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Research Paper

The effectiveness of therapy based on acceptance and commitment to internalized shame, anxiety sensitivity, and ataxia in infertile women

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ABSTRACT

Objective: The purpose of this study was to determine the effectiveness of treatment based on acceptance and commitment on internalized shame, anxiety sensitivity, and alexia in infertile women.

Methods: The present research method was semi-experimental with a pre-test-post-test design with a control group. The statistical population included all the infertile women of Ali Ibn Abi Talib Hospital in Zahedan city in 2022. The sample size was 40 infertile women who were selected through available sampling. They were randomly assigned to two experimental and control groups (20 experimental subjects and 20 control subjects). The participants in the experimental group received 8 sessions of acceptance and commitment-based treatment, each lasting 60 minutes, while the control group did not receive any intervention. To collect data from the questionnaire, Taylor and Cox's (1998) anxiety sensitivity, Rajabi and Abbasi's internalized shame questionnaire (2013), and Toronto Besharat's personality disorder questionnaire (2007) were used. The covariance analysis method was used to analyze the data.

Results: The results showed that the treatment based on acceptance and commitment led to a significant decrease in internal shame, anxiety sensitivity, and dyslexia in infertile women in the experimental group compared to the control group.

Conclusion: Also, the results of the covariance analysis showed that it is possible to benefit from treatment based on acceptance and commitment to reduce internalized shame, anxiety sensitivity, and dyslexia in infertile women.

1. Introduction

Infertility, as one of the most bitter experiences in life, is a complex crisis in married life. This phenomenon is defined as the inability to conceive after one year of sexual intercourse, without using any contraceptive method (Nayar & Hamaran, 2020). It affects a person's life, including marital, social, physical, emotional, economic, and spiritual aspects. (Oztarak, Abausik, 2021). Infertility is both an individual and private issue as well as a public and social issue. Infertility is not only a medical problem, but also often the lives of infertile couples face crises in all dimensions. In demography, infertility or the inability to conceive is indirectly defined by the frequency of married women who have failed to conceive a live child after a period of time.

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According to the World Health Organization, the clinical definition of infertility is the inability to conceive after one year of natural, continuous, and unprotected intercourse. (Karami Nouri et al., 2018). is considered; Therefore, infertility as a stressful factor affects women emotionally and socially. The World Health Organization defines infertility as the failure of a couple to conceive after one year of marital relations without using contraceptive methods. According to studies, about 50-80 million people in the world experience some type of infertility (Mousavi et al., 2013). Infertility often brings crisis in the lives of infertile couples in all dimensions. Wives who are in this critical situation are more prone to depression, anxiety, and low self-confidence than others (Khosravi, 2010). Various studies have shown the presence of depression and anxiety in infertile couples (Rojoei, 1996). Infertile couples experience a variety of infertility-related stressors, including changes in family and social networks, pressure on sexual relationships, and unexpected problems and challenges, which are associated with depression and psychological distress and can cause grief and unresolved feelings (Brennan & Greg, 2011). Infertility is associated with a wide range of psychological harms, including reduced quality of life, self-esteem, sexual and emotional dissatisfaction, increased stress levels, anxiety and depression, anger, feelings of inferiority, feelings of inefficiency, sexual dysfunction, and marital problems (Samadi, 2016).

