

# The Effect of Logotherapy Group Training on Changes of Depression, Self-Esteem and Intimacy Attitudes in Physically Disabled Women

Andisheh Golshan<sup>1</sup>, Majid Zargham Hajebi<sup>2,\*</sup> & Naser Sobhi-Gharamaleki<sup>3</sup>

## Abstract

**Objective:** This study was conducted to determine the effects of logotherapy group training on changing self-esteem and intimacy attitudes and depression of physically disabled women.

**Method:** The research was performed in semi-experimental method with two groups (logotherapy and control), pre-test, post-test and follow up phase. The statistical population was 68 people with physical disabilities under therapy of Kashan Welfare Center. Among this population, 40 physically disabled women (20-40 years old), who had depression above 17, were selected and randomly divided equally in two groups (n=20). The research instruments were Treadwell intimacy attitude (1983), Beck depression (1996) and Eysenck's self esteem (1976) inventories. Before the first group training session pre-test was conducted by using questionnaires in both groups. Then 8 sessions of logotherapy, twice a week, each lasting 120 minutes, were administered to test the group. For both groups, post-test (immediately after training sessions), and follow-up test (one month later) were taken. Analysis of variance with repeated measures was used to analyze data.

**Results:** The results showed that group training through logotherapy, significantly decreased depression ( $p \leq 0.01$ ), and significantly increased self-esteem and intimacy attitude ( $p \leq 0.01$ ), and the sustainability of this effects at follow-up.

**Conclusion:** The study concluded that training logotherapy can effectively increase intimacy attitude and self-esteem and decrease depression in physically disabled women, and so it implies the importance of paying attention to spiritual training and applying them in welfare centers.

**Keywords:** Logotherapy, Intimacy attitudes, Self-esteem, Depression, Physically disabled

## Introduction

Depression is a common mental disorder. Globally, more than 264 million people of all ages suffer from depression. Depression is a leading cause of disability worldwide and is a major contributor to the overall global burden of disease and according to the World Health Organization (2020), women are more affected by depression than men. Women have twice the incidence of major depression compared to men which caused from Chronobiological

disorders specially during premenstrual, pregnancy, post-pregnancy and menopausal times, so that prevalence of depression is estimated 13% (Parry & Newton, 2001). Depression appears in various forms and changes person's view about self, others and the world (Ganji, 2010). Beck hypothesized three factors for negative views in depression: 1) negative views of the self, 2) negative views about environment and desire to experience the world hostilely and demandingly, 3) waiting for suffering and failure about future (Beck, 1972).

Psychologists define intimacy as making relations with others and express emotions and know it as human natural expressions. Those who experience high intimacy in relationship, can

1. Department of Psychology, Qom Branch, Islamic Azad University, Qom, Iran.

2. Department of Psychology, Qom Branch, Islamic Azad University, Qom, Iran.

3. Department of Motor Behaviour, Allameh Tabataba'i University, Tehran, Iran.

\* Corresponding author, Email: Zarghamhajebi@gmail.com

show themselves desirable and express their needs effectively (Patrick, sells, Giordano & Tollerud, 2007; Better Health Channel, 2019; Czyzowska, Gurba, Czyzowska, Kalus, Sitnik-Warchulska & Izydorczyk, 2019). Among those who have major problems in communicating with others and expressing their emotions are the disabled people, who are often exposed to negative attitudes that lead to discrimination and violation of their rights and higher rates of social exclusion. For example, they face challenges in terms of education and employment and health care (United Nations, 2019), and usually a low number of disabled people adapt to these conditions, and most of them feel helpless and it reduces their self-esteem and eventually become depressed (Mushtagh & Akhouri (2016).

Supports in order to shape positive self-concept for these people can cause more social integration and personal value which finally decrease their depression (Elliott, Herrick, Patti, Witty, Godshall & Spruell, 1991; United Nations, 2019; Tough, Siegrist & Fekete, 2017).

According to WHO (2018), about 15% of the world's population have some form of disability and around 110 to 190 million people, 15 years old and older, have serious difficulties in functioning. WHO defines disability as disorder of relation between individual and environment. According to Iran's welfare organization (2018), there are 1,350,000 disabled under coverage of the welfare organization, among whom 42% are physically disabled. Depression is one of the main and common disorder among physically disabled. In this regard, Hughes, Robinson-Whelen, Taylor, Petersen and Nosek (2005), in their study about the level of depression among 443 physically disabled women over 18 years old (cut of point 17 in the BDI-II), reported that more than 51% of these women suffer from depression disorder, which impacts their life fundamental activities. Tough, et al. (2017) in a systematically review of 63 quantitative studies exploring associations of social relationships with

mental health in people with disabilities, indicated that social relationships play an important role in mental health and reducing their depression. Moradi, Kajbaf and Qamrani (2007) in their study among disabled single women in Isfahan found positive and significant relationship between desire to make intimate relationship and enhancing mental health and reducing depression.

