

Research Paper

Assessing the Effects of Acceptance-commitment and Psychodrama Therapies in Nurses With Social Anxiety Disorder



Malihe Kabusi¹, Seyed Ali Razavi Nasab², Elham Saber³, Reyhaneh Ivanbagha⁴, Behzad Khedri⁵, Zahra Khezerlou⁶, Tayebeh Ilaghi-nezhad Bardsiri², Zahra Shafiei⁷, Maryam Ebrahimipour Roodposhti⁸, Anahita Zandi⁹, Hamid Hoseyni^{10, 11}, Abbas Ghodrati Torbati⁹, Maliheh Eshaghzadeh^{9, 12*}, Samaneh Eshaghzadeh^{12*}

1. Department of Geriatric Nursing, School of Nursing and Midwifery, Golestan University of Medical Sciences, Gorgan, Iran.
2. Department of Clinical Sciences, Faculty of Sirjan Medical Sciences, Sirjan, Iran.
3. Department of Occupational Health Engineering, School of Health, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran.
4. Department of Midwifery, School of Nursing, Khalkhal University of Medical Sciences, Khalkhal, Iran.
5. Department of Social Work, Faculty of Social Studies, Hanze University of Applied Science, Groningen, Netherlands.
6. Department of Nursing, Faculty of Nursing and Midwifery, Urmia University of Medical Sciences, Urmia, Iran.
7. Nursing and Midwifery Care Research Center, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.
8. Department of Pediatric and Neonatal Intensive Care Nursing, School of Nursing & Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
9. Department of Nursing, School of Nursing and Midwifery, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran.
10. Health Sciences Research Center, Student Research Committee, Tabriz University of Medical Sciences, Tabriz, Iran.
11. Department of Cardiology, 9 Day Educational Hospital, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran.
12. Health Sciences Research Center, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran.



Citation Kabusi M, Razavi Nasab SA, Saber E, Ivanbagha R, Khedri B, Khazerlou Z, et al. Assessing the Effects of Acceptance-commitment and Psychodrama Therapies in Nurses With Social Anxiety Disorder. *Iranian Rehabilitation Journal*. 2023; 21(2):223-230. <http://dx.doi.org/10.32598/irj.21.2.763.3>

doi <http://dx.doi.org/10.32598/irj.21.2.763.3>



Article info:

Received: 29 Dec 2021

Accepted: 07 Dec 2022

Available Online: 01 Jun 2023

Keywords:

Nurse, Social anxiety disorder, Acceptance and commitment therapy, Psychodrama

ABSTRACT

Objectives: Social anxiety disorder (SAD) is one the most prevalent psychiatric disorders and generates severe negative effects on patients' mental, individual, and social health. Decreased responsibility, absenteeism, and poor life quality can be the consequences of this disorder. Considering the effective empirical background of both therapeutic approaches in reducing social anxiety symptoms and the lack of research on combining both interventions to reduce anxiety, this study was performed to determine the effects of acceptance-commitment therapy (ACT) and psychodrama therapy on nurses' social anxiety.

Methods: This randomized trial research was conducted at Torbat Heydarieh University of Medical Sciences in 2017 with a pre-test-post-test design. A total of 48 nurses with SAD who were referred to the university counseling center were chosen at random and entered into 4 equal groups (12 subjects) (an intervention group and 3 control groups). The intervention group received a combination of psychodrama and ACT therapies in twelve 90-minute treatment sessions (2 meetings every week). The control groups were provided with psychodrama therapy, ACT, and no treatment. The study data were collected by Connor's social anxiety questionnaire (2000). The collected data were analyzed by analyses of variance and covariance.

Results: A decrease was observed in the social anxiety scores in the four groups of the study after psychological therapies. The Mean±SD of the social anxiety score in the treatment group based on

* Corresponding Authors:

Maliheh Eshaghzadeh

Address: Department of Nursing, School of Nursing and Midwifery, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran.