According to the conducted research, a degree of dyslexia, anxiety, and internal shame has been reported in infertile women. The feeling of shame is an extremely painful emotion that is associated with shrinking, humiliation, worthlessness, and incapacity, and in it, there is an inward-looking hostility (Jokar & Jamali, 2005). It is defined as depressive feelings such as hopelessness, stupidity, and the desire to avoid being around others for fear of rejection. Infertility is an important and influential disease in a person's married life, and it is directed at the person himself; it causes internal shame in women. Shame is one of the most important self-conscious emotions that has a significant impact on a person's sense of self, well-being, and vulnerability to psychological and personality disorders (Matos et al., 2015). Anxiety sensitivity also appears to be a psychological instrument that affects anxiety (Stork et al., 2023; Hatami Nejad, Mikaeili & Sadeghi, 2024). Anxiety sensitivity has led to an increase in anxiety responses, and it is possible that related responses start with fear and cause the avoidance levels to rise. This structure plays an important role in the maintenance and stability of anxiety-related symptoms (Asnaani et al., 2020). People with high anxiety sensitivity often react negatively to anxiety symptoms. Show that, while people with low anxiety sensitivity may experience these symptoms as unpleasant, they do not consider them threatening (Kearns et al., 2018). Anxiety sensitivity is a kind of tendency to fear anxiety-related feelings. It is assumed to be a cognitive risk factor for anxiety disorders (Krebs et al., 2020). Anxiety sensitivity is the fear of feelings related to anxiety, which is caused by the belief that these feelings pose a physical, social, or psychological threat to a person. (McNally, 2003) Anxiety sensitivity as a general concept includes three lower-order factors of fear of bodily sensations (physical concerns), fear of publicly visible signs (social concerns), and fear of lack of cognitive control.

The inability to cognitively process emotional information and regulate emotions is called ataxia (Taylor & Bagby, 2000). Aphasia is a type of disorder in emotional and cognitive functioning, and it expresses the inability to understand, process, and explain emotions, which creates a wide range of problems in cognitive processing and the regulation of emotions. In these cases, the person is unable to describe feelings and emotions (Bremir, 2021). Studies conducted by Messina et al (2021) and Steward et al (?) have shown that various variables, such as dyslexia, can affect the psychological health levels of people. They will have an effect, and in this way, they will also impact the improvement process of physiological disorders. Therefore, ataxia is related to the lack of description and recognition of emotions in people with diabetes and creates the necessary preparation for emotional and mood problems. The personality structure of ataxia is considered a stable personality trait in healthy people. Sipheus defined the term alexia as mental and physical symptoms that sufferers are unable to identify and express emotions. Ataxia is characterized by several features: a) difficulty in identifying emotions, b) difficulty in describing emotions, and c) extroverted thinking.

Acceptance and Commitment Therapy was popularized in the 1980s by Steven Hayes (1987) at the University of Nevada. Act, meaning action, is an interesting acronym because this therapy is about taking effective action guided by our deepest values, while we are fully prepared and committed. It is only through conscious action that we can make a life meaningful. Of course, as soon as we started our efforts to build such a life, we would face all kinds of obstacles in the form of unwanted and undesirable inner experiences. ACT teaches us the effective skills of awareness to manage these inner experiences. Acceptance and commitment therapy is a transdiagnostic treatment approach that targets the main processes of psychological disorders (Choi & Kim, 2017). Unlike other cognitive behavioral therapies, acceptance and commitment therapy seeks to change the impact of thoughts and feelings on behavior by changing the individual's relationship with thoughts and feelings as opposed to changing the content of thoughts (Bram et al., 2020).

In particular, acceptance and commitment therapy helps people develop skills to interact with thoughts and feelings. Create themselves in order to better help their needs and values (Vanzin et al., 2020). The main processes of therapy based on acceptance and commitment seek to teach people how to stop inhibiting thoughts, how to get rid of disturbing thoughts, and how to tolerate the unpleasant more (Hayes & Lillis, 2012). Treatment based on acceptance and commitment is called the theory of the four sticks of mental relations. According to Hayes et al. 2006, ACT therapy has six central processes that lead to psychological flexibility: acceptance, cognitive dissonance, self as context, connection of conscious attention to the present, values, and commitment to action, resulting in this core concept of flexibility. In a research, Basereh et al. (2024) showed that treatment based on acceptance and commitment has a positive effect on self-compassion, quality of life, and marital commitment of women seeking divorce. ACT targets the core of problems, and its overall goal is to increase psychological flexibility as well as the ability to contact the present moment as fully as possible and change behavior in order to serve values. (Harris, 2006). According to the mentioned cases, the present study seeks to answer the question of whether treatment based on acceptance and commitment to internalized shame, anxiety sensitivity, and ataxia has an effect on infertile women.