Self-esteem refers to amount of prestige, acceptance, credibility and value that people consider about themselves. Person with mental health also has a higher level of self-esteem and is successful in relation to others. Those with less self-esteem avoid being in public which leads to their isolation and then depression (Gharachedaghi, 2019). Negative attitudes and psychosocial barriers affect the mental health of disabled people and cause lower level of self-esteem than others (Atadokht, Jokar Kamalabadi, Hoseini Kiasari & Basharpour, 2014). Nosek, Hughes, Swedlund, Taylor and Swank (2003) found that women with physically disabilities have lower self-efficacy and self-esteem than other women and are more socially isolated. They also reported positive relationship between intimacy and self-esteem and self-efficacy, and negative relationship between intimacy and social isolation and depression in disabled women.

Studies show that acquiring life meaning is strong support against person's affective instability and guarantees mental health (Rathi & Ragstogi, 2007; Mohammadi, Shahraky Vahed, Nikbakht, firouzkouhi & Khosravi Bonjar, 2019; Mohammadi & Rahimzada Tehrani, 2018). Logotherapy is a philosophical approach about people and their existence and explains basic themes and subjects of life such as suffering, death and life, freedom and responsibility about themselves and others, finding meaning, and to get along with meaninglessness. This approach allows people to see every day events beyond problems. Frankl's logotherapy is a therapeutic process to access ability to achieve real self, expand attitude regarding self and surroundings,

and make obvious all things which create life meaningfulness for person in present and future (Afkham Rezaei, Tabrizi & Shafieabadi, 2008).

**Main principles of logotherapy are:**

- Under any circumstances, life is meaningful, even the most tragic of its kind,
- Our main motivation in life is our desire and purpose to find the meaning and concept of life,

We are free to understand the meaning of what we do, what we experience, or at least, what we faced with in painful and unchangeable situation (Mohammadpour Yazdi, 2011). Logotherapy by considering the temporality of entity and human existence instead of pessimism and isolation, invite human to effort and activity and explain what knockout human is not sufferings undesirable nature, but their life meaninglessness which is tragic. If we accept suffering bravely, life will be meaningful until the last breath and the meaning of life can also encompass potential meaning of pain and suffering. Frankl says: nothing in the world can help man as much as the meaning of his life. Life meaningfulness is positive response to life despite the difficulties, the way in which human accept the fate and create meaning for his suffering (Frankl, 2006). This kind of therapy assumes that life has excellent meaning and that meaning can be discovered by anyone, anywhere, at any time. Remarkable point in this treatment is emphasis on the potential and unique ability of man as best as possible which can transform a tragedy into a personal victory and change unpleasant situation into a humanly one (Frankl, 2011).

Logotherapy tries to draw the scope of personal authority and freedom and helps the person to find the goal and intention in life proportional to his/her existence and entity. Logotherapy emphasizes strongly on taking responsibility which is necessary. Logotherapy encourages individual to observe life differently and try to regain positive values in life. From Frankl's point of view, the meaning of life is

not abstract and a subjective case, and these are the people who give meaning to their life, not asking the question of what is the meaning of life. They should ask themselves what meaning they can create for their life and the meaning for life by accepting responsibility (Frankl, 2011).

Some main factors of logotherapy are in line with Quran's teachings that meaningfulness and purposefulness of life are among them which are mentioned in various verses. For example, in verse 115 of Sura Al-Muminoon, it is said that: "Then did you think that we created you uselessly and that to Us you would not be returned?" (Farsinezhad & Dezhabad, 2009).

Other factors which Frankl emphasized are understanding sufferings and accepting them in life (Frankl, 2006). Allah says in verse 4, Sura Al-Balad: "We have certainly created man into hardship". Researchers and translators of Quran believe that this verse indicate that the universe is accompanied by hardship, and according to Quran, hardships construct men (Shia News, 2013).

Kang, Im, Kim, Kim, Song and Sim (2009) in their research about the effect of group logotherapy training on 29 adolescent suffering from advanced cancer reported that logotherapy reduced patients' suffering, found positive meaning in their lives, and improved their quality of life.

Steger, Mann, Michals and Cooper (2009) in their research about the effect of logotherapy on depression, anxiety and social support and mental health of 99 smoking cessation patients, found that depression was strongest predictors of mental health and also meaning of life was valuable variable to determine people's mental health. Mohammadi and Rahimzada Tehrani (2018), in their research about the effect of logotherapy on the spiritual health and quality of life of women with AIDS, reported that logotherapy improves their quality of life and spiritual health.

Khazaei (2010) in the research about the effect of logotherapy on increasing self-esteem among

women with skin lesions in Mashhad reported that group logotherapy significantly increase their self-esteem. Amini, Pakizeh and Barakat (2015) in their study reported that logotherapy training increased self-esteem of divorced women in Booshehr. Rezaei and Shafieabadi (2008), in their research about the effectiveness of group logotherapy on depression of patients with multiple sclerosis, found that logotherapy could significantly reduce depression. In this research the effectiveness of logotherapy was sustainable after one month follow-up. Also, Ghara Zibaei, Aliakbari Dehkordi, Alipour and Mohtashami (2012) in their study indicated that group logotherapy can be helpful in the reduction of perceived stress and the increase of life expectancy among MS patients. Aghalor and Sharifi Esfahani (2019), in a study on people with disability, reported that group logotherapy can help improve and strengthen their resilience. The findings of Asghari, Aliakbari and Dadkhah (2012) showed that group logotherapy had a significant effect on curing the old female's depression in the house of the oldsters. They emphasized on necessity of paying more attention to non-medication treatments, which are helpful to cure depression of elders. The positive effects of group therapy on the improvement of depression symptoms using other psychological approaches have also been reported (Oraki, 2019).

