

Original Article

Prediction of Severity of Anxiety, Depression and Obsession Symptoms based on Negative Repetitive Thoughts by Mediating Role of Experimental Avoidance in Clinical Populations Referring to Counseling Centers in Tehran

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Received: 12 Nov 2023; Revised: 3 Dec 2023; Accepted: 19 Dec 2023

Abstract

Background and Aim: A deep understanding of the effective factors in creating and aggravating the symptoms of anxiety, depression and obsession is very vital for the development of treatment and prevention strategies, and also repeated negative thoughts can play an important role in the process of forming and strengthening these symptoms, and on the one hand, empiricism and avoidance of unpleasant experiences may also act as an effective mediating variable in these processes So. the present study was done to predict severity of anxiety, depression and obsession based on negative repetitive thoughts by mediating role of experimental avoidance in clinical population who are all male and female with anxiety and obsession disorders in 2023 in Tehran.

Materials and Methods: This was a descriptive correlation research in which structural equations were done on 228 male and female participants with anxiety, depression and obsession disorders were selected by available sampling by Kline method. to collect data, Spielberger state-trait anxiety inventory (STAI), Beck depression inventory, repetitive thought questionnaire and obsession compulsive questionnaire of Maudsely (MOCL) were used.

Results: Findings suggested that by increasing negative repetitive thoughts and experimental avoidance, anxiety, depression and obsession will be increased or vice versa. by decreasing negative repetitive thoughts and experimental avoidance, anxiety, depression and obsession will be decreased. Also, given to GFI=0/909, CFI=0/919, AGFI=0/837 and RMSEA=0/076 it can be said that measured model has good fitness.

Conclusion: According to results, severity of anxiety, depression and obsession are predictable based on negative repetitive thoughts. Because anxiety is caused by trying to control or resist unwanted negative thoughts that occur normally, also because OCD is a chronic anxiety disorder characterized by excessive mental preoccupation with subjective details and perfectionism. is, to the extent that it leads to the loss of flexibility and social function, and depression, which is the constant and continuous tendency of a person to experience uncomfortable thoughts and feelings, it is possible to predict the severity of symptoms of anxiety, depression and obsession based on negative thoughts and repetition Shundeh is concerned with the avoidance and direct efforts he made to get rid of a negative thought or emotion So, using strategies for control negative

repetitive thoughts for improving mental health and decreasing anxiety and depression and obsession are necessary.

Keywords: Anxiety, Obsession, Negative repetitive thoughts, Experimental avoidance

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Please cite this article as: Zaranat M, Sahragard M. Prediction of Severity of Anxiety, Depression and Obsession Symptoms based on Negative Repetitive Thoughts by Mediating Role of Experimental Avoidance in Clinical Populations Referring to Counseling Centers in Tehran. *Int. J. Appl. Behav. Sci.* 2024;10(4):21-30.

Introduction

Negative repetitive thoughts are cognitive, uncontrolled, and stable process which emphasizes on negative aspects of self and world (1). Negative repetitive thoughts are a thinking style about problems and negative experiences with three key features including repetitive, intrusive, difficult in coping (2). Repetitive negative thinking, which is associated with emotional difficulties, encompasses a cognitive approach in which individuals ruminate on their past, present, and future problems, or negative encounters (whether past or anticipated) that persistently recur, are partially intrusive, and pose challenges in disengaging from these problems. Individuals perceive repetitive negative thinking to be unproductive and consume their mental capacity. Generally, repetitive negative thinking has an unpleasant content and negatively impacts daily activities, thereby provoking grief and feelings of insecurity (3). Those who suffer from different mental disorders think negatively about themselves and experiences and cannot stop such thinking. Negative repetitive thoughts include worry, mind rumination, threat monitoring, self-monitoring and other repetitive thoughts which are cores of depression, anxiety, and other mental disorders (4).

One of disorders which resulted from negative repetitive thoughts is called anxiety disorder. Anxiety is a psychological disorder in which person has no control on behavior when he/she is under tension and conflicts (5). In etiology of anxiety, factors like sweating, heartbeat, nervousness are mentioned (6). Anxiety disorders contain disorders with features of fear and severe anxiety and intensive behaviors are similar. Anxiety manifests with hardness of muscles,

hyper-vigilance, ready for future risks and avoidance/careful behaviors. Also, anxiety is characterized as future centered feeling, which is perceived uncontrollable, unpredictable of bad events, a quick shift in attention and concentration over events (7). When anxiety is excessive, it causes the loss of behavioral organization in the individual and after a while it becomes chronic and continuous, the person's resilience to the environment decreases and creates a wide range of anxiety disorders (8). Most cognitive theorists emphasize that anxiety disorders result from inappropriate beliefs. Alice believes that human is not anxious by external objects but by defective thoughts. Also, the person with anxiety disorder usually tries to avoid situations in which they may be evaluated, and symptoms of anxiety appear or act in ways that make them feel embarrassed (9).