2. Materials and Methods

The current research method was semi-experimental with a pre-test-post-test design with a control group. In this research, acceptance-based therapy was considered as an independent variable, and internalized shame, anxiety sensitivity, and ataxia in infertile women were considered as dependent variables. Society. The statistics of this study included all the infertile women of Ali Ibn Abi Talib Hospital in Zahedan in 2022. In this study, 40 infertile women were voluntarily selected as a sample size from the statistical population and randomly assigned to two experimental (20) and control (20) groups. The data were analyzed using SPSS-26 software through descriptive analysis of mean and standard deviation indicators, and were analyzed by multivariate covariance analysis to check the effectiveness of the intervention. The entry criteria for the subjects included women with at least a diploma and an age range of 20 to 50. The exit criteria included receiving psychological and counseling services and not attending more than 2 sessions of the treatment program based on acceptance and commitment.

Measuring tools:

Cook's Internalized Shame Questionnaire: Cook's standard internalized shame questionnaire was prepared in 1993 and includes 30 items and two subscales of shyness and self-esteem. The answer to each item of this scale is 2 degrees of Likert type. Grading is done in reverse, so that high scores in this scale indicate worthlessness, incompetence, feelings of inferiority, emptiness, and loneliness, and low scores indicate high self-confidence. Cronbach's alpha reliability coefficients for the shyness and self-esteem subscales were 0.94 and 0.90, respectively. Also, Rajabi & Abbasi (2013) reported Cronbach's alpha reliability coefficients of the internalized shame scale as 0.90 in the whole sample, 0.89 in men, and 0.91 in women.

Revised anxiety sensitivity questionnaire: The revised initial anxiety sensitivity questionnaire was created in 1985 by Rice and Patterson, which had 26 items and 3 subscales. This questionnaire has a relatively small number of items and mostly measures the factor of fear of physical symptoms. Taylor & Cox (1998) prepared the revised form of the Anxiety Sensitivity Index, replacing many vague and incomprehensible irrelevant questions with more appropriate ones. And they increased the dimensions of the questionnaire from 3 to 4 dimensions and the number of items in the questionnaire from 16 to 36. They also reported the internal consistency coefficient of the questionnaire based on Cronbach's alpha for factors 1 to 4 as 0.91, 0.86, and 0.88, respectively, and the correlation coefficient between the revised anxiety sensitivity index and the initial anxiety sensitivity index was 0.94. This questionnaire was standardized by Moradi Manesh (2006) in Iran. The result of the confirmatory factor analysis using Varimax rotation and based on the Scree questionnaire indicates the presence of 4 factors: fear of cardiovascular and gastrointestinal symptoms, fear of respiratory symptoms, fear of anxiety reactions visible in the crowd, and fear of lack of cognitive control in this index, which explained more than 58% of the total variance of the questionnaire. The reliability of the revised index of anxiety sensitivity was calculated based on three methods of internal consistency, retesting, and classification, and the reliability coefficients of 0.93, 0.95, and 0.97 were obtained for the whole scale, respectively. Also, the validity coefficients of the subscales and the validity of the index were high.

Toronto Mood Dysfunction Questionnaire: The Toronto Mood Dysfunction Scale (Bagby et al., 1994) is a 20-question test comprising three subscales: difficulty in identifying feelings, difficulty in describing feelings, and objective thinking in five-point Likert scales ranging from 1 (Totally disagree) to 5 (Totally agree). A total score is also calculated from the sum of the scores of three subscales for general mood dysphoria. The psychometric properties of the Toronto mood dysphoria scale-20 have been examined and confirmed in numerous studies (Parker, et al, 2003); Palmer, Gigance, Mauka and Staff, 2004;

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Pandy, Mandal, Taylor and Parker, 1996; Taylor & Bagby, 2000) in the Persian version of the Toronto-20 mood dysphoria scale (Bashart, 2007a, 2007b, 2008). Cronbach's alpha coefficients for total mood dysphoria and three subscales of difficulty in recognizing emotions, difficulty in describing emotions, and objective thinking are 0.82 and 0.85, respectively. 0, 0.75, and 0.72 were calculated, indicating good internal consistency of the scale.