Regarding the side effects of using drug for depression and its costs (Royal College of Psychiatrists, 2019) and also, according to high statistics of disabilities and importance of depression disorder among disabled people, it seems that applying low cost methods without side effects for prevention and treatment is necessary. On the other hand, due to the effectiveness of group logotherapy in debilitating and painful conditions and improvement of mental health, as well as the problems of physically disabled women who have experienced low quality of life in average, recent research was performed to study the effectiveness of group logotherapy training on increasing self-esteem

and intimacy attitudes and decreasing depression among women with physically disability.

## Methods

This research was performed in semi-experimental method with pre-test, post-test and one-month follow-up design with control and experimental groups in year 2019. Statistical population were all 68 depressed women between 20-40 years old with permanently physically disabled (including women with genetic disorders and spinal cord injuries) from Kashan. After reviewing their medical documents, 40 people who had referred to welfare organization and their depression was confirmed by Psychiatrist more than others, and according to Beck depression inventory, their cut off point was higher than 17, were selected (Pasha Sharifi & Nikkhoo, 2015). They grouped equally by random sampling method: logotherapy training group (20 persons) and control group (20 persons).

The mean age of the disabled women was 31.05 years with a minimum of 20 and a maximum of 40 years. In terms of education, 32.5% were elementary, 27.5% were secondary, 22.5% were diploma, 5% were associate degree, and 12.5% were bachelor's degrees. Also, 65% of them were unemployed and 35% were employed. In addition, 15% were married and 85% were single.

## Ethical considerations

- receiving written consent from participants before starting study,
- confidentiality about tests scores and other information during conducting research,
- avoiding some other therapies during research,
- necessity of participant's attendance during all training sessions,
- explaining that if a participant is not willing to attend the sessions, she is free to withdraw from the research. However, after the research free training sessions were planned for control group.

### Research instruments

After selecting, pre-tests of depression, intimacy attitudes and self-esteem were performed to both groups. In order to study severity of depression symptoms, Beck Depression Inventory (2nd edition), and for assessing intimacy attitudes, revised form of intimacy attitude inventory were used. Also, Eysenck's self esteem inventory (ESI) was used to assess self-esteem.

Beck depression inventory (2nd edition) encompasses all depression factors based on Cognitive theory of depression which prepared to assess depression among adults and adolescents. This questionnaire involves 21 items and each item was scored 1-3 and so the range of total score are 0-63. Twenty-one items of depression inventory are classified into emotional symptoms, cognitive symptoms, and physically symptoms (Pasha Sharifi & Nikkhoo, 2015). This inventory has high validity and reliability in various tests (Grothe, Dutton, Jones, Bodenlos, Ancona & Brantley, 2005). Kaviani and Mousavi (2008) reported validity and reliability of the test in various age groups of Tehran 0.72 and 0.83, respectively. In this research, Cronbach's alpha coefficient was 0.87.

Revised form of intimacy attitudes which was provided by Treadwell in 1983 involves 2 factors of emotional and mental intimacy (27 items are related to mental intimacy and 23 items are related to emotional intimacy). This test involves fifty 5-choice questions and each question scored 1-5. Total score of each person shows the level of intimacy attitude. Therefore, everyone's total score ranged between 50-250, scores lower than 140 show low tendency to make intimacy relationship, and scores higher than 210, show high tendency to make intimacy relationship. Amidon, Kumar and Treadwell (1983) calculated the reliability of this scale using Cronbach' alpha method 0.78 to 0.86, and through test-retest method 0.84. In this study Cronbach's alpha coefficient was 0.85.

Eysenck self-esteem questionnaire involves 30

items and the respondent should choose one of three options: "Yes", "No", or "?" (items with the answer "?" are scored 0.5 and items with yes or no are scored 1). In this questionnaire, lowest score is 0 and highest score is 30 (Biabangard, 2011). Hormozi Nezhad, Shahni Yeylagh, and Najarian (2000) in the research about students of Shahid Chamran University of Ahvaz reported this questionnaire's validity 0.74 for female students and 0.79 for male students, and reliability coefficient was calculated 0.88 through Cronbach's alpha method. In this study, Cronbach's alpha coefficient was 0.82.

After the pre-test, the experimental group was trained 8 sessions of logotherapy, twice a week, each lasting 120 minutes. Logotherapy training sessions are based on Frankl theory. In these sessions, the person is helped to find meaning of life (meaning of life, suffering and death, responsibility, authority and freedom). General trend of group logotherapy which explained below is based on Hutzell and Eggert Package (2009) that shows flexibility in each step. It means that estimated time, exercises and discussions topics can be changed based on special group's need.