One of another components which is under effects of negative repetitive thoughts is depression. Most patients experience periods of denial and hopelessness followed by symptoms of depression and anxiety (10). Depression is the most common psychiatry disorder which is characterized by depressed mood with sadness, low self-confidence and losing interest to enjoyable routine activities (11). Prevalence of depression is higher than other disorders which is 17% in the world, 5/69-73% in Iranian population and is 1/7 times in women more than men (12). Kim, Soo & et al. (13) investigated relationship between negative repetitive thoughts and experimental avoidance with depression and anxiety and suggested negative repetitive thoughts and experimental avoidance are correlated with depression and anxiety. Also, they suggested that depression and anxiety are predictable based on negative repetitive thoughts and experimental avoidance.

Depression is only one of many internalizing disorders that are cause for significant distress and disability. Internalizing disorders often are inter-related or comorbid as well. People with obsessive-compulsive disorder have been shown to have co-occurring symptoms of depression (14). Obsession disorder often coexists with various psychiatric comorbidities, such as depression, anxiety symptoms, bipolar disorder, substance abuse disorder, and psychosis, suggesting potential shared etiological factors (15). Therefore, obsession disorder is another disorder that threatens psychological health of people (16). Symptom profiles are extremely heterogeneous and are often characterized as falling along different symptom dimensions, including contamination/washing, intrusive thoughts/checking, and symmetry/ordering (17). Obsession is characterized by stable thought and thinking or intrusive and unwanted images as well as repeated thoughts and rituals (18). Obsession disorder is one of the serious mental health and imposes economic, social burden on society (19). Also, World Health Organization (WHO) considers this order the tenth disabling condition (physical and mental disease) (20). For example, Minavi (21) studied the relationship between anxiety, depression, obsession with negative thoughts and showed that there is significant relationship between anxiety and depression. Also, they suggested a significant positive correlation between obsession-compulsive disorder with anxiety. A significant positive correlation between obsession-compulsive disorder with depression was reported. Therefore, high anxiety means severe obsession-compulsive disorder. The negative and significant correlation was reported between three variables anxiety, depression, and obsession-compulsive disorder with quality of life.

Experiential avoidance is a mediating mechanism that explains the effect of repeated negative thoughts on psychological symptoms. An increasing number of theories and studies show that avoidance plays a significant role in the formation and maintenance on psychological symptoms (22, 23). Experiential avoidance is a form of unwillingness to make contact with personal experiences (physical sensitivities, feelings, thoughts, memories, and behavioral states) and an attempt to avoid those agonizing experiences

or events that cause the recollection of these experiences. Experiential avoidance controls or minimizes the impact of aversive experiences, resulting in short-term relief. As a result of this, behavior is negatively reinforced (24). Hays et al. (22) state that trying to distance oneself from internal experiences can lead to psychological and behavioral issues, such as substance use, depression, suicidal thoughts, and aggressive behaviors. Thus, the psychological and behavioral problems may be a byproduct of the Experiential avoidance process. Many studies have shown construct which may decrease anxiety disorders, depression and obsession is called "experimental avoidance" (25). In recent years, attention is paid toward experimental disorder as psychopathological factor of different psychological disorders. Experimental avoidance is a construct which is used for avoiding from painful experiences and is related to obsession, anxiety, and depression. This construct has two dimensions: first, lack of interest to contact to personal experiences (body sensitivity, emotions, thoughts, memories, and behavior background) and second, attempts to avoid from pain or events that may emerge these experiences (26). Also, experimental avoidance as a meta cognition factor may play important role in maintaining of psychological problems and is defined as flexible attempts for avoid from emotional / cognitive experiences or suppression of these experiences (27) and is negative evaluation of senses, feelings, thoughts as unwanted ones and withdraw from experiencing such events and intentionally control of these events (28). This avoidance has three types: cognitive avoidance (distracting from worry), emotional avoidance (attempts for suppression of sadness and discomfort) and behavioral avoidance, for example, person attempts to avoid from situations in which such feeling are experience so that such avoidance is maladaptive coping style (29).

