





**Original Article** 

**Open Access** 

# The study of the draft "do not exist" based on the theory of transactional analysis in women with bipolar I disorder

# \*Asiyeh Soleimanian1; Seyed Esmaeil Mousavi2

<sup>1</sup>M.Sc. in clinical psychology, Faculty of Humanities, Islamic Azad University, Branch of Naeein, Naeein, Iran.

<sup>2</sup>Ph.D. in clinical psychology, Faculty of Humanities, Islamic Azad University, Branch of Khomeinishahr, Isfahan, Iran.

#### Abstract

**Introduction:** The current research aimed to determine the dominant draft scenario of the life of women with bipolar I disorder.

**Materials and Methods:** This qualitative research was a phenomenological study, and we collected the data using Colaizzi's method. We interviewed 21 female patients with bipolar I disorder admitted to the neuropsychiatric department of three hospitals in Isfahan City, Iran, in 2020, and the life scenarios of the subjects were investigated. The triangulation method was used to obtain the validity and reliability of the research findings.

**Results:** The scenarios were categorized into high, medium, and low repetition. The most frequent codes included suicide (26 repetitions) with the subcategories of suicidal thoughts, despair of life, and feeling close to death. Codes with moderate repetition included negative emotions (18 repetitions) with the subcategories of feeling like others are strangers to you, feeling rejected, uninterested in life, liking dark colors, and feeling empty. The less frequent codes included negative actions (11 repetitions) with the subcategories of self-sacrifice, suppression of hearing from others, sexual abuse, self-mutilation, running away from home, substance use, and difficulty in life.

**Conclusion:** The findings showed that the dominant scenario in women with bipolar disorder, based on high frequency, was the "do not exist" scenario.

**Keywords:** Behavior analysis, Bipolar I disorder, Qualitative research, Women

# Please cite this paper as:

Soleimanian A, Mousavi SE. The study of the draft "do not exist" based on the theory of transactional analysis in women with bipolar I disorder. Journal of Fundamentals of Mental Health 2024 Mar-Apr; 26(2):107-113. DOI: 10.22038/JFMH.2024.73107.3061

#### Introduction

Bipolar Disorder (BD) is a debilitating mood disorder characterized by severe mood swings, multiple relapses, and impaired mental functioning. Recurrence of BD is high even when the disease is correctly diagnosed and treated, causing severe disruptions in patients' daily lives. Therefore, relapse prevention is a major goal in BD treatment strategies (1). Furthermore, BD is highly heritable, with genetic influence explaining 60-85% of the risk (2). Accordingly, first-degree relatives have an approximately 9% risk of developing BD (3), about ten times that of the general population (4). The risk of Major Depressive Disorder (MDD) is also increased, which is

### \*Corresponding Author:

Faculty of Humanities, Islamic Azad University, Branch of Naeein, Naeein, Iran.

asiyehsoleimanian1365@yahoo.com Received: Jun. 26, 2023

Accepted: Jun. 26, 2023

© Copyright © 2024 Mashhad University of Medical Sciences. This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 International License https://creativecommons.org/licenses/by-nc/4.0/deed.en

higher than BD due to the higher base rate of MDD (3). However, predicting disease course for each BD patient and disease onset in familial risk individuals is challenging due to the lack of biomarkers with predictive validity. Among the most consistent clinical predictors of BD course is the age of onset, with earlier onset being associated with more relapses, comorbidities, and time spent with symptoms (1). A large-scale study, the Systematic Treatment Enhancement Program for BD (STEP-BD), found that depressive relapse was predicted by more residual symptoms and time spent with depression and anxiety in the previous year (5).

Consistent with this, the polarity of one index episode is often associated with the polarity of the next episode, suggesting that the dominant polarity of patients has prognostic and therapeutic implications (6). In addition, longitudinal studies on children of BD parents showed that anxiety disorders were associated with an increased risk of MDD or BD (7.8). In contrast, attention deficit hyperactivity disorder was not a predictive disorder (9). However, the high degree of non-response to treatment and the high rate of relapse, even when BD is adequately treated, highlight the need to identify additional biomarkers to predict individuals at risk of relapse and respectively. disease onset. Recently. cognitive impairment has attracted increasing research interest as potential therapeutic targets and prognostic markers in patients with BD and those at familial risk. In recovered patients with BD, impairments related to moderate traits have been identified in nonemotional cognition, including attention, verbal memory, and executive functions, and in social and emotional cognition, including facial expression recognition and theory of (10-13). Non-emotional cognitive disorders are associated with poorer treatment response (14,15), longer disease duration (16,17), and poorer job outcomes (18). The negative consequences of social and emotional cognitive problems have also been found for the psychosocial functioning of patients (19), although this case has been studied less widely. Among people at risk of family, disorders in verbal memory, sustained attention, executive function, and some aspects of social-emotional cognition have been observed (12), although the findings are heterogeneous (20). Importantly, high-risk