The summary of logotherapy training program is as follow:

**First session:** Introducing the trainer and the experimental group, explaining logotherapy, objective and method and logotherapy techniques and defining the technique of values awareness (extending conscious awareness and revelation of personal values). Then, basic information about ontology and four concepts of death, sufferings, freedom and meaninglessness were presented in order to help participants to face with fear, worry, difficulty and problems positively and tangibly. Also, necessary information was provided about religious beliefs in self-acceptance and understanding personal properties as one of the aspects of human existence.

**Second session:** Group exercise of recent events, desirable artistic experiences, wise conversation and

positive effective persons in their life and finding meaningful values about them.

**Third session:** training predictive anxiety technique and so training determining goals and introducing short-term, midterm and long-term goals. At this stage, participants determine some goals throughout life, given the mortality of the world.

**Forth session:** training the technique of paradoxical intention and analyzing goals to fit them with personal values. At this stage goals (short-term, midterm and long-term) are assessed based on hierarchy of personal values and whether achieving goal will contribute to realize it or not.

**Fifth session:** determine new goals for neglected values. Goals should be objective and accessible and should be included designing of programs for responsibility and achievement of success.

**Sixth session:** training decentralization technique to achieve the goals. according to this technique, person learns to exclude challenging behavior or symptoms from her attention scope and not to pay attention to them, while pays attention to issues spiritually and regards to positive aspects of life.

**Seventh session:** training attitudes modification technique and introducing strength and weakness points may help to achieve the goals. During this session, the correction of attitudes to changing the framework of attitudes from negative to positive is

emphasized.

**Eighth session:** creating motivation and try to achieve goals based on evocation. In order to achieve the goals, participant must take action and take the first step by registering a personal contract and trusting in God, in which the trainer requests the fighting power of the human soul, and asks the person to be aroused to change her physical-emotional state, positively. The trainer mentions for participant the freedom, responsibility and trust in most powerful thing in the world (God), semantic orientation and the ability to positively change.

After completion of training sessions, post tests of depression, intimacy attitudes and self-esteem were conducted for two groups, immediately. Also, after one month, two groups were examined (follow-up) for the third time. At the end, the data were analyzed with repeated measures analysis of variance using SPSS (version22) statistical software.

### Results

Table1 shows descriptive scales such as mean and standard deviation of depression, intimacy attitude and its components (mental intimacy and emotional intimacy), and self-esteem among disabled women in both experimental and control groups during pre-test, post-test and follow-up.

The results of this table shows considerable

**Table 1.** Descriptive scales of depression, intimacy attitude, mental attitude, emotional attitude and self-esteem in two groups

Variable	Group	Number	Pre-test	Post-test	Follow-up
			Mean ±Standard deviation	Mean ±Standard deviation	Mean ±Standard deviation
Depression	experimental	20	25.10 ± 4.55	9.25 ± 3.29	9.30 ± 3.42
	control	20	25.35 ± 3.82	25.15 ± 4.19	25.20 ± 3.05
Intimacy attitude	experimental	20	120.00 ± 8.44	169.25 ± 9.70	168.85 ± 9.43
	control	20	119.85 ± 7.88	12.00 ± 8.50	119.75 ± 7.70
Mental intimacy	experimental	20	67.50 ± 6.71	94.15 ± 8.65	93.95 ± 7.92
	control	20	67.45 ± 5.98	67.55 ± 7.13	67.25 ± 6.11
Emotional intimacy	experimental	20	52.50 ± 5.34	75.10 ± 5.17	74.90 ± 5.60
	control	20	52.40 ± 4.80	52.45 ± 5.13	52.50 ± 5.08
Self-esteem	experimental	20	8.25 ± 2.53	23.85 ± 2.62	23.65 ± 2.52
	control	20	8.20 ± 2.26	8.25 ± 2.10	8.20 ± 2.63

difference between mean scores of studied variables during post-test and follow-up in experimental and control groups, in that mean score of depression in experimental group during post-test and follow-up, unlike control group, shows considerable decrease compared to pre-test. While, mean scores of intimacy attitude and its components, and also mean score of self-esteem in experimental group during post-test and follow-up, shows significant increase compared to pre-test. Statistical measurement of repeated measurements was used to statistically evaluate the differences obtained from the descriptive comparisons of the means.

The results of Kolmogorov-Smirnov test confirmed the assumption of a normal distribution of the data in the research variables at the three stages of pre-test, post-test and follow-up. In table 2, the results of Levine F test show homogeneity

of variance assumption of groups and insignificant relations of Box's M test and Mauchly's test of sphericity for all variables, which indicates homogeneity prediction of variance-covariance matrix and equivalence assumption of variances in subjects.

Variance analysis within subjects (based on Sphericity assumed) related to each experimental variable in table 3 shows that difference between three stages of pre-test, post-test and follow-up, and also interaction effect between group and test stages in variables of depression, intimacy attitude, mental intimacy, emotional intimacy and self-esteem, is statistically significant at 1% level. Therefore, experimental and control groups are different at least in one of test stages (pre-test, post-test and follow-up) in scores of depression, intimacy attitude, mental intimacy, emotional intimacy, and self-esteem.