Camilla Cookson, Olga Luzon, John Newland, and Jessica Kingston (30) investigated mediating role of cognitive fusion and experimental avoidance in predicting of anxiety, depression based on worry and mind rumination. Results showed that there is relationship between anxiety, depression, and mind rumination as well as cognitive fusion and experimental avoidance have direct and indirect

effects to predict anxiety, depression based on worry and mind rumination. Also, van Oosterom (20) investigated relationship between secure attachment style and mind rumination with obsession beliefs in women. Results showed that secure attachment style has negative correlation with negative beliefs. Also, insecure attachment style of avoidance, mind rumination has positive significant correlation with obsessive beliefs and secure attachment style, insecure attachment style of anxious avoidance and rumination may predict obsessive beliefs.

Given to prevalence of negative repetitive thoughts in people who suffer from anxiety disorders, depression, and obsession and consequently, psychological problems and their range in all aspects of life, importance of the research is emphasized. This topic addresses deep insight of relationship between psychological processes and mental effects in psychological disorders, by analysis of negative repetitive thoughts and mediating role of experimental avoidance, research in this field may add more insight about underlying mental mechanisms of psychological disorders and may result in effective strategies in diagnosis and treatment of these disorders.

Information from this present research may help researchers and mental health professionals to present effective intervention plans based on their more knowledge given to needs of patients. The present research may create new views, cultures, and interpretation in the field of mental disorders. In addition to extending of knowledge in this field, the present research may be basic foundations to improve performance and mental health in society, so its importance is emphasized.

Methods

Given to aim of study to predict of severity of anxiety, depression and obsession based on negative repetitive thoughts by mediating role of experimental avoidance in clinical population, the present study is descriptive correlation research. structural equations were used. Given to 9 subscales, 228 male and female participants with anxiety, depression and obsession disorders were selected by available sampling by Kline method.

Their ages were $27/7 \pm 5/68$ and 57% were female and 43% were male. Also, frequency distribution showed that 52/2% were single and 47/8 were married. To do research, psychiatry center in Mazdaran was selected and after getting allowance from Dr. Mostafa Heidari, questionnaires were distributed among patients. The aim of research was explained. After completing, they were collected for analysis.

Materials

Spielberger anxiety questionnaire

The Spielberger state-trait anxiety inventory (STAI) was built by Spielberger and is used in research and clinical activities for measuring anxiety (31). This inventory has 40 items including separate self-reporting subscales. State anxiety inventory is scored by 5-point Likert-type from 1= very low to 5= very high. For total score, scores of two subscales are added. Total score is 20. Cronbach alpha coefficient of state and trait anxiety is reported 0.92, 0.90 respectively. Also, re-test coefficient of state and trait anxiety is reported 0.62 and 0.68 respectively (32). Reliability of the present research is 0.84 by Cronbach alpha.

Beck depression inventory (Beck, Brown and Steer)

The Beck depression inventory (BDI) was introduced for measuring presence and severity of depression symptoms (33). This inventory has 21 items to measure severity of depression in adults and adolescents (+13). All items are scored in 0-3. Score range is between 0-63, it means higher score reflects severe depression. According to Beck, score between 0-13 indicates non depression or minimal depression; score 14-19 is indicative of mild depression 20-28 indicates moderate depression 29-63 is indicator of severe depression. Validity of this inventory in Iran is reported 0/68 by Cronbach alpha and 0/94 by re-test reliability (34). The present research reported reliability as 0.89 by Cronbach alpha.

Repetitive thought questionnaire

This questionnaire is developed by Mc Evoy. This questionnaire has 31 items measuring negative repetitive thought. This questionnaire is scored in 5-point Likert-type from 1= not at all to 5= total correct. This questionnaire has three sub-scales

including worry, mind rumination and threat monitoring. Total Cronbach Alpha is 0.72-0.93. To calculate predictive validity, depression and anxiety inventory is used which correlation coefficients are reported 0.42 and 0.38(35). Persian reliability I s reported by Hatamian and Moradi (36) as 0.84.

Obsession compulsive questionnaire of Maudsely (MOCL)

Maudsely obsessive compulsive questionnaire was developed by Hodgson and Rachman (37) to measure field and type of obsession which has 30 items by correct and incorrect keys. Correct answer is 1 and incorrect answer is 0. This questionnaire is designed so that obsessed person answers to half of items as correct and to another half as incorrect. Score range is between 0-30. This questionnaire has four components: checking, cleaning, slowness, and obsessive hesitate. Reliability and validity were approved by clinical populations. Reliability is reported 0/89 by test-retest. In two studies in Iran, means 15.75 ± 5.63 and 14.67 ± 5.76 (38-39).