individuals with cognitive impairment may be at greater risk for disease onset (21), although findings are again inconsistent (22). Several questions remain regarding the prognostic value of cognitive impairment in patients with BD and those at familial risk: Are cognitive impairment consistently associated with mood episode recurrence and/or disease onset? If so, which cognitive domains show the greatest predictive validity across studies? To answer these questions, there is a need to synthesize the findings of existing studies on the relationship between cognition relapse and disease onset. Meta-analysis is a very important tool in combining studies and obtaining a quantitative measure of evidence from published studies. However, we decided beforehand to conduct a qualitative study rather than a quantitative study. The current research aims to answer the question of how life scenarios based on bipolar I disorder play a role qualitatively.

#### **Materials and Methods**

This qualitative research was phenomenological study. The data was collected based on the Colaizzi method and dealt with the contents of the interviews. We interviewed 21 female patients with bipolar I disorder admitted to the neuropsychiatric department of three hospitals (Khorshid (9 patients), Farabi (6 patients), and Modarres (6 patients)) in Isfahan City, Iran, in 2020. The research sampling method was purposeful. The inclusion criteria included female patients with bipolar I disorder hospitalized in the neuropsychiatric departments of Farabi, Modarres, and Khorshid hospitals, having the approval of ward nurses, having at least elementary education and at most academic education, registration and approval of the medical file by the ward's psychiatrist and having and consent psychologist, cooperation and interview. The exclusion criteria included being in a condition after receiving a shock or taking hallucinogenic drugs, being in a state of withdrawal from addiction or being involved in substances, and the unwillingness to continue the interview. Although the findings were saturated by interviewing 7 subjects, we interviewed all 21 patients for 45 to 75 minutes in 10 days in a semi-structured way with open questions. Clinical psychology experts confirmed the validity and reliability of the interview questions. First, the interview was recorded by phone with the permission of the interviewee. The seven steps of the Colaizzi method were done. They including repeatedly listening to the recorded statements of the participants and writing them word for word on paper and reading several times to understand the feelings and experiences of the participants; underline the information with meaning and expressions related to the discussed phenomenon and specify the important sentences; extracting formulated concepts after defining the important phrases of each interview and the meaning of the phrase that expresses the meaning and the basic part of the person's thinking (coding); classification of developed concepts; linking the results for a comprehensive description of the phenomenon under study and creating more general categories; providing a comprehensive description of the phenomenon under study with a clear and unambiguous statement and finally validation by referring to each sample and asking about the findings. We conducted this study using open-ended questions prepared by the researcher. These questions were approved by a committee of supervisors and experts familiar with transactional analysis.

#### Results

Table 1 presents the demographic variables of the female patients with bipolar I disorder. Table 2 presents the samples of open-ended questions.

**Table 1.** Demographic status of the participants

Variable	Status	Percent	
Age (Year)	< 30 years	52%	
	$\geq$ 30 years	48%	
Education level	Diploma	33%	
	Under Diploma	41%	
	Higher education	26%	
	Single	33%	
Marital status	Divorced	28%	
	Married	39%	
Having children	Have children	33%	
	Without children	67%	

Table 2. Samples of questions

#### Sample

Express a childhood memory that you still remember

Expressing the things you have finished, is the number of finished activities more or less finished?

The amount of responsibility in life

Expressing relationships with the opposite sex and how you feel about these relationships

Expressing a memory or a word that you have received from your father or mother and you have not forgotten yet.

What is the amount of planning and personal time in your life? Does it matter at all?

The concept of life and that the world is worth living and enduring hardships, in your opinion

What is the degree of dependence in relationships with family or in the workplace, or with the opposite sex?

What is the level of support and ordering and forbidding others?