Execution method: After obtaining the necessary permission to submit the questionnaire and specify the sample, the number of subjects with the prepared question sheet and answer sheet was referred to the Amir al-Mominin Hospital in Zahedan. After announcing the topic of the research and the conditions of participation in the intervention sessions of this research, the ethical consent form was completed by the people participating in the research. After distributing the questions and answer sheets of all three questionnaires, the necessary and sufficient explanation about each test and how the subjects answered the questions was provided.

In addition, the subjects were told to answer the test questions honestly and without bias. The time required to answer each of the questionnaires was collected. The group treatment training program based on the acceptance and commitment protocol of Hayes et al. (2004) was presented to the experimental group in 8 1-hour sessions, once a week, and no intervention was done in the control group. In this research, the data were analyzed using the multivariate analysis of covariance test.

Table 1. Summary of therapy sessions based on acceptance and commitment

Session	Session description
First	Getting to know the treatment process and meetings, establishing relationships with group members, psychological training, and distribution of questionnaires
Second	Discussing experiences and evaluating them, efficiency as a measure, and the creation of creative helplessness
Third	Reviewing the assignment of the previous session, expressing control as a performance measurement problem
Fourth	Reviewing the experiences of the previous session, reviewing the task and behavioral commitment, introducing the fault, using cognitive fault techniques, interfering in the performance of problematic language chains, and weakening one's alliance with thoughts and emotions.
Fifth	Reviewing the experiences of the previous session, reviewing the task and behavioral commitment, observing the self as context, weakening the self-concept and self-expression as an observer, and showing the separation between the self, internal experiences, and behavior.
Sixth	Reviewing the experiences from the previous performance measurement session, application of mindfulness techniques, the conflict between experience and mind, modeling exit from the mind, and training to see inner experiences as a process.
Seventh	Reviewing the experiences of the previous meeting, reviewing assignments, measuring performance, introducing the concept of value, showing the dangers of focusing on results, and discovering the practical values of life.
Eighth	Reviewing the experiences of previous meetings, reviewing homework, understanding the nature of desire and commitment, and determining action patterns in accordance with values

3. Results

In Table 2, the descriptive statistics related to the mean and standard deviation of the scores of the internalized shame, anxiety sensitivity, and ataxia variables are shown separately for the experimental and control groups in two measurement stages (pre-test and post-test). As can be seen, the average scores of the control group in the post-test compared to the pre-test do not show much difference. While in the experimental group, we see a greater decrease in scores in the post-test than in the pre-test.

Table 2. Statistical description of the scores of internalized shame, anxiety sensitivity, and ataxia in two stages of measurement according to experimental and control groups

Variable	group	the level	Number	mean	The standard deviation
internalized shame	Control	pre-test	20	3.600	0.556
		post-test	20	3.610	0.508
	experiment	pre-test	20	3.720	0.443
		post-test	20	3.020	0.409
Anxiety sensitivity	Control	pre-test	20	3.500	0.566
		post-test	20	3.510	0.566
	experiment	pre-test	20	3.800	0.447
		post-test	20	3.000	0.409
Ataxia	Control	pre-test	20	3.590	0.500
		post-test	20	3.580	0.488
	experiment	pre-test	20	3.600	0.335
		post-test	20	3.440	0.309

In order to investigate the effectiveness of treatment based on acceptance and commitment on internalized shame, anxiety sensitivity, and alexia of infertile women, analysis of covariance (ANCOVA) was used. Before conducting this test, the statistical assumptions of the normality of the distribution of scores were checked using the Kolmogorov-

Smirnov test, the homogeneity of variances using the Levine test, and the equality of the slope of the regression line. It is unimpeded by the analysis of covariance test.