Experimental avoidance of Bond questionnaire

This questionnaire was developed by Bond (40) which has 10 items and 2 subscales measured in 7-point Likert type (1= not at all to 7= always). Higher score shows mental flexibility. Bond et al reported results of 2816 subjects during 6 samples to suggest satisfactory reliability and validity of construct. Means of Cronbach alpha coefficient was

0.84 and re-test reliability in 3-12 months were 0.81 and 0.79. In Iran, Abbasi Asi, Fani, Molodi and Zarabi (41) evaluated psychometric features and translated it into Farsi.

Results

To predict severity of anxiety, depression and obsession based on repetitive thought by mediation role of experimental avoidance in clinical population, data of research were analyzed in descriptive and inferential level. At first, means, standard deviation, frequency and frequency percent are presented. Also, statistical tests are presented to study statistical pre-assumption to use parametric tests. Finally, in inferential section, pre-assumptions were studied by path analysis.

In descriptive section, means and standard deviation of depression, anxiety, experimental avoidance, repetitive thoughts, obsession with subscales are presented in Table 1.

Evaluation of pre-assumptions of structural equations modeling is important. Meeting these pre-assumptions approves fitness of using this mode. To evaluate multi-variable missing data, Mahallanobis was used. 228 participants were selected after omitting those who got one point less than cut score of anxiety, depression, obsession. 83 participants were omitted due to missing data.

Table 1. Results of descriptive statistic of variables.

Components		Number	Means	Standard deviation
Depression		228	17.25	8.58
Anxiety	State	228	57.14	8.20
	Trait	228	54.38	8.37
Experimental avoidance		228	21.09	8.95
Repetitive thoughts	Worry	228	29.75	4.76
	Mind rumination	228	30.74	5.50
	Threat monitoring	228	37.38	5.21
	Checking	228	1.98	1.60
Obsession	Washing	228	4.73	2.20
	Slowness-repeat	228	2.51	1.44
	Hesitate	228	2.97	1.58

Table 2. Matrix of Pearson correlation between variables.

Variable	1	2	3	4	5	6	7	8	9	10	11
Depression	1										
Anxiety state	0.51**	1									
Anxiety trait	0.49**	0.82**	1								
Experimental Avoidance	0.49**	0.57**	0.58**	1							
Worry	0.38**	0.59**	0.68**	0.42**	1						
Rumination	0.30**	0.43**	0.54**	0.42**	0.41**	1					
Threat monitoring	0.39**	0.62**	0.60**	0.45**	0.51**	0.47**	1				
Checking	0.22**	0.26**	0.19**	0.39**	0.26**	0.19**	0.23**	1			
Washing	0.42**	0.33**	0.35**	0.27**	0.29**	0.24**	0.29**	0.37**	1		
Slowness	0.44**	0.23**	0.31**	0.37**	0.27**	0.21**	0.16*	0.42**	0.51**	1	
Hesitate	0.52**	0.25**	0.34**	0.39**	0.25**	0.18**	0.13*	0.25**	0.49**	0.54**	1

Sample size given to Kline formula, due to 9 indicators and 228 participants, it is concluded that there is one indicator for 25 participants in analysis process. Normality assumption: using Kolmogorov-Smirnov test to evaluate normality of scores distribution showed that Due to significance level of subscales is higher than 0.05, it can be concluded that distribution of scores is normal. Multi collinearity: with correlation matrix between exogenous variables, non-collinearity was approved due to value lower than 0.70. But their relationships are positive and significant. It means that, by increasing negative repetitive thoughts and experimental avoidance, anxiety, depression and obsession will be increased or vice versa. Results are in Table 2.

To determine competence of fitness of model, fitness indexes are present. Results are in Table3. Indexes GFI=0/909, CFI=0/919, AGFI=0/837 suggest fitness of model, because their value is close to 1. TMSEA=0/076 suggest good fitness of model because, its value is lower than 0.08. In summary, given to mentioned indexes, it can be said that suggested measuring model has good fitness.

According to Table 4, negative repetitive thoughts

have direct positive and significant effects (0.63) on experimental avoidance. negative repetitive thoughts have direct positive and significant effects (0.74) on anxiety. Also, experimental avoidance has direct positive and significant effects (0.55) on anxiety. indirect effects of negative repetitive thoughts with anxiety by mediating role of experimental avoidance is 0.34. negative repetitive thoughts have direct positive and significant effects (0.63) on experimental avoidance (0.63). negative repetitive thoughts have direct positive and significant effects (0.42) on depression. Also, experimental avoidance has direct positive and significant effects (0.543) on depression. indirect effects of negative repetitive thoughts with anxiety by mediating role of experimental avoidance is 0.27. negative repetitive thoughts have direct positive and significant effects (0.63) on experimental avoidance. negative repetitive thoughts have direct positive and significant effects (0.36) on obsession. Also, experimental avoidance has direct positive and significant effects (0.37) on obsession. indirect effects of negative repetitive thoughts with obsession by mediating role of experimental avoidance is 0.23 which significance is studied by Sobel test.