The categories and subcategories of the "Do not exist" scenario in women with bipolar I disorder, based on interviews with them, were as follows:

1. The most frequent general category: Suicide

The general category of suicide was repeated 26 times by the interviewees, which was the most repeated and included the following subcategories:

A. Suicidal thoughts

A patient under 30 years old, with a diploma, married and without children: "My suicides had to be done because my mother said: I wish you would die, I would be relieved."

# B. Despair in life

A patient over 30 years old, a graduate, divorced and childless: "I know that I received from my parents, especially my father, the failure to succeed in education and marriage and being disappointed in the natural course of my life due to incompetence."

#### C. Feeling close to death

A patient over 30 years, single, and with a diploma: "After the death of my boyfriend, I feel close to death and nothingness."

which was moderate and included the following subcategories:

A. Feeling that others are strangers to you

A patient under 30 years old, a graduate and divorced without children: "After the divorce and the change in how others, especially my family, look at me, I feel that they have become strangers to me and the sense of familiarity with me, they don't have."

# B. Feeling rejected

A patient over 30 years old, with a diploma and single: "My sister's birthday was equal to my being ignored and rejected, and I would do anything to say see me."

#### C. Lack of interest in life

A patient over 30 years old, with a diploma, married, and with children: "When I think about my life and my children's situation, I feel that I have no interest in life, and I wish it would be as soon as possible, to end."

#### D. Interest in dark colors

A patient under 30 years old, single, and with a diploma: "I think about not being so much that I see darkness everywhere, and I like dark colors better than happy colors."

# E. Feeling empty

A patient over 30 years old, diploma, divorced with children: "I can bring my children to me, but my husband does not allow me and my behavior is out of control and makes me feel empty."

3. Category with low repetition: Negative actions

The general category of negative actions was repeated 11 times by the interviewees, which was rarely repeated and included the following subcategories:

# A. Self-sacrifice

A patient under 30 years old, with a diploma, married with children: "I think that in order to make life better for my child, I need to become a victim, so that maybe things will be better for my child."

### B. Suppression of hearing from others

A patient over 30 years old, married, divorced, and with children: "My mother-in-law orders me and insists on treating me like a fat person, and I always hear her scolding."

Fundamentals of Mental Health, 2024 Mar-Apr

#### C. Sexual abuse

2. General category with moderate repetition: Negative emotions

The general category of negative emotions was repeated 18 times by the interviewees,

A patient over 30 years old, a graduate and single: "At work, I was once offered a sexual relationship by a male colleague, and although I rejected it and quit my job, I still think I am under threat from him."

#### D. Self-mutilation

A patient over 30 years old, unmarried and with a high school diploma, who, in her words, felt rejected and left by her boyfriend forced her to commit self-mutilation.

# E. Running away from home

A patient over 30 years old, graduate, and single: "I was humiliated so much by my mother, and my husband always said I wish I did not have you. I ran away from home once and went to a friend's house. With the intervention of my friend's parents, I had to return home."

#### F. Substance use

A patient over 30 years old, with a diploma, divorced, and childless: "By turning to addiction and using alcohol and marijuana, I intended to get rid of the existing situation."

# G. Difficulty in life

A patient over 30 years old, with a diploma, married, and with children: "My husband is so irresponsible that I am responsible for all the housework, shopping, and raising children, and I endure many hardships in life. Sometimes I wish I was not there."

# Discussion

We interviewed 21 female patients with bipolar I disorder admitted to the neuropsychiatric department of three hospitals. The scenarios were categorized into high, medium, and low repetition. The most frequent codes included suicide (26 repetitions) with the subcategories of suicidal thoughts, despair of life, and feeling close to death. Codes with moderate repetition included negative emotions (18 repetitions) with the subcategories of feeling like others are strangers to you, feeling rejected, uninterested in life, liking dark colors, and feeling empty. The less frequent codes included negative actions (11 repetitions) with the subcategories of selfsacrifice, suppression of hearing from others, sexual abuse, self-mutilation, running away from home, drug use, and difficulty in life. The consequence of this scenario is feeling emptiness, worthlessness, and being unwanted. If the parents neglect the child for any reason or do not respond to their needs properly, it creates a "do not exist" scenario in the person that they wish they were not, which leads the person to self-harm (23). Emotion-oriented solutions lead to suicide (24), which shows that the research results are in line with previous research on bipolar patients (23,24).