**Table 2.** Results of Levene's test, Box's M and Mauchly's test of sphericity about study variables

Variable	Levene		Box's M		Mauchly's W	
	F	Significant	M	F	χ2	Significant
depression	1.90	0.14	16.42	1.77	9.78	0.21
Intimacy attitude	1.14	0.10	18.31	1.14	14.10	0.11
Mental intimacy	1.65	0.09	15.05	1.48	11.81	0.15
Emotional intimacy	1.94	0.12	11.10	1.36	10.60	0.10
Self-esteem	2.02	0.15	14.16	1.82	10.21	0.12

**Table 3.** Results of inter-group variance analysis of each variables

Variable	Change source	df	Mean squares	F	Eta squared
Depression	Stages	2	853.36	290.66**	0.88
	Interaction(stages×group)	2	816.41	278.07**	0.88
	Error	76	2.94		
Intimacy attitude	Stages	2	8028.91	442.27**	0.92
	Interaction(stages×group)	2	8011.56	441.30**	0.92
	Error	76	18.15		
Mental intimacy	Stages	2	2341.46	211.52**	0.84
	Interaction(stages×group)	2	2358.56	213.06**	0.85
	Error	76	11.07		
Emotional intimacy	Stages	2	1698.83	317.36**	0.89
	Interaction(stages×group)	2	1676.43	313.17**	0.89
	Error	76	5.35		
Self-esteem	Stages	2	803.58	686.97**	0.96
	Interaction(stages×group)	2	798.31	682.47**	0.95
	Error	76	1.17		

\*\*Shows statistically significant at 1% level.

Table 4 shows variance analysis of between-group effects (logotherapy and control). According to table results, the difference of all five scales between the two groups at the statistical level of 0.01 is significant. It means that logotherapy training has been effective on depression, intimacy attitude, mental intimacy, emotional intimacy and self-esteem of physically disabled women.

In order to determine the stage which the variables are significantly different, Bonferroni's post hoc test by pairwise comparison of means was used (Table 5). Before conducting the post hoc test, homogeneity of the variances between the study groups was assessed at each stage. Significant levels of Levene's test in all variables were higher than 0.05, therefore the assumption of variance equivalency was approved.

Bonferroni post hoc test (Table 5) showed that in the experimental group, mean scores of depression during post-test and follow-up decreased significantly ( $p \leq 0.01$ ) compared to pre-test, and means difference between post-test and follow-up was not significant, which shows the effect of logotherapy on decreasing depression of disabled and sustainability of this effect until follow-up stage. However, mean scores of intimacy attitude and its components (mental intimacy and emotional intimacy) and self-esteem during post-test and follow-up increased significantly ( $p \leq 0.01$ ) compared to pre-test, and so the difference

of means between post-test and follow-up was not significant, which shows the effect of logotherapy on increasing intimacy attitude and its components among disabled women and also its sustainability until follow-up stage. In the control group, there was no significant difference in the mean scores of depression, intimacy attitude, mental intimacy and emotional intimacy between any stages.

**Discussion and conclusion**

The results of present research showed that logotherapy training impacts on decreasing depression and increasing self-esteem and intimacy attitude and its components positively and significantly. The findings of present research are in line with the findings of other researchers. For example, Sarvarian and Taghizadeh (2016) reported that group logotherapy training significantly increase self-esteem and happiness of female students of Qom city. In research by Khazaei (2010), group logotherapy significantly increased self-esteem of women with skin lesions. Also, in research by Amini, Pakizeh and Barakat (2015), logotherapy training significantly increased self-esteem of divorced women. In addition, Asghari et al. (2012) reported that group logotherapy significantly reduced depression in the old women. The research of Mohammadi and Rahimzadeh Tehrani (2018), also showed a significant increase in the quality of life and the spiritual health of women with AIDS

**Table 4.** Summary of results of between-group variance analysis of each variables

Variable	Change source	df	Mean squares	f	Eta squared
Depression	Group	1	3424.01	93.81**	0.71
	Error	38	36.50		
Intimacy attitude	Group	1	32340.83	172.39**	0.82
	Error	38	162.21		
Mental intimacy	Group	1	9487.41	72.35**	0.66
	Error	38	131.13		
Emotional intimacy	Group	1	6795.08	96.91**	0.72
	Error	38	70.12		
Self-esteem	Group	1	3224.03	205.53**	0.84
	Error	38	15.69		

\*\*Shows statistically significant at 1% level.