According to Table 5, absolute value of Sobel test is higher than 1.96, so, indirect effects of negative repetitive thoughts with anxiety, depression and obsession mediating role of experimental avoidance is significant.

Discussion

The present research aimed to predict severity of anxiety, depression and obsession symptoms based on

Table 3. Summary of fit indexes of model.

Fit indexes of model	Observed scores
χ^2	74.84
DF	37
χ^2/df	2.190
GFI	0.909
CFI	0.919
AGFI	0.837
RMSEA	0.076

Table 4. Results of Boot Stroop test for direct, indirect and total paths.

	Direct effect	Indirect effect	Total effect
Negative repetitive thoughts>> experimental avoidance	0.63	---	0.63
Negative repetitive thoughts>> anxiety	0.74	0.34	1.08
Negative repetitive thoughts>> obsession	0.36	0.23	0.59
Negative repetitive thoughts>> depression	0.42	0.27	0.69
Experimental avoidance >> anxiety	0.55	---	0.55
Experimental avoidance >> obsession	0.37	---	0.37
Experimental avoidance >> depression	0.43	---	0.43

Table 5. Results of Sobel test.

	Mediating variable	z-value	Result
Negative repetitive thoughts>>anxiety	experimental avoidance	2.984	Approved
Negative repetitive thoughts>>depression	experimental avoidance	2.643	Approved
Negative repetitive thoughts>> obsession	experimental avoidance	2.096	Approved

negative repetitive thoughts with mediating role of experimental avoidance in clinical population. Results of Sobel test suggested that indirect effects of negative Repetitive thoughts with anxiety with mediating role of experimental avoidance is significant. In summary, given to mentioned indexes, it can be said that suggested measured model has good fit. Findings are consistent to Mehrabi (42), Ardestani (43), Clarke& Kiropoulos (7), DEREIX-CALONGE (4), Ameri and Najafi (44) and Hunt(18). To explain this finding, given to that anxiety is an attempt to control or insist against unwanted negative thoughts, also obsessive disorder is a chronic anxious disorder with extreme preoccupation about thematic details and perfectionism so that flexibility and social function are lost and Depression is intention toward discomfort thoughts and feelings, so prediction of severity of anxiety, depression and obsession symptoms based on negative repetitive thoughts through direct avoidance and attempts for be free of a thought or negative affection in clinical population is addressed.

First assumption was that: experimental avoidance has positive relationship with severity of anxiety symptoms and plays mediating role in effects of negative Repetitive thoughts with anxiety. Given to Sobel test, that indirect effects of negative Repetitive thoughts with anxiety with mediating role of experimental avoidance is significant. Findings are consistent with Poorshahbazi and Kheir Abadi (32) and Ardestani (33).

To explain, it can be said that those who have no flexibility for avoidance of emotional/cognitive experiences or suppress them may evaluate senses, feelings, thoughts as unwanted and negative extremely and don't want to experience them therefore they will attempt to control or withdraw. also, little negative cue makes them helpless so that they flee from health communication and are waiting humiliation from others in a few communications and are angry self-insufficient due to their inability in social communication. They will have many difficulties in family relationships, in professional communication and in social and marital relations so they will be anxious, and way will be facilitated for mind rumination and negative repetitive thoughts.

Therefore, anxiety is resulted from control or insist against negative unwanted thoughts and experimental avoidance plays important role in anxiety symptoms. Negative evaluation of importance of unconscious thoughts may remove behavior and avoidance so that obsessive persons try to avoid stimulus of obsessive thoughts. Therefore, suppression or control of emotions play important role in emergence or maintaining of compulsive behaviors.

Also, second assumption was this: experimental avoidance has positive relationship with severity of depression symptoms and plays mediating role in effects of negative Repetitive thoughts with depression.

Finding of the present research suggested that that indirect effects of negative Repetitive thoughts with

depression with mediating role of experimental avoidance is significant. This finding is consistent to (6) and (3).

To explain this, it can be said that intention for negative evaluation of painful feelings and thoughts and avoidance from related experiences are related to many problems. Avoidance and attempt to free from a thought or emotional state may have adverse effects and lead to mind rumination or making negative feeling more severe. District attempts to prevent acceptance or confronting discomfort experiences may interfere with meaningful activities of life or making distress more severe because, experimental avoidance suddenly will be against values of persons. These attempts for reduction or control of unwanted experiences may reduce anxiety and depression temporality but, finally they are ineffective in long term.