In analyzing the draft of life, the deterrent of "do not exist" that appears repeatedly is the weighty concept of death. Mental pain is the fundamental and main part of suicide, and when someone commits suicide, he/she wants to get relief from the onset of mental pain. These pains are caused by not fulfilling vital and psychological needs (25). This finding is consistent with the results of Assarzadegan and Raeisi study on 30 patients with type 2 diabetes who referred to a health center in Isfahan City, Iran in 2016 (26), Moghtaderi et al.'s study on 30 patients with Parkinson's disease in Isfahan, Iran in 2017 (27), Nikbakhsh et al.'s study on 40 patients with breast cancer using psychological well-being questionnaire (28), and Yaghoubi Namin et al.'s study Alzheimer's patients (29). In this line, Bonnín et al. (30), Yang et al. (31), and Costa and Willis (32) concluded that thinking about suicide among patients is to get rid of the pain and suffering of the disease (26-32).

One of the reasons for the high rate of suicide in women is the prevalence of mood and emotional disorders because people suffering from these disorders experience severe mood changes (33), this research is in line with the present paper because of the existence of the "don't exist" scenario.

Sometimes, a person with self-destruction at the physical level, including self-harm or using substances in the continuation of the suicide process, destroys him/herself and proves the stages of non-existence (34).

The results showed that the "don't exist" affects the occurrence of symptoms of bipolar disorder. This finding is consistent with the results of studies conducted by Mohajjel Rezaei and Hashemi on 50 female patients with bipolar I disorder (35), Afshari et al. on 60 patients with bipolar disorder (36), and Mohammadi et al. on 30 patients with schizophrenia and bipolar disorder (37), Mousavizadegan and Maroufi on 59 patients with bipolar I disorder and normal people (38), and Akbari and Saeidi on 30 people with chronic schizophrenia (39).

One of the limitations of the current research was difficult and time-consuming access to patients due to the presence of the interviewed participants in neuropsychiatric hospitals, the presence of the coronavirus and maintaining quarantine.

Also, some patients were in a condition after receiving a shock or taking medication, so they were unable to answer the questions. Another limitation was the lack of accurate and correct data due to the destroyed memory as a result of changing the treatment process and also lack of access to patients' files. Accordingly, it is suggested to conduct this study in men suffering from this disease as well as in patients with other mental disorders.

#### Conclusion

The research findings show that the "don't exist" scenario with the subcategories of despair for life, feeling close to death, feeling that others are strangers to you, feeling rejected, being shy, suppressing hearing from others, being sexually abused, self-mutilation, loneliness, running away from home, substance use, hardship, lack of interest in life, lack of attention from loved ones and being ignored, were confirmed.

# Acknowledgments

The researchers thank the supervisors, guards, and nurses of the neuropsychiatric departments of Khorshid, Modarres, and Farabi hospitals of Isfahan, who cooperated to carry out this research.

# **Conflict of Interests**

The authors declare no conflict of interest.

#### **Funding**

The authors declare no funding.

# **Ethical Considerations**

This research has been approved by the ethics committee of Isfahan University of Medical Sciences. The participants were volunteer to continue the interview and they were allowed to withdraw from the study at any stage. Also, all participants were aware of the research process and signed consent. Their information was also kept confidential.

# **Code of Ethics**

IR.MUI.RESEARCH.REC.1399.281

#### **Authors' Contributions**

Asiyeh Soleimanian: Data collection, Data analysis, and preparing manuscript. Seyed Esmaeil Mousavi: Supervision of study process, preparing and editing manuscript.