Tel: +98 (51) 52226011

E-mail: m.eshaghzadeh93@gmail.com

Samaneh Eshaghzadeh

Address: Health Sciences Research Center, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran.

E-mail: s.eshaghzadeh@gmail.com

psychodrama was 64.75 ± 13.37 before the study period and 49.08 ± 6.71 after that. While in the ACT group, it was 59.65 ± 12.21 and 42.66 ± 8.05 before and after the study, respectively, and in the group provided with a combination of both therapies, it was 62.75 ± 13.49 before the study period and 35.75 ± 7.19 after that. A lack of significant difference ($P=0.86$) could be detected in the mean anxiety score in the group of control. However, the social anxiety score of the group with a combination of both therapies significantly decreased ($P<0.001$) compared to other studied control groups.

Discussion: The data analysis showed that a combination of ACT and psychodrama therapies significantly reduced the social anxiety of nurses.

Highlights

- Considering the social anxiety disorder (SAD) prevalence in society, especially among nurses, and the complications caused by it for the progress of people and society, taking this disorder into account and finding a more successful approach to its treatment is necessary.
- Even though the effects of separately using psychodrama therapy and ACT have been proven on the symptoms of SAD, combining both therapies increases their impacts.
- Psychotherapists are suggested to apply this approach to treat the disorder of social anxiety of clients, their quality of life, and social interactions.

Plain Language Summary

Panic, stress, and avoidance of social relationships are social panic or anxiety, which should be investigated attentively. When it prevents daily tasks, this disorder becomes a social disorder. Acceptance and commitment therapy (ACT) is a good treatment method for stress. This approach has been found as a part of the third generation of psychotherapeutic interventions, and it tries to treat the mental relationships of people with their ideas and sentiments rather than transforming them. So, this research was performed to assess the impact of ACT and psychodrama therapy on nurses' social anxiety. Our randomized trial research was performed at Torbat Heydarieh University of Medical Sciences in 2017 with a pre-test-post-test design. The number of participants was 48. They were randomly selected from nurses with a social anxiety disorder (SAD) referred to the university counseling center and entered into 4 groups with 12 members in each group (an intervention group and 3 control groups). The intervention group received a combination of psychotherapeutic therapies and participated in twelve 90-minute treatment sessions (2 meetings every week). The control groups were provided therapy based on psychodrama, ACT, and no treatment. Data collection was done by Connor's social anxiety questionnaire (2000). Data analysis was done by analyses of variance and covariance. Considering the social anxiety prevalence in society, especially among nurses, and the complications caused by it for the progress of people and society, taking this disorder into account and finding a more successful approach to treat it seems necessary. Although separately using psychodrama therapy and ACT has been publicized to have an important impact on SAD symptoms, the use of the two approaches together intensifies their powerful impacts even more. So, individuals participating in psychological health, like psychotherapists, are recommended to apply this protocol to treat the disorder of social anxiety of clients, their life quality, and social interactions.

Introduction

Nursing is one of the professions in which making mistakes can cause irreparable damage to patients and their families. Because nurses suffer much stress depending on their work type and experiences [1], it can cause burnout and other mental disorders in them [2, 3] and even affects

their commitment to their job and duties [4]. Therefore, paying attention to the tiniest professional issues and not ignoring them may affect this group's behavioral and personality styles and turn them into perfectionists [2]. Since perfectionism and mental rumination are the decisive factors in elucidating and predicting social anxiety [5], social anxiety disorder (SAD) has been recognized as the most prevalent psychiatric disorder. SAD is placed in the third