On the other hand, third assumption was this: experimental avoidance has positive relationship with severity of obsession symptoms and plays mediating role in effects of negative Repetitive thoughts with obsession.

Statistical analysis showed that indirect effects of negative Repetitive thoughts with obsession mediating role of experimental avoidance is significant. Findings are consistent with findings of Ardestani, Keykhosrovani and Amini (43), Ameri and Najafi (44) and Hant (18). to explain this finding, it can be said that anxiety is effective factor in obsessive symptoms and urges are used to decrease anxiety. Stressful events play key roles in emerge and maintaining of obsession disorder. Depressed mood is factor for creating obsession behaviors and negative repetitive thoughts so that negative mood states like boring may intense obsession an results in maintain of it. Depression is latent factor which has effect on many obsessive behaviors. Depression and anxiety are resulted from avoidance strategies for thoughts, memories and activities which may lead to behavior and actions of obsessive disorder in long time.

The present research has limitation including difficulties in finding cased with three disorders of anxiety, depression, and obsession. Also, due to sample was restricted to one province so generalization of findings should be done with

caution. Therefore, it is suggested that future studies repeat this study for other geographical regions and compare results. Also, another tools like interview should be used to get understanding and more insight for future studies. As practical suggestion, it is recommended that to use diagnostic clinical interview for negative repetitive thoughts to present effective intervention for patients. In addition, to decreased experimental avoidance in persons with obsessive disorders, depression and anxiety, effective interventions should be used to lower severity of symptoms and facilitate improving way in these patients.

Conclusion

According to the present study, it can be said that experimental avoidance plays mediating role in relationship between anxiety, depression, and obsessive thoughts. Anxiety, depression an obsession are predictable based on negative repetitive thoughts with mediating role of experimental avoidance in clinical population.

Acknowledgment

We thank all person who helped us in completing this research. It should be note that all ethical consideration were followed in this research.

Conflict of Interest

The authors declare that they have no conflict of interest.

References

1. Rezaei, S. A. K. Hatamian, P, Amjad, F. V, & Yousefkhani, M. P. The Relationship between Emotional Disorder and Repeated Negative Thoughts with Body Image Concern Due to the Mediating Role of Family Support in Women Applying for Cosmetic Surgery. *Iranian Journal of Psychiatric Nursing (IJP)*. 2022; 10(1): 18-27.
2. BALLELIO, Andrea, et al. Does cognitive behavior therapy for insomnia reduce repetitive negative thinking and sleep-related worry beliefs? A systematic review and meta-analysis. *Sleep Medicine Reviews*. 2021; 55: 1013-78.
- 3- Yaztappeh, J. S, Lorestani, E, Zaheri, Y, Rezaei, M, Mohammadi, H, Kakabraee, K, ... & Mohebi, M. D. (2024). A Study of Emotion Regulation Difficulties, Repetitive Negative Thinking, and Experiential Avoidance in Adults with Stuttering: A

