

## The Effectiveness of Logotherapy on Body Dysmorphic Disorder and Self-Esteem in Women Undergoing Cosmetic Surgery

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### ABSTRACT

**Purpose:** This study aimed to investigate the effectiveness of logotherapy on body dysmorphic disorder and self-esteem in women undergoing cosmetic surgery.

**Methodology:** The research employed a quasi-experimental design with control and experimental groups using pretest-posttest methodology. The target population consisted of all women in Shiraz who had undergone at least one cosmetic surgery. A purposive sampling method was used to select 30 participants, who were then randomly assigned to experimental and control groups. Data were collected using the Body Dysmorphic Disorder Questionnaire developed by Phillips et al. (1997) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). The experimental group participated in eight sessions of logotherapy. Data were analyzed using analysis of covariance (ANCOVA).

**Findings:** The results of one-way ANCOVA showed a statistically significant difference between the experimental and control groups in both dependent variables after controlling for pretest scores. Logotherapy significantly reduced symptoms of body dysmorphic disorder ( $F(1, 27) = 68.37, p < .001, \eta^2 = .707$ ) and significantly increased self-esteem ( $F(1, 27) = 67.10, p < .001, \eta^2 = .713$ ) in the experimental group compared to the control group.

**Conclusion:** Therefore, it can be concluded that prior to performing cosmetic surgeries, this type of therapy can be utilized to enhance women's satisfaction with their appearance and body, as well as to improve their self-esteem.

**Keywords:** body dysmorphic disorder, self-esteem, logotherapy.

## 1. Introduction

In recent decades, cosmetic surgery has lost its primary function, which was to restore the normal function or shape of body parts. A beautiful body, when classified according to traits labeled as ideal or appropriate, represents a social standard (Sarwer, 2021). Thus, the effort to appear beautiful, well-groomed, and attractive is also a social behavior observed throughout human history (Jafferany et al., 2020). One of the methods of achieving beauty is cosmetic surgery. Cosmetic surgery is a specialized and voluntary procedure aimed at altering, maintaining, rejuvenating, or enhancing physical appearance through medical techniques (Di Gesto et al., 2022). General and plastic surgery are intertwined with complex meanings, including discourses of beauty and socio-gender norms, which in turn attract girls and women to beauty-related behaviors and practices (Meshkouri et al., 2024). Beauty is a universal human aspiration, and it is for this reason that aesthetic practices and procedures have emerged. Cosmetic surgeries attract many clients, particularly women and girls, due to a variety of reasons—one of which may be the level of self-esteem among women.

Self-esteem refers to a person's sense of self-worth, or the extent to which individuals value, appreciate, and love themselves (Parsakia & Darbani, 2022). It is a type of attitude that allows individuals to view their abilities with realistic and positive perspectives, granting them a sense of control over their lives (Want & Kleitman, 2006). Low self-esteem can be one of the reasons individuals tend to pursue cosmetic surgeries; therefore, enhancing self-esteem may help reduce the inclination toward cosmetic surgery in our society (Mehraban Asl et al., 2024). Visiting beauty centers in the pursuit of becoming more attractive is often driven by the goal of increasing self-esteem (Asadi et al., 2019). Women and girls who experience heightened self-consciousness to the extent that their self-perception becomes dependent on others' viewpoints may be more vulnerable to developing body dysmorphic concerns (Maheralnaqsh et al., 2020).

Body dysmorphic disorder exacerbates this issue by causing individuals to become excessively preoccupied with perceived physical flaws (Saadatmand et al., 2022). This psychological disorder compels individuals to spend a significant amount of time focusing on their appearance and ultimately leads to distorted body perception as they attempt to improve or conceal the body parts they believe are defective (Malcolm et al., 2018). According to statistics

from the International Society of Aesthetic Plastic Surgery, more than 20 million cosmetic surgeries were performed in 2014. Iran is among the countries with high prevalence of cosmetic procedures and beauty-related care (Gholami et al., 2019).