Table 3. The results of the covariance analysis for the interaction between anxiety sensitivity and ataxia in the experimental group and the control group

Variable	sum of squares	Df	mean square	F	Sig	Effect size
internalized shame	1.740	1	8.410	1.120	0.002	0.459
Group	2.034	1	5.640	2.200	0.003	0.127
Anxiety sensitivity	0.565	1	15.000	1.023	0.001	0.500
Group	2.321	1	9.990	2.345	0.003	0.218
Ataxia	129.2	1	5.550	2.270	0.000	0.370
Group	1.000	1	8.400	1.133	0.000	0.139

In Table 3, one-way between-group covariance analysis was performed to compare the effect of treatment based on acceptance and commitment on internalized shame, anxiety sensitivity, and ataxia. The independent variable of treatment was based on acceptance and commitment, and the dependent variable was the internalized shame test scores, anxiety sensitivity, and alexia. The scores of individuals in the pre-intervention implementation were used in this analysis. The results of the test, respectively (P=0.002, F=120), (P=0.003, F=345), and (P=0.000, F=270), indicate the great effect of acceptance-based treatment. And commitment is anxiety sensitivity, ataxia.

4. Discussion and Conclusion

The present study was conducted with the aim of investigating the effectiveness of treatment based on acceptance and commitment for internalized shame, anxiety sensitivity, and alexia of infertile women. The findings of this research showed that treatment based on acceptance and commitment reduced internal shame, anxiety sensitivity, and alexia in infertile women.

The feeling of shame is an extremely painful emotion that is associated with shrinking, humiliation, worthlessness, and incapacity, and in it, there is an inward-directed hostility (Jokar & Jamali, 2014). It is defined as depressive feelings such as hopelessness, stupidity, and the desire to avoid being around others for fear of rejection. Since infertility is an important and influential disease in a person's married life and is directed at the person themselves, internal shame is created in women. Acceptance and commitment therapy to manage these internal experiences teaches effective mindfulness skills that reduce internalized shame.

Treatment based on acceptance and commitment seeks to teach people how to stop inhibiting thoughts, how to get rid of disturbing thoughts, and how to tolerate unpleasant emotions more (Hayes & Lillis, 2012), and this reduces anxiety sensitivity. Anxiety sensitivity is the fear of anxiety-related feelings that comes from the belief that these feelings pose a physical, social, or psychological threat to a person (McNally, 2003). Anxiety sensitivity as a general concept includes the three lower-order factors of fear of bodily sensations (physical concerns), fear of publicly visible signs (social concerns), and fear of lack of cognitive control.

He defined alexia as mental and physical symptoms that sufferers are unable to identify and express emotions. Ataxia is characterized by several features: a) difficulty in identifying emotions, b) difficulty in describing emotions, and c) extroverted thinking. Difficulty in identifying emotions occurs when a person is weak in identifying emotions and bodily sensations or in differentiating between different emotions. A failure to explain emotions means a reduced capacity to use language to communicate emotions and symbols of emotions. Extraverted thinking happens when a person tends to think externally about doing various things, which is the opposite of internal thinking. According to research, high levels of dyslexia are inversely related to the ability to establish and maintain intimate relationships, marital and sexual satisfaction (Najafi et al., 2017).

Among the limitations of the current research, the large number of questions in the questionnaires of the research led to the prolongation of its implementation time, so it is appropriate to be careful in the generalization of the results. The statistical population of this research was the infertile women of Amir Mominin Hospital in Zahedan, which will be compared with the results of this research by conducting similar research in other hospitals across the country. And it is suggested that treatment based on acceptance and commitment should be investigated with things like self-esteem and stress.

5. Ethical Considerations

Compliance with ethical guidelines

Compliance with ethical guidelines, all ethical principles are considered in this article. The participants were informed about the purpose of the research and its implementation stages. They were also assured of the confidentiality of their information and were free to leave the study at any time. If desired, the research results would be made available to them.

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Authors' contributions
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Conflicts of interest
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References:

Asnaani, A., Tyler, J., McCann, J., Brown, L. and Zang, Y. (2020). Anxiety sensitivity and emotion regulation as mechanisms of successful CBT outcome for anxiety-related disorders in a naturalistic treatment setting. Journal of Affective Disorders, 267: 86-95. Doi:10.1016/j.jad.2020.01.160

Bagby, R. M, Parker, J. D. A, & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale-I. Item selection and cross-validation of the factor structure. Journal of Psychosomatic Research, 38, 23-32. Doi:10.1016/0022-3999(94)90005-1