- Comparative Study. *Iranian Journal of Psychiatry*, 19(1), 79-85.
4. DEREIX-CALONGE, Iduar, et al. Repetitive negative thinking longitudinally predicts the psychological adjustment of clinical psychology trainees. *Psicología Conductual*. 2020; 28(2): 227-43.
 5. BANDELOW, Borwin; MICHAELIS, Sophie; WEDEKIND, Dirk. Treatment of anxiety disorders. *Dialogues in clinical neuroscience*. 2017; 19(2): 93-107.
 6. Association, A.P. *Diagnostic and Statistical of Mental Disorders*. 5th ed. USA: American Psychiatric Association. 2013.
 7. Clarke, E, & Kiropoulos, L. A. Mediating the relationship between neuroticism and depressive, anxiety and eating disorder symptoms: The role of intolerance of uncertainty and cognitive flexibility. *Journal of Affective Disorders Reports*. 2021; 4, 100101
 8. Agahheris, M, Goodarzi, G, & Rahravi, G.. (2021). The efficacy of Music for the mind applying on anxiety sensitivity among females with uterine, ovary, and breast cancer. *International Journal of Applied Behavioral Sciences*, 8(2), 70-80.
 9. Kia MS, Hashemian K, Abolmaali K. Comparison of Effectiveness of Transactional Analysis, Exposure and Response Prevention and Intensive Short Term Dynamic Psychotherapy on Students' Academic Anxiety. *International Journal of Applied Behavioral Sciences*. 2023;10(2):1-8.
 10. Gueserse M, Zali A, Hassanzadeh S, Hatami M, Ahadi M. The Effectiveness of Transcranial Direct Current Stimulation (TDCS) on Anxiety, Depression, and Physical Symptoms of People with Chronic Pain. *International Journal of Applied Behavioral Sciences*. 2021 Jan 1;8(3):52-62.
 11. Wetherall, K, Robb, K. A, & O'Connor, R. C. (). Social rank theory of depression: A systematic review of self-perceptions of social rank and their relationship with depressive symptoms and suicide risk. *Journal of affective disorders*. 2019; 24(6): 300-319.
 12. Hagerty B, Bathish M, Kuchman T. Development and testing of a self-regulation model for recurrent depression. *Journal of Health Psychology*. 2018; 25(10): 1-11.
 13. Kean, J Hsu, Mullarkey, M, Dobias, M, Beevers, C. Symptom-level network analysis distinguishes the unique associations of repetitive negative thinking and experiential avoidance on depression and anxiety in a transdiagnostic clinical sample. *Psychol Psychother*. 2022; 10(22): 193-216.
 14. Hinduja S, Darzi A, Ertugrul IO, Provenza N, Gadot R, Storch E, Sheth S, Goodman W, Cohn J. Multimodal prediction of obsessive-compulsive disorder, comorbid depression, and energy of deep brain stimulation. *Authorea Preprints*. 2024 Jan 26. 1-16.
 15. Zhu C, Huang Y, Zhu W, Jiang X, Liang Y, Tang W, Xu Z. Comparison of Disease Severity, Anxiety and Depression in Obsessive-Compulsive Disorder Patients with Different Insight. *Actas Españolas de Psiquiatría*. 2024 Feb 5;52(1):10-8.
 16. Cui, Q, Sheng, W, Chen, Y, Pang, Y, Lu, F, Tang, Q, Chen, H. Dynamic changes of amplitude of low-frequency fluctuations in patients with generalized anxiety disorder. *Human brain mapping*. 2020; 41(6): 1667-1676.
 - 17- Xu J, Ironside ML, Broos HC, Johnson SL, Timpano KR. Urged to feel certain again: The role of emotion-related impulsivity on the relationships between intolerance of uncertainty and OCD symptom severity. *British Journal of Clinical Psychology*. 2024 Feb 13.
 18. Hunt, C. Differences in OCD symptom presentations across age, culture, and gender: A quantitative review of studies using the Y-BOCS symptom checklist. *Journal of Obsessive - Compulsive and Related Disorders*. 2021; 26 (17):100533.
 19. Trafford, A. A, Wroe, A. L, Brown, G, & Luzon, O. What You See is What You Do: magery and the Moral Judgements of Individuals with OCD. *Journal of Obsessive -Compulsive and Related Disorders*. 2018; 16 (1): 50 -55.
 20. Van Oosterom, A. T. The influence of obsessions on the relationship between intolerance of uncertainty and drive for activity in anorexia nervosa. 2021. (Master's thesis). 47, 777-780
 21. Minawi, Nawal. Examining the relationship between anxiety, depression and obsession with negative thoughts. The 7th international conference of knowledge and technology of educational sciences, social studies and psychology of Iran. Payam Noor University of Khuzestan. Iran. 2021.
 22. Hayes SC, Wilson KG, Gifford EV, Follette VM, Strosahl K. Experiential avoidance and behavioral disorders: a functional dimensional approach to diagnosis and treatment. *J Consult Clin Psychol*. 1996; 64:1152-68.
 23. Marx BP, Sloan DM. Peritraumatic dissociation and experiential avoidance as predictors of posttraumatic stress symptomatology. *Behav Res Ther*. 2005; 43:569-83.
 24. Ahmadi F, Goodarzi MA, Taghavi MR, Imani M. Modeling the structural relationships between trauma exposure with substance use tendency, depression symptoms, and suicidal thoughts in individuals with earthquake trauma experience: the mediatory role of peritraumatic dissociation and experiential avoidance. *BMC psychiatry*. 2024 Mar 1;24(1):171-181.
 25. Browning, M. E, Van Kirk, N. P, & Krompinger, J. W. Examining depression symptoms within OCD: the role of experiential avoidance. *Behavioural and Cognitive Psychotherapy*. 2022; 50(4): 367-380.
 26. Gushanas, K. L. The role of parental experiential avoidance (PEA) in the accommodation of pediatric obsessive-compulsive disorder (POCD). 2019. (Doctoral dissertation). 367-380.
 27. Yarollahi, N. A, & Shairi, M. R. Investigation the role of experiential avoidance on anticipation general health in non-clinical samples. *Shenakht journal of psychology & psychiatry*. 2018; 5(3):1-11. Doi: 10.29252/shenakht.5.3.1.
 28. Ferreira, C, Palmeira, L, Trindade, I. A, & Catarino, F. When thought suppression backfires: its moderator effect on eating psychopathology. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*. 2015; 20(3):355-362.
 29. Kachooei, M, Ashrafi, E, Momeni Rouchi, M, Hosseinpour, A, & Hafezi, P. Prediction of eating disorder symptoms among female students based on experiential avoidance and mindfulness. *Medical Science Journal of Islamic Azad University-Tehran Medical Branch*. 2019; 29(1): 92-99.
 30. Camilla, C, Olga, L, Newland, J, Kingston, J. Examining the role of cognitive fusion and experiential avoidance in predicting anxiety and depression. *Psychol Psychother*. 2020; 93(3): 456-473. doi: 10.1111/papt.12233.
 31. Spielberger CD, Gorsuch RL, Lushene R, Vagg PR, Jacobs GA. *Manual for the State-Trait Anxiety Inventory*; Palo Alto, CA, Ed. Palo Alto: Spielberger. 1983.
 32. Zanganeh Qashlaghi, et al. The effectiveness of cognitive behavioral therapy on depression and anxiety in women with breast cancer. *Journal of the Faculty of Medicine of Mashhad University of Medical Sciences*. 2020; 63(5): 2967-2974.
 33. Beck, A. T, Alford, B. A. *Depression: Causes and treatment*; University of Pennsylvania Press. 2009.
 34. Salarifer M, PourEtemad R. The relationship between metacognitive beliefs and depressive disorder and anxiety. *Journal of Revelation*. 2011; 13 (4): 29-38. (Persian).
 35. HATAMIAN, Peyman, et al. The Relationship between Emotional Disorder and Repeated Negative Thoughts with Body