Given the aforementioned issues and the profound psychological consequences experienced by such individuals, offering appropriate psychological treatment is of great importance. Among third-wave cognitive-behavioral therapies, logotherapy stands out. This therapeutic approach focuses on increasing awareness of one's life meaning as a path to achieving self-esteem and reducing body dysmorphic symptoms (Tabesh & Sedighi Arefi, 2024). This form of therapy is based on the idea that life holds unconditional meaning, which can be discovered by anyone, anywhere, and at any time. Logotherapy helps clients realize that they possess untapped potentials that can be used for healing and personal growth. The goal is not to dismiss the physical or psychological dimensions of the self but to transcend them and gain a new perspective that allows for a different understanding of the self (Gholipour Firoozjaj et al., 2022).

For this reason, Frankl himself described logotherapy as the pinnacle of psychology. The spiritual dimension of a person surpasses the other aspects of human nature and shapes the core of personality. Just as a child becomes aware of their "self," a mature individual must become aware of their spiritual dimension. Through this process, they also realize their capacity for observation, decision-making, and action. In general, all uniquely human phenomena—those not found in the animal kingdom—emerge through this spiritual dimension (Amin Kazemi et al., 2023).

In recent decades, there has been a significant rise in cosmetic surgeries among women. Complex motivations such as dissatisfaction with body image, sociocultural pressures, and the pursuit of improved self-esteem are key driving factors behind this trend. Given the increase in cosmetic surgeries and their associated psychological consequences, exploring alternative therapeutic methods like logotherapy seems necessary. This study aims to contribute to the psychotherapy literature in Iran by providing empirical evidence on the effectiveness of logotherapy in reducing body dysmorphic disorder and enhancing self-esteem. Furthermore, the findings of this research have practical implications for use in counseling centers, cosmetic clinics, and preventive intervention programs. Therefore, this study seeks to answer the question:

Does logotherapy affect body dysmorphic disorder and self-esteem in women who have undergone cosmetic surgery?

## 2. Methods and Materials

### 2.1. Study Design and Participants

Given the subject of the research, the present study employed a quasi-experimental design. A general overview of experimental studies (true experimental or quasi-experimental) suggests that such research investigates the effect of one or more independent variables on one or more dependent variables. These types of studies, in cases where manipulation of variables is possible, can provide significant insights into the causal relationships among variables. The quasi-experimental design used in this study was a two-group design (an experimental group and a control group) with pretest–posttest measures.

The statistical population of the study included all women and girls who visited cosmetic surgery centers in Shiraz. Based on data collected from five cosmetic surgery centers over the first eight months of 2024, a total of 206 individuals who had undergone at least one cosmetic surgery were identified. To determine the sample size, 134 individuals were selected using Cochran's formula from among those who consented to participate in the study. Participants who scored lowest on the Rosenberg Self-Esteem Scale and highest on the Body Dysmorphic Disorder Questionnaire were selected. After contacting those who had completed the questionnaires, 30 individuals attended an orientation session. During this session, the research objectives and procedures were explained. The participants were then randomly assigned to two groups: an experimental group (15 individuals) and a control group (15 individuals).

### 2.2. Measures

#### 2.2.1. Body Dysmorphic Disorder

The Body Dysmorphic Disorder Questionnaire is a modified version of the Yale-Brown Obsessive Compulsive Scale developed by Phillips et al. (1997) to assess body dysmorphic disorder. This questionnaire consists of 12 items and includes four components: cognitive obsession, behavioral compulsion, avoidance, and insight. It uses a Likert-type scale. Items 1–5 assess cognitive obsession, items 6–10 assess behavioral compulsion, item 11 measures avoidance, and item 12 assesses insight. Scoring options range from “completely under control (none)” to “extremely uncontrolled (not at all)” with corresponding values from 0

to 4. To calculate the total score, all item scores are summed, with the total score ranging from 0 to 48. Higher scores indicate greater severity of body dysmorphic disorder. A total score above 20 suggests the presence of body dysmorphic disorder. Validity refers to the extent to which an instrument measures what it claims to measure. In the study by Tohididoost (2019), the content, face, and criterion validity of this questionnaire were deemed appropriate. Reliability, or the consistency of the instrument, refers to its stability in measuring a construct under consistent conditions. The Cronbach's alpha coefficient calculated in Tohididoost's (2019) study was reported to be above 0.70 (Meshkouri et al., 2024).