# References

- 1. Vieta E, Berk M, Schulze TG, Carvalho AF, Suppes T, Calabrese JR, et al. Bipolar disorders. Nat Rev Dis Primers 2018; 4(1): 1-16.
- 2. Amamou B, Chebbi W, Allegue M, Mhalla A, Zaafrane F, Gaha L. Unipolar mania: A particular aspect of bipolar disorder in Tunisia. Clin Psychopharmacol Neurosci 2018; 16(2): 209-13.
- 3. Angst J, Ajdacic-Gross V, Rossler W. Bipolar disorders in ICD-11: Current status and strengths. Int J Bipolar Disord 2020; 8(4): 1-5.
- 4. Belizario GO, Silva M, Lafer B. Impact of predominant polarity on long-term outcome in bipolar disorder: A 7-year longitudinal cohort study. J Affect Disord 2018; 241(5): 37-40.
- 5. Chen PH, Tsai SY, Pan CH, Chen YL, Chang HM, Su SS, et al. High risk and trajectories of physical illnesses before the diagnosis of bipolar disorder. J Affect Disord 2021; 281(10): 99-108.
- 6. Chen PH, Tsai SY, Pan CH, Chen YL, Su SS, Chen CC, et al. Prevalence and 5-year trend of incidence for medical illnesses after the diagnosis of bipolar disorder: A nationwide cohort study. Aust N Z J Psychiatry 2022; 56(9): 1164-76.
- 7. Severus E, Bauer M. Diagnosing bipolar disorders: ICD-11 and beyond. Int J Bipolar Disord 2020; 8(5): 1-2.
- 8. Biere S, Kranz TM, Matura S, Petrova K, Streit F, Chiocchetti AG, et al. Risk stratification for bipolar disorder using polygenic risk scores among young high-risk adults. Front Psychiatry 2020; 11(2): 44-56.
- 9. Lee J, Correll CU, Lee TY, Oh S, Kim J, Rhee SJ, et al. Validation of the bipolar prodrome symptom interview and scale-abbreviated prospective (BPSS-AP) in a clinical sample and healthy controls. J Affect Disord 2023; 324(13): 463-8.
- 10. Bora E, Pantelis C. Meta-analysis of social cognition in attention-deficit/hyperactivity disorder (ADHD): comparison with healthy controls and autistic spectrum disorder. Psychol Med 2016; 46(4): 699-716.
- 11. Bourne C, Aydemir Ö, Balanzá-Martínez V, Bora E, Brissos S, Cavanagh J. Neuropsychological testing of cognitive impairment in euthymic bipolar disorder: An individual patient data meta-analysis. Acta Psychiatr Scand 2021; 149(15): 20-62.
- 12. Miskowiak KW, Kjaerstad HL, Meluken I, Petersen JZ, Maciel BR, Köhler CA, et al. The search for neuroimaging and cognitive endophenotypes: A critical systematic review of studies involving unaffected first-degree relatives of individuals with bipolar disorder. Neurosci Biobehav Rev 2017; 73: 1-22.
- 13. Miskowiak KW, Burdick K, Martinez-Aran A, Bonnin C, Bowie C, Carvalho A, et al. Assessing and addressing cognitive impairment in bipolar disorder: The International Society for Bipolar Disorders Targeting Cognition Task Force recommendations for clinicians. Bipolar Disord 2018; 20(3): 184-94.
- 14. Harvey PD, Sand M. Pharmacological augmentation of psychosocial and remediation training efforts in schizophrenia. Front Psychiatry 2017; 8: 177-89.
- 15. Martini J, Leopold K, Pfeiffer S, Berndt C, Boehme A, Roessner V, et al. Early detection of bipolar disorders and treatment recommendations for help-seeking adolescents and young adults: Findings of the early detection and intervention Center Dresden. Int J Bipolar Disord 2021; 18(3): 139-49.
- 16. Etkin A, Gyurak A, O'Hara R. A neurobiological approach to the cognitive deficits of psychiatric disorders. Dialogues Clin Neurosci 2022; 13(2): 45-58.
- 17. Vieta E, Angst J. Bipolar disorder cohort studies: crucial, but underfunded. Eur Neuropsychopharmacol 2021; 47(6): 31-33.
- 18. McIntyre RS, Calabrese JR. Bipolar depression: The clinical characteristics and unmet needs of a complex disorder. Curr Med Res Opin 2019; 35(11): 1993-2005.
- 19. Rhee TG, Olfson M, Nierenberg AA, Wilkinson ST. 20-year trends in the pharmacologic treatment of bipolar disorder by psychiatrists in outpatient care settings. Am J Psychiatry 2020; 177(8): 706-15.
- 20. Kjærstad HL, Mistarz N, Coello K, Stanislaus S, Melbye SA, Harmer CJ, et al. Aberrant cognition in newly diagnosed patients with bipolar disorder and their unaffected relatives. Psychol Med 2020; 50(11): 1808-19.
- 21. Thase ME, Stahl SM, McIntyre RS, Matthews-Hayes T, Rolin D, Patel M, et al. Screening for bipolar I disorder and the rapid mood screener: Results of a Nationwide Health Care Provider Survey. Prim Care Companion CNS Disord 2023; 25(2): 33-48.
- 22. Seidman LJ, Cherkerzian S, Goldstein JM, Agnew-Blais J, Tsuang MT, Buka SL. Neuropsychological performance and family history in children at age 7 who develop adult schizophrenia or bipolar psychosis in the New England Family Studies. Psychol Med 2013; 43(1): 119-31.
- 23. Arabvarnousfaderani M, Fatehizade M, Bahrami F, Jazayeri RS, Ebrahimi A. [The effects of men's bipolar mood disorder type II on marital relationships from the spouse's perspective: A qualitative study]. Journal of family research 2018; 13(3): 375-88. (Persian)
- 24. Busk J. Daily estimates of clinical severity of symptoms in bipolar disorder from smartphone-based self-assessments. Transl Psychiatry 2020; 10(1): 194-208.
- 25. Carvalho AF, Firth J, Vieta E. Bipolar disorder. N Engl J Med 2020; 383(1): 58-66.
- 26. Assarzadegan M, Raeisi Z. [The effectiveness of training based on positive-psychology on quality of life and happiness of patients with type 2 diabetes]. Health psychology 2019; 8: 97-116. (Persian)