rank after depression and alcohol abuse and has severe negative effects on patients' mental, individual, and social health [6]. SAD is a persistent and significant fear of negative estimation in social and functional situations [7]. Often, social anxiety suggestively weakens social functioning and can lead to impaired social skills [6]. Avoiding social relationships [8] can result from this disorder [6]. Numerous approaches to psychotherapy, such as psychoanalysis, behavior therapy, cognitive therapy, etc. are effective in treating social anxiety; however, various studies showed higher effectiveness of cognitive-behavioral treatments compared to other approaches, and much scientific evidence supports it [9]. However, therapists have seen many clients who, despite being highly motivated and working hard to recover, could not overcome the disturbing thoughts and feelings and achieve the necessary success. Sometimes, despite the treatment's success, after a few months, they lost their motivation and felt that, in the long run, there were no significant changes in their feelings about their lives [10]. Therefore, there is a need to use more effective therapies to change the function of cognitions and emotions. One of the third wave therapies developed in the context of cognitive-behavioral therapy is ACT. This treatment helps people to accept what is beyond their personal control and to commit to an action which enriches life. In fact, ACT seeks to change the potential functions of unwanted thoughts and feelings by correcting the psychological context in which they are experienced [11].

Along with ACT, another treatment method (psychodrama) was applied to treat the disorder of social anxiety, which was directly associated with the disorder of people because of its display nature [12]. It is a therapy method based on experiences that makes individuals apply a controlled curative role for solving personal and social complications and finding possible explanations by actions rather than words [13]. Actually, through the reconstruction of reality and playing a role, psychodrama helps individuals to assess their attitudes and thoroughly comprehend their positions in life [11].

In acceptance-commitment therapy, individuals with SAD should be encouraged to actively confront their frightening mental experiences along with changing behaviors and creating a goal and motivation to commit to a more social lifestyle [8]. Using psychodrama techniques helps a person to achieve what should be accepted and to avoid denial and avoidance. Considering the effective empirical background of both therapeutic approaches in reducing social anxiety symptoms and the lack of research on combining both interventions to reduce nurses' anxiety, by conducting the present study,

we assessed the effect of group therapy on nurses' SAD using both ACT with psychodrama.

Materials and Methods

In this randomized trial study with a pre-test-post-test design, four groups (1 intervention group and 3 control groups) participated in 2017. The statistical population comprised nurses with a Master's degree from [Torbat Heydarieh University of Medical Sciences](#). The SAD of the participants was assessed by a self-reporting questionnaire of social anxiety developed by Connor et al. A psychologist diagnosed 48 participants with SAD according to DSM-V criteria. After that, they were randomly divided into 4 groups (12 nurses in each group): One intervention group or combined psychotherapy group (who received therapy based on psychodrama along with treatment based on acceptance-commitment) and three control groups (who received psychodrama therapy, ACT, and no therapy). The reason behind selecting the groups with the same number of members was that in short-term interpersonal group treatments, according to the possible resources and training requirements, the required number of members in each group should be 6 to 12 people, of whom one or two are leaders.

The samples were divided randomly into one intervention group and 3 control ones through permutation blocks (4 blocks). The intervention group was considered with 4 blocks of code 1, and the control group with 4 blocks of code 2. In each of the blocks, two codes 1 and two codes 2 were considered without any repetition. The blocks were selected at random, and after being applied, each one was canceled. Then, the following block was re-chosen at random. Each block regulated individuals' entry arrangement into intervention or control groups. For example, block 1221 referred to the arrangement by which the first and fourth people were gone into the intervention group, and the second and third people were enrolled in the group control. The inclusion criteria were SAD diagnosis based on DSM-V diagnostic criteria, having no mental disorder, an optimum level of psychological and physical status based on clinical interviews, and satisfaction with attending meetings. However, using anti-anxiety medicines and not attending more than one therapy meeting were considered the exclusion criteria.

ACT group therapy for the first control group was undertaken by one therapist specialized in ACT therapy, and group therapy based on psychodrama for the second control group was undertaken by one psychodrama therapist. In the intervention group, the sessions were held with a combination of treatments and were chaired

and conducted by both therapists. Questionnaire 1 was accomplished by 78 nurses referring to the counseling center through the interviews with the center's psychologist, 48 of whom had social anxiety and were divided randomly into 4 groups (n=12 in each group).