#### 2.2.2. Self-Esteem

Rosenberg (1965) conducted the first scientific studies in the field of self-esteem, examining the impact of variables such as social status, race, religion, birth order, and parental relationships on the self-esteem of a large group of children and adolescents. As a result, the Rosenberg Self-Esteem Scale became one of the most widely used tools for assessing self-esteem. The scale consists of 10 items, five of which are positively worded (items 1 to 5), and five are negatively worded (items 6 to 10). Scoring for items 1 to 5 is as follows: strongly disagree = 0, disagree = 1, agree = 2, and strongly agree = 3. For items 6 to 10, the scoring is reversed: strongly agree = 0, agree = 1, disagree = 2, and strongly disagree = 3. In his 1965 study, Rosenberg found a significant relationship between individual and collective self-esteem with  $r = .34$ ,  $p < .01$  in a sample of 82 students. In a study on female college students, a Cronbach's alpha of .93 was reported, and a test-retest reliability coefficient of  $r = .85$  was obtained. Rajabi and Bahloul (2007) conducted a cross-sectional study on 129 randomly selected first-year students at Shahid Chamran University, using the Rosenberg Self-Esteem Scale. Internal consistency coefficients for the entire sample, male students, and female students were .84, .87, and .80, respectively. Item-total correlations ranged from .56 to .72 and were significant at  $p < .001$ . Factor analysis using principal axis factoring and Promax rotation revealed two components—personal competence and self-satisfaction—that explained 53.83% of the variance. Given the scale's reliability and validity, it is suitable for both clinical and research use (Abdollahzadeh et al., 2023).

### 2.3. Intervention

In this study, the educational program was based on Hetzel's (2002) logotherapy approach. The protocol, adapted from the study by Tabesh and Sedighi-Arfaei (2024), was delivered in eight one-hour sessions to the experimental group (Tabesh & Sedighi Arefi, 2024).

In the first session, participants were introduced to basic concepts of logotherapy, including the technique of value awareness and the identification of personal values, followed by a homework assignment. The second session focused on exploring the meaning of life and encouraging participants to record meaningful daily experiences. In the third session, existential goals and personal values were identified, and participants practiced writing their "whys of life" (a list of reasons to live). The fourth session addressed the fear of judgment and body-related anxieties through gradual exposure to avoided situations and role-playing challenging social interactions, with a homework task involving a public activity without concealing one's appearance. In the fifth session, cognitive restructuring techniques were introduced to challenge negative automatic thoughts about appearance and replace them with realistic attitudes through positive self-talk, with a task of journaling and rewriting these thoughts. The sixth session aimed to enhance self-esteem by exploring internal and external sources of self-worth,

identifying strengths and achievements, and practicing self-affirmation through the "I love myself because..." exercise, with a related behavioral task. The seventh session examined the meaning of suffering and life challenges, discussed the role of freedom and responsibility in life choices, and analyzed cosmetic surgery from a logotherapy perspective using the "if my life were a book" narrative exercise, followed by writing the next chapter of life with an emphasis on values. The final session involved a comprehensive review of therapeutic progress, summarizing achievements and changes made throughout the intervention.

### 2.4. Data Analysis

Data were collected using questionnaires, and for hypothesis testing and data analysis, analysis of covariance (ANCOVA) was conducted using SPSS-26 software.

## 3. Findings and Results

As shown in Table 1, the data indicate that while both groups started with relatively similar levels of body dysmorphic disorder and self-esteem at pre-test, the experimental group demonstrated a substantial reduction in body dysmorphic symptoms and a notable increase in self-esteem after participating in the logotherapy intervention.

**Table 1**

*Means and Standard Deviations of Pre-Test and Post-Test Scores for Body Dysmorphic Disorder and Self-Esteem by Group*

Variable	Group	Time	N	Mean	Standard Deviation
Body Dysmorphic Disorder	Experimental	Pre-Test	15	28.27	4.56
	Experimental	Post-Test	15	17.13	3.08
	Control	Pre-Test	15	27.80	4.38
	Control	Post-Test	15	28.87	4.12
Self-Esteem	Experimental	Pre-Test	15	14.53	3.14
	Experimental	Post-Test	15	22.60	2.95
	Control	Pre-Test	15	14.33	3.08
	Control	Post-Test	15	14.13	3.47

Prior to conducting ANCOVA, several assumptions were assessed to ensure the validity of the analysis. The assumption of normality was tested using the Shapiro-Wilk test, which indicated that the distribution of scores for both dependent variables did not significantly deviate from normality. Homogeneity of variances was examined using Levene's test, and results confirmed equal variances across

groups ( $p > .05$ ). The assumption of homogeneity of regression slopes was also checked and found to be non-significant, indicating no interaction between the covariate (pretest scores) and group membership. Linearity and independence of observations were confirmed through scatterplot inspection and study design, respectively, supporting the use of ANCOVA for final analysis.