**Table 5.** Results of Bonferroni post hoc test about pairwise comparison of stages means of groups

Variable	Stages	Experimental group		Control group	
		Mean difference	Standard deviation	Mean difference	Standard deviation
<b>Depression</b>	Pre test-post test	-15.85**	1.20	-0.20	1.18
	Pre test-follow up	-15.80**	1.20	-0.15	1.18
	Post test-follow up	0.50	1.20	0.05	1.18
<b>Intimacy attitude</b>	Pre test-post test	49.25**	2.91	0.15	2.54
	Pre test-follow up	48.85**	2.91	-0.10	2.54
	Post test-follow up	-0.40	2.91	-0.25	2.54
<b>Mental intimacy</b>	Pre test-post test	26.65**	2.47	0.10	2.03
	Pre test-follow up	26.45**	2.47	-0.20	2.03
	Post test-follow up	-0.20	2.47	-0.30	2.03
<b>Emotional intimacy</b>	Pre test-post test	22.60**	1.70	0.05	1.58
	Pre test-follow up	22.40**	1.70	0.10	1.58
	Post test-follow up	-0.20	1.70	0.05	1.58
<b>Self-esteem</b>	Pre test-post test	15.60**	0.81	0.05	0.74
	Pre test-follow up	15.40**	0.81	0.00	0.74
	Post test-follow up	-0.20	0.81	-0.50	0.74

\*\*Shows statistically significant at 1% level.

due to group logotherapy. Ghara Zibaei, et al. (2012) showed that group logotherapy reduces the perceived stress and increases the life expectancy in MS patients. Also, Aghalor and Sharifi Esfahani (2019) showed that group logotherapy can increase resilience of disabled people. Kang et al (2009) in their study indicated that group logotherapy can improve the quality of life of adolescent with advanced cancer through finding meaning in their lives.

The research of Navab, Kalantary and Javadzadeh (2014) also showed a significant effect of logotherapy training in increasing psychological well-being of women, and during one-month follow-up, they reported that because finding the ultimate meaning and goal of life keeps person from feeling of emptiness and confusion, it leads to her peace of mind and liberation from mental anxieties and mental health.

In explaining present research results, it should be mentioned that depressed person tries to evade from duties and responsibility which undertake in

life, and since logotherapy emphasizes on finding purpose and meaning of life and conscientiousness and responsibility, training it increases the level of awareness and self-assistance and responsibility to cope with problems and spiritual power of disabled, which help them improve their depression. Training people to obtain and create meaning by suggested concepts may increase their responsibility (Mohammadi & Rahimzadeh Tehrani, 2018). When one faces with unchangeable destiny, he will find the chance of achieving the highest values and meaning of life. Pain and suffering are the best manifestation of human being value and what matters is attitude style and individual's reaction regarding to suffering (Frankl, 2006). One of points about logotherapy in present research is to draw disabled attention to this point that main motivation and life purpose is not the way of escaping from pain and suffering, but is attitude and the way of coping with pain and suffering for better tolerance. Therefore, disabled person accepts pain and suffering better.

About increasing self-esteem in disabled people

by logotherapy, we can state that since lack of purpose and meaning in life decrease self-esteem (Shahidi & Shirafkan, 2008), then, logotherapy training for disabled may lead to finding meaning of life and human existential value and increasing self-esteem.

Lack of proper communication with each other is one of manifestation of existential vacuity in logotherapy. Someone, who has failed to find purpose and meaning of life, feels meaninglessness and emptiness and in Frankl's view suffers from existential emptiness (Frankl, 2006). Therefore, in present research, group logotherapy training has improved disabled inter-relationship and has increased their intimacy attitudes. On the other hand, considering the benefits of group therapy, including the possibility of communicating with each other, exchanging information with similar people, understanding how others tackle problems, and making positive changes and having group support (American Psychological Association, 2019), it seems participating in group logotherapy sessions as a social activity has also been effective in improving the mental health of disabled women.

Results of present research showed that increasing intimacy attitude among disabled will decrease their depression. Also, by increasing intimacy attitude, self-esteem significantly increases. Also, Nosek, Hughes, Swedlund, Taylor and Swank (2003) reported that among disabled, there is positive relationship between intimacy and self-esteem and self-efficacy, and negative relationship with social isolation and depression; As Mushtagh and Akhouri (2016) found, physically disabled people have low level of self esteem and high level of depression, stress and anxiety in comparison to normal participants.

Generally, positive effects of group logotherapy training from this study results showed that conducting logotherapy method by creating new meaning and changing beliefs impacts on improving self-esteem and intimacy attitude, and therefore,

decreasing depression among physically disabled women, in that when a person encounters with inevitable situation or unchangeable fate, such as disability, she can find a chance to achieve the highest value and the deepest meaning of life. Also, this research showed the necessity of paying attention to spiritual training in positive psychology techniques and using them in welfare centers and clinics to improve psychological conditions of disabled women. These results can provide ground for improving professional abilities to improve the level of relations, attitudes, and self-esteem, and also decreasing depression among physically disabled women.

In this study, there were restrictions about the selection of samples and the presence of individuals due to their movement limitations, and also statistical population only included women with disabilities.