The group of intervention was provided by a psychotherapy combination (ACT as well as psychodrama therapy) (Table 1) in 12 sessions; each meeting lasted 90 min (two sessions every week) according to the protocol for the SAD [14-16], determined and developed by the researcher. The first and second control groups were provided with ACT (Table 2) and therapy based on psychodrama, respectively, in 10 sessions (Table 3), while the third one was provided with no treatment. A pre- (before the treatment started) and a post-test (after the treatment completion) were considered to be done so that questionnaires were filled in all groups, and an independent evaluator led the pre-test and post-test assessment. The third group of control, which was not provided with any therapy during the research, received ACT psychotherapy after the end of the study. It is notable that throughout the investigation, one participant from the group of intervention and one from the ACT group did not continue their therapy sessions due to interference with the sessions during their work hours.

The therapy sessions in the intervention group are provided in Table 1.

Its purposes were clarified to the participants before they started the research. The study information confidentiality was ensured for all nurses, along with observing all ethical issues. Nurses were free to leave the study whenever they wanted. At the end of the study, the education provided to the groups of intervention was given to the group of control too. The data collection in the research was performed through the social anxiety questionnaire designed by Connor et al. in 2000. This 17-item self-reporting questionnaire was developed to evaluate a broad collection of SAD symptoms in three categories: Experiencing panic in social positions (6 items), avoiding social relationships (7 items), and experiencing mental stress in social positions (4 items). Then, the participants were asked to estimate symptoms in the previous week as follows: Any symptom (score=0), low (score=1), some degree (score=3), high (score=4), and very high (score=5) [2]. The total questionnaire score ranges between 0 and 68. The great validity and reliability were defined for this tool so that its reliability was obtained from 0.78 to 0.89 by the retest method in groups diagnosed with SAD. Also, using the Cronbach α method, the coefficient of internal consistency of this questionnaire was at 0.94 in a normal group and at 0.89, 0.91, and 0.80 in the categories of panic, avoidance, and

Table 1. The group of combined therapy (the protocol of acceptance-commitment therapy and psychodrama therapy)

Session	Content
1	Familiarizing members of the groups with each other and explaining the overall treatment design, and educational meetings
2	Awareness of psychological flexibility, mental acceptance, mental knowledge, cognition separation, and associated practices
3	Awareness of self-visualization, private stories, value and pledged action explanation, and associated practices
4	Awareness of the time of the present and focus on the increase in mental awareness
5	Education and evaluation of how to effectively react to and cope with psychological backgrounds
6	Creation of purposes and public lifestyles and commitment to them
7	Coping with embarrassment by techniques of walking
8	Familiarity with and performing techniques of the mirror and introducing myself
9	Use of the method of role changing as well as familiarity with and doing the technique of role-playing
10	Familiarity with and performing the technique of an empty chair
11	Creation of a real situation for testing stress
12	Reviewing the therapy and termination of the groups

Table 2. The protocol of ACT

Session	Content
1	Familiarizing the members of the group with each other and explaining the general treatment strategy and training meetings
2	Awareness of mental flexibility, psychological acceptance, psychological awareness, cognitive separation, and related exercises
3	Awareness of self-visualization, personal stories, illumination of values and committed actions and associated exercises
4	Be aware of the present and "now", and focus on the increase in psychological mindfulness
5	Education and evaluation of the quality of effective responding and coping with mental experiences
6	Creation of objectives and social lifestyles and commitment to them
7	Members practice giving feedback on what they have learned in previous sessions
8	Members practice giving feedback on what they have learned in previous sessions
9	Members practice offering feedback on what they have learned in previous sessions
10	Reviewing the treatment and termination of the group

Iranian Rehabilitation Journal

mental embarrassment, respectively [16]. SPSS software, version 20 was applied to analyze the information. The Mean±SD were used to describe quantitative variables, and the frequency and percentage to describe qualitative ones. Data were analyzed by analyses of variance and covariance at a 95% confidence level.