**Table 2**

Results of One-Way ANCOVA on the Mean Scores of Body Dysmorphic Disorder in the Experimental (Logotherapy) and Control Groups with Pretest as Covariate

Variable	Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Body Dysmorphic Disorder	Pretest	596.07	1	596.07	48.46	.000	.642
	Group	840.89	1	840.89	68.37	.000	.707
	Error	332.06	27	12.29			

As shown in [Table 2](#), after controlling for the effect of the covariate (pretest) on the dependent variable, there was a statistically significant difference between the two groups regarding body dysmorphic disorder ( $p < .05$ ). In other words, logotherapy had a significant effect on reducing body dysmorphic symptoms. This indicates that logotherapy

successfully improved body image concerns, leading to a meaningful reduction in body dysmorphic disorder in the experimental group. Additionally, since the eta squared value for the group variable is .707, it can be concluded that 70% of the total variance in body dysmorphic disorder scores is explained by the group effect.

**Table 3**

Results of One-Way ANCOVA on the Mean Scores of Self-Esteem in the Experimental (Logotherapy) and Control Groups with Pretest as Covariate

Variable	Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Self-Esteem	Pretest	484.37	1	484.37	87.33	.000	.764
	Group	372.20	1	372.20	67.10	.000	.713
	Error	149.75	27	5.54			

As shown in [Table 3](#), after controlling for the effect of the covariate (pretest) on the dependent variable, there was a statistically significant difference between the two groups regarding self-esteem ( $p < .05$ ). This indicates that logotherapy significantly enhanced self-esteem among participants in the experimental group. Furthermore, given that the eta squared value for the group variable is .713, it can be concluded that 71% of the total variance in self-esteem scores is explained by the group effect.

of the total variance in self-esteem was accounted for by the group effect.

These results are consistent with the findings of prior studies ([Abdollahzadeh et al., 2023](#); [Amani et al., 2018](#); [Amini Kho, 2020](#); [Morgan et al., 2016](#); [Sarvarian & Taghizadeh, 2015](#)).

To explain these findings, it can be stated that logotherapy, by acknowledging the transience of life and the human condition, calls individuals to strive and act instead of succumbing to pessimism and isolation. It posits that what truly overwhelms people is not their suffering or misfortune, but rather the loss of meaning in life, which is profoundly distressing. If suffering is courageously accepted until the final moment, life retains its meaning—and the meaning of life can even encompass the potential meaning within pain and suffering. Therefore, the search for meaning in life can have a significant impact on reducing psychological difficulties across various populations ([Amin Kazemi et al., 2023](#)).

Logotherapy engages with human beings and their world, offering individuals the opportunity to confront fundamental existential concerns such as life and death, hope and despair,

#### 4. Discussion and Conclusion

The findings indicate that logotherapy was effective in improving body dysmorphic disorder, leading to a statistically significant reduction in body image disturbance among participants in the experimental group. Moreover, since the eta squared value for the group was .70, it can be concluded that 70% of the total variance in body dysmorphic disorder was explained by the group effect. Logotherapy was also found to significantly improve self-esteem, resulting in a meaningful increase in self-esteem scores in the experimental group. Similarly, the eta squared value for the group in relation to self-esteem was .71, indicating that 71%



connection with others or isolation, freedom of choice, awareness, and responsibility toward oneself and others, self-transcendence, and the quest for meaning—particularly during life stages that bring one closer to the reality of death. Under these conditions, and upon grasping the concepts of logotherapy, individuals develop a greater sense of responsibility toward their lives and experience fundamental transformations in their beliefs. The resulting sense of happiness and motivation, alongside responsibility toward self and others, encourages individuals to modify their behaviors and relationships with others and their environment. Through this process, various dimensions of self-esteem and body dysmorphic concerns improve, as individuals gain a deeper understanding of the meaning and purpose in their lives.