Basereh, S., Ghamari, M., Alijani, F., & Jafari, A. (2024). The Effect of Acceptance and Commitment-based Therapy on Self-Compassion, Quality of Life, and Marital Commitment of Women Who Filed for Divorce. *Journal of Family Relations Studies*, *4*(13), 4-12. Doi:10.22098/jhrs.2022.11821.1085

Besharat, M. A. (2007a). Reliability and factorial validity of a Farsi version of the Toronto Alexithymia Scale with a sample of Iranian students. Psychological Reports, 101, 209-220. Doi:10.2466/pr0.101.1.209-220

Besharat, M. A. (2007b). Assessing reliability and validity of the Farsi version of the Toronto Alexithymia Scale in a sample of substance-using patients. Psychological Reports, 102, 259-270. Doi:10.2466/pr0.102.1.259-270

Besharat, M. A. (2008). Psychometric characteristics of a Persian version of the Toronto Alexithymia Scale-20 in clinical and non-clinical samples. Iranian Journal of Medical Sciences, 33, 1-6. https://ijms.sums.ac.ir/article_39805.html

Brem, M. J., Coop Gordon, K., & Stuart, G. L. (2020). Integrating acceptance and commitment therapy with functional analytic psychotherapy: A case study of an adult male with mixed depression and anxiety. Clinical Case Studies, 19(1), 34- 50. Doi:10.1177/1534650119883351

Bremner, J. D. (2021). Isotretinoin and neuropsychiatric side effects: Continued vigilance is needed, Journal of Affective Disorders Reports; 6, 100230-100245 Doi:10.1016/j.jadr.2021.100230

Choi, D., & Kim, S. (2017). An integrative review of acceptance and commitment therapy (ACT) for mental health problems. Korean Journal of Stress Research, 25(2), 75-85. Doi:10.17547/kjsr.2017.25.2.75

Harris, R. Embracing your demons: an overview of acceptance and commitment therapy. Psychotherapy in Australia 2006; 4: 70 – 6. Doi:10.3316/informit.545561433272993

Hatami Nejad, M., Mikaeili, N., & Sadeghi Niri, E. (2024). Modeling the Role of Parent-Child Conflict in Predicting Social Anxiety with the Mediation of Anxiety Sensitivity. *Journal of Family Relations Studies*, *4*(14), 4-13. Doi:10.22098/jfrs.2024.14903.1184

Hayes SC, Luoma JB, Bond FW, Masuda A, Lillis J. (2006). Acceptance and Commitment Therapy: Model, processes, and outcomes. Behavior Research and Therapy. 44:1 –25 Doi:10.1016/j.brat.2005.06.006

Hayes, S.C, & Lillis, J. (2012). Acceptance and Commitment Therapy. American Psychological Association (Theories of Psychotherapy Series*)*. https://www.apa.org/pubs/books/4317286

Karmi Nouri, Reza, Akhundi, Mohammad Mahdi, & Behjati Ardakani, Zohra. (1380). Psycho-social aspects of infertility from the point of view of Iranian doctors. Fertility and Infertility (JOURNAL OF REPRODUCTION AND INFERTILITY), 2(3 (series 7)), 13-25. SID. https://sid.ir/paper/358077/fa

Krebs, G., Hannigan, L. J., Gregory, A. M., Rijsdijk, F. V., & Eley, T. C. (2020). Reciprocal links between anxiety sensitivity and obsessive–compulsive symptoms in youth: a longitudinal twin study. Journal of Child Psychology and Psychiatry, 61(9), 979-987. Doi:10.1111/jcpp.13183

Kearns, N., Villarreal, D., Cloutiera, R., Baxley, C., Carey, C., & Blumenthal, H. (2018). Perceived control of anxiety as a moderator in the relationship between anxiety sensitivity and problematic alcohol use among adolescents. Journal of Adolescrnce, 63, 41-50. Doi:10.1016/j.adolescence.2017.12.009

Jokar, Bahrami; Etemad, Jalali; Rahpima, Samira. (2005) Predicting Happiness Based on Feelings of Shame and Guilt: A Study of the Role of Gender Moderation, Journal of Psychological Studies, No. 0, pp. 67-86 Doi:10.22051/psy.2015.1953