3. Results

In the research, 48 nurses with social anxiety were divided into 4 groups of no treatment, psychodrama, ACT, and therapy based on the combination of the two methods. The Mean±SD age in the psychodrama group was 30.5±6.34 years, in the ACT group, 30.75±5.83 years, in the combined therapies group, 29.50±19.58 years and in the no therapy group, 31.5±6.16 years. The groups had the same number of participants, and their sex ($P=0.18$)

Table 3. Psychodrama therapy

Session	Content
1	Familiarizing the members of groups to each other and explaining the overall treatment plan and educational meetings
2	Coping with embarrassment by techniques of walking
3	discussing social backgrounds and asking for their ideas about them
4	Familiarity with and performing techniques of the mirror and introducing myself
5	Use of the method of role changing as well as familiarity with and doing the technique of role-playing
6	Familiarity with and performing the technique of an empty chair
7	Selection of a showing role from the client's experiences and performing it by themselves
8	Creation of a real situation for testing stress
9	Creation of a realistic situation for testing stress
10	Reviewing the therapy and termination of the groups

Iranian Rehabilitation Journal

Table 4. Participants' demographic characteristics by the study groups

Variables		No. (%)				The Chi-square Test
		No Therapy	Psychodrama Therapy	Acceptance-commitment Therapy	Test of Both Therapies	
Gender	Female	5(41.7)	8(66.7)	10(83.3)	6(50)	0.18
	Male	7(58.3)	4(33.3)	2(16.7)	6(50)	
Education level	1 st year	3(25)	5(41.7)	2(16.7)	5(41.7)	0.39
	2 nd /3 rd year	7(58.3)	7(58.3)	8(66.6)	5(41.7)	
	Last year	2(16.7)	-	2(16.7)	2(16.7)	

*Significant level of 95%.

Iranian Rehabilitation Journal

and education level were similar too ($P=0.39$). Individuals' demographic data by the groups of the research are presented in [Table 4](#).

The findings exhibited a substantial diminution in the total score of the SAD and its dimensions in all three groups in such a way that the Mean \pm SD social anxiety score in the psychodrama group was 63.75 \pm 11.37 before the intervention and 50.08 \pm 7.75 after the study period. However, the Mean \pm SD social anxiety score was 60.21 \pm 10.71 before the intervention and 43.66 \pm 7.05 after the study in the ACT group. In the combined therapy group, before applying intervention and after that, the Mean \pm SD social anxiety scores were found to be 61.75 \pm 11.49 and 34.75 \pm 8.19, respectively. A noteworthy difference ($P=0.86$, [Table 1](#)) could not be diagnosed in the mean anxiety score in the group of control. However, the score difference, indicating the decrease in social anxiety, was expressively greater in the intervention

group of combined therapy compared to the considered control groups ($P<0.001$) ([Table 5](#)).

4. Discussion

Our research determined the impact of the combination of ACT with psychodrama therapy on participants with SAD. This research showed the effectiveness of the psychological interventions applied in all three groups of ACT, psychodrama, and their combination in declining the symptoms of SAD. However, the combination of ACT and psychodrama reduced the symptoms more.