One of the primary limitations of this study was the small sample size, which may limit the generalizability of the findings to broader populations. Additionally, the participants were all selected from cosmetic surgery centers in Shiraz, which may introduce sampling bias and reduce external validity. The reliance on self-report questionnaires may also have introduced response biases, such as social desirability or inaccurate self-perception. Furthermore, the short duration of the intervention and the absence of follow-up assessments limit the ability to determine the long-term effectiveness and stability of the therapeutic outcomes.

Future research should aim to replicate this study with a larger and more diverse sample across different cities or cultural contexts to enhance generalizability. Longitudinal designs with follow-up evaluations could provide insights into the durability of logotherapy's effects on body dysmorphic disorder and self-esteem. Additionally, integrating qualitative methods such as in-depth interviews could enrich understanding of participants' subjective experiences and the internal processes contributing to change. Comparative studies that evaluate the efficacy of logotherapy against other third-wave cognitive-behavioral approaches would also be beneficial.

The findings of this study suggest that logotherapy can be effectively applied as a psychological intervention for women with body image concerns undergoing cosmetic surgery. Mental health professionals in clinical and counseling settings could incorporate logotherapy to promote meaning-making, self-acceptance, and self-worth in clients with appearance-related distress. Moreover, cosmetic surgery centers may benefit from offering pre-surgical psychological assessments and optional logotherapy-based group interventions to help clients

develop healthier perspectives on beauty, reduce dependency on physical alterations, and foster greater psychological well-being.

### Authors' Contributions

All authors significantly contributed to this study.

### Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

### Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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### Declaration of Interest

The authors report no conflict of interest.

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### Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

### References

- Abdollahzadeh, H., Mahmoudi, H., & Aghajani, S. (2023). Effectiveness of Meaning Therapy on Spiritual Energy and Self-Esteem in Elderly Residents of Nursing Homes. *Psychology of Aging*, 9(4), 343-359. [https://jap.razi.ac.ir/article\\_2954.html](https://jap.razi.ac.ir/article_2954.html)
- Amani, A., Ahmadi, S., & Hamidi, O. (2018). Effectiveness of Group Meaning Therapy on Self-Esteem and Psychological Well-Being in Female Students with Love Trauma Syndrome. *Positive Psychology Research Journal*, 4(3), 71-86. [https://ppls.ui.ac.ir/article\\_23712.html?lang=en](https://ppls.ui.ac.ir/article_23712.html?lang=en)
- Amin Kazemi, N., Mohammadi, F., & Asmkhani Akbarinejad, H. (2023). Comparison of the Effectiveness of Meaning Therapy and Acceptance and Commitment Therapy on Pain Catastrophizing and Sense of Psychological Coherence in