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### References

- Afkham Rezaei, Z., Tabrizi, M., & Shafieabadi, A. (2008). The effectiveness of group logotherapy on women's health improvement. *Journal of Clinical Psychology Andisheh Va Raftar*, 3(9), 69-78.
- Aghalor, M., & Sharifi Esfahani, M. (2019). The effectiveness of group logotherapy on increasing resilience in patients with disabilities referred to the Isfahan Red Crescent Comprehensive Rehabilitation Center. *The 6th International Conference on Advanced Research Achievements in Social Sciences, Educational science and Psychology*, 19pp. [https://www.civilica.com/Paper-ARSEP06-ARSEP06\\_026.html](https://www.civilica.com/Paper-ARSEP06-ARSEP06_026.html). [Persian]
- American Psychological Association. (2019). *Psychotherapy: Understanding group therapy*. American Psychological Association. <https://www.apa.org/topics/group-therapy>.
- Amidon, E., Kumar, V. K., & Treadwell, T. (1983).

- Measurement of intimacy attitudes: The intimacy attitude scale-revisited. *Journal of Personality Assessment*, 47(6), 635–639.
- Amini, N., Pakizeh, A., & Barakat, F. (2015). Investigation the effect of logotherapy training on increasing the self-esteem of divorced women who refer to the counseling center and help offices of the police stations of Bushehr city in 2014. Second National Conference on Sustainable Development in Educational Sciences and Psychology, Social and Cultural Studies, Tehran, Iran. [https://www.civilica.com/Paper-EPSCONF02-EPSCONF02\\_0523.html](https://www.civilica.com/Paper-EPSCONF02-EPSCONF02_0523.html). [Persian]
- Asghari, N., Aliakbari, M., & Dadkhah, A. (2012). The effects of group logotherapy on decreasing the degree of depression in female olds. *Middle Eastern Journal of Disability Studies*, 2(1), 31-38.
- Atadokht, A., Jokar Kamal Abadi, N., Hoseini Kiasari, S. T., & Basharpour, S. (2014). The role of perceived social support in predicting psychological disorders in people with physical disability and its comparison with normal subjects. *Journal of Rehabilitation*, 15(3), 26-34.
- Beck, A.T. (1972). *Depression: Causes and Treatment*. University of Pennsylvania Press.
- Bental, R.P. (2005). Words: A proposal to classify happiness as a psychiatric disorder. *Journal of Medical Ethics*. 18(2), 94-8.
- Better Health Channel. (2019). *Relationships- creating intimacy*. Victoria State. Better Health Channel. <https://www.betterhealth.vic.gov.au/health/healthyliving/relationships-creating-intimacy>
- Biabangard, A. (2011). *Methods of increasing self-esteem in children and adolescents*. Parents and Teachers Association Publications, Tehran, Iran. 144pp.
- Czyzowska, D., Gurba, E., Czyzowska, N., Kalus, A., Sitnik-Warchulska, K., & Izydorczyk, B. (2019). Selected predictors of the sense of intimacy in relationships of young adults. *International Journal of Environmental Research and Public Health*, 16(22), 4447.
- Elliott, T.R., Herrick, S.M., Patti, A.M., Witty, T.E., Godshall, F.J., & Spruell, M. (1991). Assertiveness, social support and psychological adjustment following spinal cord injury. *Behaviour Research and Therapy*, 29(5), 485–493.
- Farsinezhad, A. R., & Dezhabad, H. (2009). The goal of creation of the universe and man according to the Quran. *Journal of Religious Thought*, 9(30), 103-134.
- Frankl, V. E. (2006). *Man's Search for Meaning*. Beacon Press, 184 pp.
- Frankl, V. E. (2011). *The Unheard Cry for Meaning: Psychotherapy and Humanism*. Touchstone press, 304 pp.
- Ganji, M. (2010). *A practical guide to treating depression*. Savalan Publication, Tehran, Iran. 232pp.
- Gharachedaghi, M. (2019). *Self-esteem psychology*. Nakhostin Publication, Tehran, Iran. 304pp.
- Ghara Zibaei, F., Aliakbari Dehkordi, M., Alipour, A., & Mohtashami, T. (2012). Efficacy of group logo therapy in the perceived stress and life expectancy in MS patients. *Journal of Research in Psychological Health*, 6(4), 12-20.
- Grothe, K. B., Dutton, G. R., Jones, G. N., Bodenlos, J., Ancona, M., & Brantley, P. J. (2005). Validation of the Beck depression inventory-II in a low-income African American sample of medical outpatients. *Psychological Assessment*, 17(1), 110-114.
- Hormozi Nezhad, M., Shahni Yeylagh, M., & Najarian, B. (2000). Simple and multiple relationships of self esteem, social anxiety, perfectionism and selfassertiveness among students of Shahid Chamran university of Ahvaz. *Journal of psychological and educational science*, 7(3-4), 29-50.
- Hughes, R. B., Robinson-Whelen, S., Taylor, H. B., Petersen, N. J., & Nosek, M. A. (2005). Characteristics of depressed and nondepressed women with physical disabilities. *Archives of Physical Medicine and Rehabilitation*, 86, 473-9.
- Hutzell, R. R., & Eggert, M. D. (2009). *A workbook to increase your meaningful and purposeful goals (MPGs)*. <http://www.toddnuckols.com/Meaningful%20goals.pdf>
- Iran welfare organization. (2018). *Disability statistics in the country*. <http://www.iransepid.ir/News/13808>. [Persian]
- Kang, K. A., Im, J. I., Kim, H. S., Kim, S.J., Song, M. K., & Sim, S. (2009). The effect of logotherapy on the suffering, finding meaning, and spiritual well-being of Adolescents with Terminal cancer. *Journal of Korean Academy of Child Health Nursing*, 15(2): 136-144.