The study by Witlox et al. showed that blended ACT was an appreciated alternative treatment to CBT for anxiety in the later years of one's life [16]. Yabandeh et al. investigated the impacts of the two approaches of ACT and therapy based on cognition-behavior elements on SAD and showed a significant reduction in social anxiety by ACT compared to the one found on cogni-

Table 5. Comparing the scores of social anxiety, embarrassment and panic in the study groups

Variables	Result in Pre-test	No Therapy	Psychodrama Therapy	Acceptance-commitment Therapy	Combined Therapy
Social anxiety	Mean \pm SD p^a	59.58 \pm 8.50 0.86	64.75 \pm 13.37 -	59.65 \pm 12.21 -	62.75 \pm 13.49 -
	Mean \pm SD p^b	64.75 \pm 9.40 -	49.08 \pm 6.71 <0.0001*	42.66 \pm 8.05 <0.0001*	35.75 \pm 7.19 <0.0001*
Shyness	Mean \pm SD p^a	119.16 \pm 13.05 0.93	116.25 \pm 15.52 -	119.23 \pm 13.43 -	115.83 \pm 14.49 -
	Mean \pm SD p^b	119.26 \pm 12.92 -	85.14 \pm 11.08 <0.0001*	88.17 \pm 7.90 <0.0001*	67.75 \pm 10.78 0.02*
Fear	Mean \pm SD p^a	38.98 \pm 7.53 0.71	38.83 \pm 6.88 -	34.75 \pm 8.78 -	34.75 \pm 9 -
	Mean \pm SD p^b	38.93 \pm 6.53 -	28.96 \pm 5.09 <0.0001*	26.52 \pm 2.92 <0.0001*	21.92 \pm 4.68 0.02*

*Significant level of 95%, ^aANOVA, ^bANCOVA.

Iranian Rehabilitation Journal

tion-behavior elements. However, a remarkable difference could not be detected between the two treatment methods. The researchers suggested that the significant impacts of the two approaches might be because of their common elements, like coping with stressful notions rather than overcoming or limiting them [17]. Rickardsson et al. showed that the technique of psychodrama had a significant effect on the reduction of the chronic mental problem of patients since this therapy approach by confirming the subconscious played an important role in patients' sentimental discharge and their relief [15]. Witlox et al. demonstrated intervention based on an ACT for anxious cancer survivors; as reported by clinical social workers in cancer care clinics, accelerating psychological retrieval and energy levels and reduction in overlooked medical engagements could be detected. A stronger and broader effectiveness was seen for more anxious and avoidant participants. This finding demonstrates more benefits for cancer survivors with more marked psychological symptoms [16].

Pour Rezaian showed the impacts of psychodrama therapy on SAD and suggested the reason behind the impacts of psychodrama was the capacities of this therapy method. It can help patients reduce stress by recreating anxious positions through exercise and innovative emotional methods [11].

Comparing the effectiveness of these two approaches with each other, the results showed that although both therapeutic methodologies were influential in diminishing the SAD symptoms (in comparison with the control group) and led to a reduction in its symptoms, their decline was more when the components of psychodrama were used along with ACT.

In psychotherapy techniques, people face situations in which they are afraid. They see it and show others what they fear. As a result, the source of fear becomes obvious and apparent so that they can calmly watch the situation they fear, and this confrontation with the source of fear in a safe place makes them more courageous and reduces their social anxiety in various social situations. The ACT approach also provides a context in which the individuals become aware of inflexible and automatic responses to their experiences and realizes their responses to anxiety are inefficient and exacerbate problems. Given that the goal of ACT is the elimination of experiential avoidance and enhancement in psychological resilience through contact with the present, committed behaviors, and a life based on values, the exposure traces are clear in all of these solutions. Therefore, this can be another

reason combining these two therapeutic approaches can increase the effectiveness of treatment.

According to the results, the combination of psychoactive components with ACT psychotherapy is a promising treatment for SAD, but there is a need for more controlled research in this area. Like other studies, the present study has some limitations, including the short period of conducting the treatment protocol and the lack of follow-up during a few months after the treatment sessions. So, this treatment protocol is suggested to be done for a longer time and with a longer follow-up to examine all dimensions of the combination of these two treatments. Also, considering the spatial limitation in sampling and limiting the statistical population to nurses who were educated and employed people, generalizing the results of this study to other populations of society should be done with caution. In the current study, for the first time, the researchers designed a new protocol for treatment according to the two conventional methods of psychotherapy to investigate their effects, which was an innovation in the guidelines of treatment for the disorder of social anxiety [18-20].