- Women with Breast Surgery Experience. *Anesthesia and Pain*, 14(4), 1-13. <https://jap.iuims.ac.ir/article-1-5730-fa.html>
- Amini Kho, M. (2020). Effectiveness of Group Meaning Therapy on Adolescent Boys' Self-Esteem. First International Conference on Counseling, Ardabil.
- Asadi, M., Salehi, M., Sadoughi, M., & Afkham Ebrahimi, A. (2019). Self-Esteem and Attitude Toward Physical Appearance Before and After Rhinoplasty Surgery. *Iranian Journal of Psychiatry and Clinical Psychology (Andisheh va Raftar)*, 19(1 (Issue 72)). <https://www.sid.ir/paper/390738/en>
- Di Gesto, C., Nerini, A., Policardo, G. R., & Matera, C. (2022). Predictors of acceptance of cosmetic surgery: Instagram images-based activities, appearance comparison and body dissatisfaction among women. *Aesthetic Plastic Surgery*, 1-11. <https://doi.org/10.1007/s00266-021-02546-3>
- Gholami, S., Vatankhah, H., & Banisi, P. (2019). Effectiveness of Cognitive-Behavioral Training on Self-Esteem of Women Seeking Cosmetic Surgery. 5th National Conference on Recent Innovations in Psychology, Applications, and Empowerment with a Focus on Psychotherapy, Tehran.
- Gholipour Firoozjai, M., Dookanei Fard, F., & Jahangir, P. (2022). Comparison of the Effectiveness of Reality Therapy and Meaning Therapy on the Components of Subjective Well-Being in Women Seeking Divorce Due to Marital Infidelity. *Growth in Psychology*, 11(7), 121-132. <https://www.magiran.com/paper/2511221/comparison-of-the-effectiveness-of-reality-therapy-and-logotherapy-on-the-mental-well-being-components-of-women-seeking-divorce-affected-by-marital-infidelity?lang=en>
- Jafferany, M., Salimi, S., Mkhoyan, R., Kalashnikova, N., Sadoughifar, R., & Jorgaqi, E. (2020). Psychological aspects of aesthetic and cosmetic surgery: Clinical and therapeutic implications. *Dermatologic Therapy*, 33(4), e13727. <https://doi.org/10.1111/dth.13727>
- Maheralnaqsh, F., Naderi, F., Bakhtiarpour, S., & Safarzadeh, S. (2020). Comparison of the Effectiveness of Mental Exercise Training and Acceptance and Commitment Therapy on Psychological Distress and Fear of Self in Individuals with Body Dysmorphic Disorder. *Psychiatric Nursing*, 8(3), 118-131. <https://ijpn.ir/article-1-1550-en.html>
- Malcolm, A., Labuschagne, I., & Rossell, S. L. (2018). The relationship between body dysmorphic disorder and obsessive-compulsive disorder: A systematic review of direct comparative studies. *Australian & New Zealand Journal of Psychiatry*, 52(11), 1030-1049. <https://doi.org/10.1177/0004867418799925>
- Mehraban Asl, S., Rezaei, F., Iranpour, M., & Mohammadi, F. (2024). Comparative Study of Self-Esteem and Emotional Intelligence Between Married Women Who Have Undergone Rhinoplasty and Normal Individuals. 5th International Conference on Health, Educational Sciences, and Psychology.
- Meshkouri, M., Bagherzadeh Golmakani, Z., Mansouri, A., & Khodabakhsh, M. R. (2024). Effectiveness of Schema Therapy on Perfectionism, Body Shame, and Symptoms of Body Dysmorphic Disorder in Women Seeking Cosmetic Surgery. *Journal of Psychological Sciences*, 23(143), 197-216. <https://ensani.ir/fa/article/597315/>
- Morgan, J., Clark, D., Tripodis, Y., & Halloran, C. S. (2016). Impacts of religious semantic priming on an intertemporal discounting task: Response time effects and neural correlates. *Neuropsychologia*, 89, 403-413. <https://doi.org/10.1016/j.neuropsychologia.2016.07.020>
- Parsakia, K., & Darbani, S. A. (2022). Effectiveness of strength-based counseling on self-worth of divorced women. *Applied Family Therapy Journal (AFTJ)*, 3(1), 687-700. <https://journals.kmanpub.com/index.php/aftj/article/view/938>
- Saadatmand, E., Mahmoudalilou, M., Esmaeilpour, K., & Hashemi, T. (2022). Investigating the Relationship Between Early Maladaptive Schemas and Symptoms of Body Dysmorphic Disorder with the Mediation of Self-Compassion. *Psychiatric Nursing*, 10(1), 64-75. <https://ijpn.ir/article-1-1979-en.html>
- Sarvarian, Z., & Taghizadeh, M. E. (2015). Effectiveness of Group Meaning Therapy on Self-Esteem and Happiness in Adolescent Girls in Qom City. *Medical Ethics*, 9(34), 187-207. <https://www.sid.ir/paper/195626/en>
- Sarwer, D. B. (2021). Body image, cosmetic surgery, and minimally invasive treatments. *Body Image*, 31, 302-308. <https://doi.org/10.1016/j.bodyim.2019.01.009>
- Tabesh, R., & Sedighi Arefi, F. (2024). Effectiveness of Meaning Therapy-Based Training on Agency, Perfectionism, and Positive Affect in Emerging Adulthood. *Psychological Achievements*, 31(1), 391-410. [https://psychac.scu.ac.ir/article\\_19332.html](https://psychac.scu.ac.ir/article_19332.html)
- Want, J., & Kleitman, S. (2006). Imposter phenomenon and self-handicapping: Links with parenting styles and self-confidence. *Personality and individual differences*, 40(5), 961-971. <https://doi.org/10.1016/j.paid.2005.10.005>