- Kaviani, H., & Mousavi, A. S. (2008). Psychometric properties of the Persian version of Beck anxiety inventory (BAI). *Tehran University Medical Journal*, 66(2), 136-140.
- Khazaei, R. (2010). Comparing the effectiveness of logotherapy and group cognitive therapy on increasing women's self-esteem with skin lesions. M.S. Thesis in Clinical Psychology, Faculty of Educational Sciences and Psychology, Ferdowsi University of Mashhad.
- Mohammadi, S. Y., & Rahimzadeh Tehrani, K. (2018). The effectiveness of therapy on spiritual health and quality of life of women with AIDS in Tehran. *Quarterly Journal of Health Psychology*, 7(1), 106-120.
- Mohammadi, M., Shahraky Vahed, A., Nikbakht, R., Firouzkhohi, A. R., & Khosravi bonjar, A. (2019). Relationship between optimism and the meaning of life among the diabetic patients referring to the internal department of Amiralmomenin Ali Hospital, Zabol in 2018. *Journal of Diabetes Nursing*, 7(1), 728-736.
- Mohammadpour Yazdi, A. R. (2011). Viktor Emil Frankl, founder of logotherapy (An overview of psychology and existential psychotherapy). Danzheh publications, Tehran, Iran. 286pp.
- Moradi, A., Kajbaf, M. B., & Qamarani, A. (2007). The relationship between intimacy attitudes and mental health among physically disabled females in the city of Esfahan. *Journal of Women's Studies Sociological and Psychological*, 5(3), 95-108.
- Mushtagh, S., & Akhouri, D. (2016). Self esteem, anxiety, depression and stress among physically disabled people. *The International Journal of Indian Psychology*, 3(4), 125- 132.
- Navab, Z. S., Kalantary, M., & Javadzadeh, A. (2014). Investigating the effectiveness of group logotherapy with an Islamic approach on the psychological well-being of women referring to counseling centers in Isfahan in 2013. *Islamic Research Journal of Women and Family*, 2(3), 43-55.
- Nosek, M. A., Hughes, R. B., Swedlund, N., Taylor, H. B., & Swank, P. (2003). Self-esteem and women with disabilities. *Social Science and Medicine*, 56(8), 1737-1747.
- Oraki, M. (2019). The effectiveness of the schema therapy on depression and relapse in heroin-dependent individuals. *Biquarterly Iranian Journal of Health Psychology*, 2(1), 9-18.
- Patrick, S., Sells, J.N., Giordano, F.G., & Tollerud, T.N. (2007). Intimacy, differentiation, and personality variables as predictors of marital satisfaction. *The Family Journal*, 15(4), 359- 67.
- Parry, B. L., Newton, P. R. (2001). Chronobiological basis of female-specific mood disorders. *Neuropsychopharmacology*, 25:102-108.
- Pasha Sharifi, H., & Nikkhoo, M. R. (2015). Psychological Assessment Guide: For Clinical Psychologists, Counselors, and Psychiatrists (Vol. 2). Sokhan Publication, Tehran, Iran. 704pp.
- Rathi, N., & Ragstogi, R. (2007). meaning in life and psychological well-being in preadolescent and adolescent. *Journal of the India Academy of Applied Psychology*, 33(1), 31-38.
- Rezaei, H., & Shafieabadi, A. (2008). The effect of group logotherapy on multiple sclerosis patients' depression. *Scientific Journal of Education Research*, 4(16), 53-71.
- Royal College of Psychiatrists. (2019). *Position statement on antidepressants and depression*. RC PSYCH. <http://www.rcpsych.ac.uk>.
- Sarvarian, Z., & Taghizadeh, M. H. (2016). Effectiveness of group logotherapy on self-esteem and happiness of Qom adolescents' girls. *Medical Ethics*, 9(34), 187-207.
- Shahidi, S., & Shirafkan, S. A. (2008). Psychotherapy and spirituality. Roshd Publications, Tehran, Iran. 232pp.
- Shia News. (2013). *Why did God, the Merciful, create man in suffering!?*. <https://www.shia-news.com/fa/news/68220>. [Persian]
- Steger, F. S., Mann, J. R., Michals, P., & Cooper, T. C. (2009). Meaning in life, anxiety, depression and general health among smoking patients. *Journal of psychosomatic research*, 67, 353-358.
- Tough, H., Siegrist, J., & Fekete, C. (2017). Social relationships, mental health and wellbeing in physical disability: a systematic review. *BMC Public Health*, 17, 414.
- United Nations. (2019). *Disability and development report*. United Nations, New York. 284 pp.
- World Health Organization. (2018). *Disability and health*. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/disability-and-health>.
- World Health Organization. (2020). *Depression*. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/depression>.