5. Conclusion

Considering the social anxiety prevalence in society, especially among nurses, and the complications caused by it for the progress of people and society, taking this disorder into account and finding a more successful approach to treating it seems necessary. Although separately using psychodrama therapy and ACT has been displayed to have an important impact on SAD symptoms, the use of the two approaches together intensifies their powerful impacts even more. So, individuals participating in psychological health, like psychotherapists, are recommended to apply this protocol to treat the disorder of social anxiety of clients, their life quality, and social interactions.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of [Torbat Heydarieh University of Medical Sciences](#) (Code: IR.THUMS.REC.1397.019), (Registration No.: IRCT20181009041282N3).

Funding

This research was supported by the research project, funded by [Torbat Heydarieh University of Medical Sciences](#).

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

The authors appreciate the participation of all nurses and colleagues at [Torbat Heydarieh University of Medical Sciences](#).

References

- [1] Kabusi M, Sepehr P, Poorsadeghian M, Zamani Z, Tahghighi H, Salehi Sahlabadi A, et al. Psychological effects of the outbreak of covid-19 on the mental health of healthcare workers in Iran. *Iranian Rehabilitation Journal*. 2022; 20(3):379-86. [\[Link\]](#)
- [2] Aghabalazadeh L, Aghabalazadeh M. [The role of rumination and perfectionism in explaining of social anxiety disorder among students of Urmia Azad University in academic year 2018-2019 (Persian)]. *Nursing and Midwifery Journal*. 2019; 17(1):11-20. [\[Link\]](#)
- [3] Yarmohammadi H, Poorsadeghiyan M, Shorabi Y, Ebrahimi M H, Rezaei G, Biglari H, et al. Risk assessment in a wheat winnowing factory based on ET and BA method. *Journal of Engineering and Applied Sciences*. 2016; 11(3):334-8. [\[Link\]](#)
- [4] Vatani J, Arami M, Khanikosarkhizi Z, Shahabi Rabori MA, Khandan M, Dehghan N, et al. Safety climate and related factors in rehabilitation nurses of hospitals in Iran. *Work*. 2021; 68(1):189-96. [\[DOI:10.3233/WOR-203368\]](#) [\[PMID\]](#)
- [5] Hedayati Babil V, Talebian Sharif J, Abdekhodae MS. [Investigate effectiveness of Acceptance and Commitment Therapy (ACT) on social anxiety of students (Persian)]. *Journal of Psychology New Ideas*. 2018; 2(6):1-13. [\[Link\]](#)
- [6] Poorsadeghiyan M, Abbasi M, Mehri A, Hami M, Raei M, Ebrahimi MH. Relationship between job stress and anxiety, depression and job satisfaction in nurses in Iran. *The Social Science*. 2016; 11(9):2349-55. [\[Link\]](#)
- [7] Keller MB. Social anxiety disorder clinical course and outcome: Review of Harvard/Brown Anxiety Research Project (HARP) findings. *Journal of Clinical Psychiatry*. 2006; 67(12):14-9. [\[PMID\]](#)
- [8] Ramak N, Moinefard L, Jangi P, Sangani A. Effect of group cognitive-behavioral techniques training on social anxiety in nursing students. *Journal of Holistic Nursing And Midwifery*. 2020; 30(1):1-8. [\[DOI:10.32598/JHNM.30.1.1\]](#)
- [9] Hamilton KE, Wershler JL, Macrodimitris SD, Backs-Dermott BJ, Ching LE, Mothersill KJ. Exploring the effectiveness of a mixed-diagnosis group cognitive behavioral therapy intervention across diverse populations. *Cognitive and Behavioral Practice*. 2012; 19(3):472-82. [\[DOI:10.1016/j.cbpra.2011.12.002\]](#)