- 27. Moghtaderi M, Saffarinia M, Zare H, Alipour A, Chitsaz A. [Effectiveness of the mindfulness therapy on the life quality and psychological wellbeing of parkinson patients]. Psychological science 2020; 18(8): 3-14. (Persian) 28. Nikbakhsh N, Mohammadian Amiri F, Niazifar M, Bijani A. [Depression, anxiety, and quality of life in breast cancer patients with depression receiving citalopram and supportive group psychotherapy: A six-month longitudinal study]. Journal of Mazandaran University of Medical Sciences 2019; 29(5): 12-31. (Persian)
- 29. Yaghoubi Namin S, Ahadi H, Jomehri F, Kalhornia Golkar M. [The effectiveness of cognitive stimulation therapy on cognitive functions and quality of life in people with Alzheimer's disease]. Quarterly journal of Lorestan University of Medical Sciences 2019; 21(2): 14-28. (Persian)
- 30. Bonnín CM, Reinares M, Martínez-Arán A, Jiménez E, Sánchez-Moreno J, Solé B, et al. Improving functioning, quality of life, and well-being in patients with bipolar disorder. Int J Neuropsychopharmacol 2019; 22(8): 467-77.
- 31. Yang Y, Fletcher K, Whitehead R, Murray G. Toward new therapeutic mechanisms in bipolar disorder: Analog investigation of self-compassion and nonattachment to self. Front Psychol 2018; 9: 1848.
- 32. Costa CJ, Willis DE. To the end of the line: Axonal mRNA transport and local translation in health and neurodegenerative disease. Dev Neurobiol 2018; 78(3): 209-20.
- 33. Havassi N, Khorshidi A, Khorshidi A, Jafari A, Havassi F. [Evaluating the predictors of suicide deaths]. Journal of Mazandaran University of Medical Sciences 2017; 27: 217-27. (Persian)
- 34. Mousavi E, Rahmati F. [Rewrite your life story (life scenarios in interaction analysis)]. Tehran: Neveshteh; 2020. (Persian)
- 35. Mohajjel Rezaei S, Hashemi T. [The comparison of cognitive functions in bipolar disorder type I patients and normal subjects]. Journal of thought and behavior in clinical psychology 2018; 12(3): 25-36. (Persian)
- 36. Afshari B, Omidi A, Sehat M. [The effect of dialectical behavior therapy on executive function in patients with a bipolar disorder]. Feyz 2018; 22(4): 46-62. (Persian)
- 37. Mohammadi A, Bahrami E, Hatef B, Kargar M. [Effectiveness of neurofeedback treatment on empathy and delusional beliefs in patients with schizophrenia and bipolar disorder]. Journal of military medicine 2018; 20(2): 16-24. (Persian)
- 38. Mousavizadegan S, Maroufi M. [Comparison of selective attention in different phases of bipolar I disorder and general population]. Advances in cognitive science 2018; 20(1): 32-45. (Persian)
- 39. Akbari M, Saeidi S. [The effectiveness of psychosocial rehabilitation in reducing negative symptoms and improving social skills of chronic schizophrenia patients]. Shenakht-journal of psychology and psychiatry 2017; 4(3): 29-38. (Persian)