Image Concern Due to the Mediating Role of Family Support in Women Applying for Cosmetic Surgery. *Iranian Journal of Psychiatric Nursing*. 2022; 10(1): 18-27.

3. McEvoy PM, Mahoney AE, Moulds ML. Are worry, rumination, and post-event processing one and the same: Development of the Repetitive Thinking Questionnaire. *Journal of anxiety disorders*. 2010 Jun 1;24(5):509-19.

36. Hatamian P, Moradi A. Comparing Unhealthy Eating Behaviors and Attitudes and Negative Repeating Thoughts in Night Shift and Day Shift Nurses. *Iranian Journal of Psychiatric Nursing*. 2018 Feb 10;5(6):31-6.

37. Hodgson, R. J, & Rachman, S. Obsessional compulsive complains. *Behaviour Research and Therapy*. 1977; 15(5): 389-395.

38. Ghassemzadeh, H, Mojtabai, R, Khamseh, A, Ebrahimkhani, N, Issazadegan, A. A, & Saif-Nobakht, Z. Symptoms of OCD in a sample of Iranian patients. *International Journal of Social Psychiatry*. 2002; 48(1): 20-28.

39. Ghassemzadeh, H, Khamseh, A, & Ebrahimkhani, N. Demographic variables and clinical features of obsessive-compulsive disorder In Iranian patients (Second report), In B. E. Ling (Ed.), *Obsessive-compulsive disorder research*. 2005; New York: Nova Science Publishers, Inc. 243-271.

40. Bond, F.W, Hayes, S.C, Baer, R.A, Carpenter, K.M, Guenole, N, Orcutt, H.K, et al. (). Preliminary psychometric properties of

the Acceptance and Action Questionnaire-II: a revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy*. 2011; 42(4): 676-88.

41. Abbasi, Imane; Fetty, Laden; Molodi, Reza and Zarrabi, Hamid. psychometric adequacy of the Persian version of Acceptability and Practice Questionnaire - Second Edition, *Psychological Methods and Models*. 2013; 2(10): 65-80.

42. Mehrabi, Ali; Mohammad Khani, Parvaneh; Dolatshahi, Abbas; Porschehbaz, Gholamreza; Khairabadi, Gholamreza. Investigating the mediating role of emotion dysregulation in the relationship between negative affect, dysfunctional attitudes and negative automatic thoughts with depression symptoms. *Cognitive and behavioral science research*. 2022; 1(2): 112-131.

43. Ardestani, Shirin; Ki Khosravani, Mavlad; Amini, Naser. The effectiveness of acceptance and commitment therapy on experiential avoidance, uncertainty intolerance and positive metacognitive beliefs in women with obsessive compulsive disorder. *A biannual journal of adolescent and youth psychological studies*. 2022; 3(1):209-221.

44. Ameri, Narjes; Najafi, Mahmoud. Investigating the mediating role of psychological distress (stress, anxiety and depression) in the relationship between experiential avoidance and obsessive-compulsive symptoms in students. *Psychological studies*. 2021.17(4):11-31

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