emotions; seventh session: Techniques of discontinuing worries; eighth session: Techniques of enhancing creativity; ninth session: Techniques of planning and organizing daily activities; and tenth session: Filling out the questionnaires 2 months after the ninth session.

The training was done by a psychologist as a group and individually through speech, brainstorming, and educational aids such as PowerPoint. Each session lasted for about 2.5 h (one session per week). Furthermore, the participants were given the researcher’s phone number to demand further advice and support during the 2-month follow-up, if necessary. Therefore, the patients could call if they had any question. After the follow-up, the patients in both groups filled out Coopersmith Self-Esteem Inventory again. For ethical considerations, happiness training was done by a psychologist in the control group similarly to that conducted for the intervention group after posttest administration.

The data were gathered by a questionnaire of demographic characteristics and Coopersmith Self-Esteem Inventory. This inventory is one of the most famous instruments to measure self-esteem and has already been used frequently. This scale consists of 58 questions; 26 of which were related to general, social, familial, and professional issues. In addition, right questions were specified for fake replies which, in fact, are considered to be a sign of a defensive reaction toward the questionnaire.

The lowest and highest attainable scores are 0 and 50, respectively. The closer the score is to 50, the higher the level of self-esteem is. The test-retest reliability coefficients of this scale have been reported to be 0.73–0.91, respectively. The validity and consistency of this instrument have been found to be 92% in previous research which reflects the optimal consistency, reproducibility, and accuracy of this instrument.[29] Delaram et al. reported the validity of Coopersmith Self-esteem Inventory by test-retest method 90% and 93%, respectively.[30]

The data were analyzed by descriptive and analytical statistics (paired t-test, independent t-test, Pearson correlation coefficient) i in SPSS 20 (SPSS Inc: Chicago). The level of significance was considered <0.05.

**Results**

The mean age of the mothers in the intervention and control groups was 33.3 ± 6.3 and 33.5 ± 5.8 years, respectively. The mean age of the children in the intervention and control groups was 6.34 ± 3.37 and 5.03 ± 3.36 years, respectively, with no significant difference between the two groups by independent t-test (P > 0.05). Furthermore, there was no significant difference in the mothers’ education and occupation and the number of children in the families between the two groups (P > 0.05).
Independent t-test indicated a significant difference between the mean self-esteem score of the two groups after training ($P < 0.05$) while the difference was not statistically significant between the two groups before training. Furthermore, paired t-test exhibited a significant difference in mean self-esteem score between before and after the training in the intervention group ($P < 0.05$), but the difference was not statistically significant for the control group ($P > 0.05$) [Table 1].

Results of Pearson’s correlation coefficient indicated that in the intervention group, self-esteem was significantly associated with child’s gender and mother’s occupation ($P < 0.05$). In addition, in the control group, self-esteem was significantly associated with mother’s occupation ($P < 0.05$) [Table 2].

### Discussion

The aim of the present study was to examine the effect of happiness training on self-esteem in the mothers of children with cleft lip and palate. In this study, there was no significant difference in demographic characteristics between the intervention and control groups. The present study findings are consistent with Gholami Heydarabadi et al.’s study.\(^{[31]}\)

According to the findings of the present study, the mean score of the mothers’ self-esteem was not significantly different between before and after the training in the control group, while the corresponding difference was significant in the intervention group. Similarly, Kashaninasab et al.’s study on the efficacy of Fordycy happiness training on relief of depression in women demonstrated that the level of depression was significantly lower in the group undergoing the training than the control group.\(^{[32]}\)

To explain the findings of the present study, we can argue that the mothers of children with special needs, disregarding their children’s positive abilities and capabilities, are involved in the process of negative thinking, of which they cannot easily get rid, and hence their self-esteem could be affected.\(^{[33]}\)

Therefore, the mothers’ attending sessions of happiness training in the present study could help reduce boredom and depression and enhance happiness in them by changing their attitudes toward the world and their abilities, seeking out their children’s abilities and capabilities, and thinking of positive aspects of life. In other words, by helping the mothers disregard negative thoughts, happiness training resulted in improved friendly and intimate relationships with others and increased social interactions in them, ultimately contributing positively to the improvement of their self-esteem.

In addition, in the present study, the mean score of mothers’ self-esteem was significant before and after the study between both groups. Similarly, Shakehnia et al.’s study to determine the efficacy of happiness training on depression symptoms relief and self-esteem indicated that mothers and children attending a happiness training program can reduce depression symptoms including the domains of negative mood, interpersonal problems, and lack of enjoyment, and increase self-esteem.\(^{[34]}\)

Khodadadi Sangdeh et al.’s study indicated that the mean happiness score of the mothers after positive psychotherapy was significantly higher in the case group than the control group.\(^{[35]}\) Furthermore, Riahi et al. found that training the management of negative mood caused mental health to improve at subscales of anxiety, insomnia, physical symptoms, and social functioning in the mothers of children with autism by enhancing their self-identification and helping them use efficient techniques to resolve conflicts.\(^{[36]}\)

In the present study, the training of emotions expression and development of optimism and positive thinking could lead to the mothers’ further recognition of themselves and positivized experiences through strengthening and improving the mothers’ relationships with self, others, and the surrounding world, and therefore, they were further able to realize the contribution of these positive experiences to increasing and promoting self-respect, to assume greater responsibility for their own values, and finally their self-esteem enhanced. Meanwhile, since
the social relationships may contribute to a sense of life satisfaction, feeling supported by others and belonging to others, and hence happiness, holding training sessions in groups provides prerequisites for mothers’ assertiveness and presence in the community.

In addition, teaching the techniques of increasing communication, increasing intimacy, and optimism in training sessions could lead to the promotion of self-esteem in the mothers, such that they were able to achieve the set purposes by increasing intimacy and optimism and developing a sense of commitment and accountability. Finally, depression and hopelessness decreased and self-esteem enhanced in them.

The most considerable limitation of the study was scheduling of training sessions with regard to work hours of employed mothers. Therefore, the researcher held the sessions at weekends to have all women attend all sessions. Small sample size was another limitation of this study so that it is recommended that future studies be conducted with a higher sample size.

**Conclusion**

Given the effect of happiness training on the promotion of self-esteem in the mothers of children with cleft lip and palate, and its useful role in furthering participation of the mothers in treating and taking care of their children, this psychological intervention can be used for the mothers of children with other special healthcare needs as well.

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**Conflicts of interest**

There are no conflicts of interest.

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