- [10] Taheri AA, Foroughi AA, Mohammadian Y, Ahmadi SM, Heshmati K, Hezarkhani LA, et al. The effectiveness of acceptance and commitment therapy on pain acceptance and pain perception in patients with painful diabetic neuropathy: A randomized controlled trial. *Diabetes Therapy*. 2020; 11(8):1695-708. [\[DOI:10.1007/s13300-020-00851-9\]](#) [\[PMID\]](#) [\[PMCID\]](#)
- [11] Purrezaeian M. [The clinical evaluation of psychodrama's effectiveness in treatment of social anxiety: A case study (Persian)]. *Clinical Psychology Studies*. 2016; 6(24):29-46. [\[doi:10.22054/jcps.2016.6513\]](#)
- [12] Orkibi H, Feniger-Schaal R. Integrative systematic review of psychodrama psychotherapy research: Trends and methodological implications. *PloS One*. 2019; 14(2):e0212575. [\[DOI:10.1371/journal.pone.0212575\]](#) [\[PMID\]](#) [\[PMCID\]](#)
- [13] Akinsola EF, Udoka PA. Parental influence on social anxiety in children and adolescents: Its assessment and management using psychodrama. *Psychology*. 2013; 4(3):246-53. [\[DOI:10.4236/psych.2013.43A037\]](#)
- [14] Li H, Wong CL, Jin X, Chen J, Chong YY, Bai Y. Effects of acceptance and commitment therapy on health-related outcomes for patients with advanced cancer: A systematic review. *International Journal of Nursing Studies*. 2021; 115:103876. [\[DOI:10.1016/j.ijnurstu.2021.103876\]](#) [\[PMID\]](#)
- [15] Rickardsson J, Gentili C, Holmström L, Zetterqvist V, Andersson E, Persson J, et al. Internet-delivered acceptance and commitment therapy as microlearning for chronic pain: A randomized controlled trial with 1-year follow-up. *European Journal of Pain*. 2021; 25(5):1012-30. [\[DOI:10.1002/ejp.1723\]](#) [\[PMID\]](#)
- [16] Witlox M, Garnefski N, Kraaij V, Simou M, Dusseldorp E, Bohlmeijer E, et al. Prevalence of anxiety disorders and sub threshold anxiety throughout later life: Systematic review and meta-analysis. *Psychology and Aging*. 2021; 36(2):268-78. [\[DOI:10.1037/pag0000529\]](#) [\[PMID\]](#)
- [17] Yabandeh MR, Bagholi H, Sarvghad S, Kouroshnia M. [Comparing the effectiveness of cognitive behavioral therapy with acceptance and commitment therapy on reduction of social anxiety disorder symptoms (Persian)]. *Psychological Methods and Models*. 2019; 10(36):177-96. [\[Link\]](#)
- [18] Shafiee-Kandjani AR, Alizadeh M, Nasirzadehghan A, Kehtary-Harzag L, Vahedi M, Poorsadeqiyani M, et al. Socioeconomic status and dimensions of mental health with suicidal ideations among students. *Iranian Journal of Public Health*. 2021; 50(10):2158-60. [\[PMID\]](#)
- [19] Biglari H, Ebrahimi MH, Salehi M, Poorsadeghiyan M, Ahamadnezhad I, Abbasi M. Relationship between occupational stress and cardiovascular diseases risk factors in drivers. *International Journal of Occupational Medicine and Environmental Health*. 2016; 29(6):895-901. [\[PMID\]](#)
- [20] Amani S, Dolatabadi ZA, Bardsiri TI, Nouri M, Saraji JN, Poorsadeqiyani M, et al. Designing and validation of self-assessment tool of professional competency and its psychometrics in the Administrators of Preschool Educational Centers. *Iranian Journal of Public Health*. 2022; 51(11):2582-91. [\[Link\]](#)