Matos, M., Pinto-Gouveia, J., Gilbert, P., Duarte, C., & Figueiredo, C. (2015). The Other As Shamer Scale–2: Development and validation of a short version of a measure of external shame. Personality and individual differences, 74, 6-11. Doi:10.1016/j.paid.2014.09.037

McNallay,R.J.(2003).Progress and controversy in the study of posttraumatic stress disorder.Annual review of psychology,54(1),229-252. Doi:10.1146/annurev.psych.54.101601.145112

Messina, I., Alessandro, G., & Viviani, R. (2021). Neurobiological models of emotion regulation: a meta-analysis of neuroimaging studies of acceptance as an emotion regulation strategy. Journal Social Cognitive and Affective Neuroscience; 16(3), 257-267. Doi:10.1093/scan/nsab007

Najafi, Mahmoud; Roshani, Fereshteh; Naqshbandi, Shahram; Malekzadeh, Parviz. (2017). Comparison of Mood Disorder in People without Attention Deficit / Hyperactivity Disorder. Clinical Psychology, 9 (2): 73-82. Doi:10.22075/jcp.2017.11204.1109

Nayar, K.D., Nayar, P., Gupta, S., Singh, M., Bhattacharya, R., Kant, G., Gahlot, M.S.R., Nayar, K.D. (2020). Impact of endometriosis on anxiety, depression, and quality of life and its association with pregnancy outcomes in infertile patients at a tertiary level infertility centre in India. Fertility and Sterility, 114(3), 211-215. Doi:10.1016/j.fertnstert.2020.08.598

Ozturk, A., Aba, Y.A., Sik, B.A. (2021). The relationship between stigma, perceived social support, and depression in infertile Turkish women undergoing in vitro fertilization-embryo transfer. Archives of Psychiatric Nursing, 35(5), 434-440 Doi:10.1016/j.apnu.2021.05.009

Parker, J. D. A, Taylor, G. J, & Bagby, R. M. (2003). The 20-item Toronto Alexithymia Scale-III. Reliability and factorial validity in a community population. Journal of Psychosomatic Research, 55, 269-275. Doi:10.1016/s0022-3999(02)00578-0

Rajabi, G., & Abasi, G. A. (2012). Examining the relationship between self-criticism, social anxiety, and fear of failure with shyness in students. Research in Clinical Psychology and Counseling, 1(2), -. Doi:10.22067/ijap.v1i2.9837

Rojoie, Maryam. (1996). Psychological aspects of infertility. Psychological research. Fourth year 3 (4), 72-88. http://noo.rs/ULLy8

Samadi, H. (2016). Investigating the effectiveness of Acceptance and Commitment Therapy (ACT) on marital compatibility and life expectancy in infertile women.Basic psychology master's thesis, Islamic Azad University, Science Research Khorasan Razavi (Nishapur). (Persian) https://jtbcp.riau.ac.ir/article_1045.html?lang=en

Stork, M., Lemos, M., & Román-Calderón, J. P. (2023). Differences in anxiety sensitivity and experiential avoidance between subtypes of social anxiety disorder. *PLOS ONE*, 18(9), e0290756. Doi:10.1371/journal.pone.0290756

Taylor, S. & Cox, Bj. (1998). An expanded Anxiety Sensitivity Index: evidence for a hierarchic structure in a clinical sample. J Anxiety Disord. 1998;12:463-83. Doi:10.1016/s0887-6185(98)00028-0

Taylor, G. J, & Bagby, M. (2000). An overview of the alexithymia construct. In R. Bar-On & J. D. A. Parker (Eds.), The handbook of emotional intelligence (pp. 263-276). San Francisco: Jossey-Bass. Doi:10.1016/s0033-3182(91)72086-0

Vanzin, L., Mauri, V., Valli, A., Pozzi, M., Presti, G., Oppo, A., ... E Nobile, M. (2020). Clinical effects of an ACT-group training in children and adolescents with attention-deficit/hyperactivity disorder. Journal of Child and Family Studies, 29(4),1070-1080. Doi:10.1007/s10826-019-01546-x