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Comparison of the Effectiveness of Mindfulness-Based Therapy and Transactional Analysis on Sexual Function and Sexual Satisfaction in Female Patients with Bipolar Disorder

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A B S T R A C T

Objective: The aim of this study was to compare the effectiveness of mindfulness-based therapy and transactional analysis on sexual function and sexual satisfaction in female patients with bipolar disorder.

Methods: In this study, 20 women with bipolar disorder who referred to the Gyrus Specialty Neurology and Psychiatry Clinic in Tehran from April to August 2022 were selected through purposive sampling and randomly assigned to three groups: mindfulness-based therapy, transactional analysis therapy, and a control group. All participants completed the Female Sexual Function Index (FSFI) by Rosen et al. (2000) and the Sexual Satisfaction Scale by Larson et al. (1998) before and after the intervention. The mindfulness-based therapy group underwent eight 90-to-120-minute sessions held twice a week, while the transactional analysis group received treatment in nine 60-to-120-minute sessions held twice a week. Data were analyzed using descriptive statistics and repeated measures analysis.

Findings: The results indicated that both mindfulness-based therapy and transactional analysis therapy had an effect on sexual function and sexual satisfaction in female patients with bipolar disorder. Moreover, a comparison of the effectiveness of the two therapeutic approaches across all dimensions showed that mindfulness-based therapy had a greater impact on sexual function and sexual satisfaction in female patients with bipolar disorder compared to transactional analysis.

Conclusion: Therefore, the use of mindfulness-based therapy is recommended in psychology clinics.

Keywords: *Mindfulness-Based Therapy, Transactional Analysis, Sexual Function, Sexual Satisfaction, Bipolar Disorder*

1. Introduction

Bipolar disorder is a chronic mental disorder that ranks as one of the ten most disabling diseases globally (Çınaroğlu, 2024; Clayton & Burlingame, 2024). Bipolar disorder is a category of mood disorders characterized by the occurrence of at least one manic or mixed episode during an individual's lifetime. Most patients also experience one or more episodes of major depression at other times, with many returning to their normal state between episodes (American Psychiatric Association, 2019). This disorder typically manifests in late adolescence or early adulthood (Hassas et al., 2024). According to the Diagnostic and Statistical Manual of Mental Disorders, the 12-month prevalence of bipolar I disorder in the United States is approximately 0.6%, with prevalence rates ranging from 0.0% to 0.6% across eleven other countries. The lifetime prevalence ratio of bipolar I disorder between men and women is approximately 1.1 to 1. The international 12-month prevalence of bipolar II disorder is around 0.3% (Gabrielle, 2024; Janiri et al., 2024). Additionally, the prevalence of mood disorders in Iran is reported at 4.29%, with bipolar disorder prevalence at 0.96% (Mahini et al., 2024).

Previous research indicates that couples in which one partner has bipolar disorder report lower sexual satisfaction compared to couples without mental disorders, with differences in satisfaction levels observed between patients and their spouses (Kopeykina et al., 2016). Sexual satisfaction is defined as "an emotional response resulting from an individual's subjective evaluation of the positive and negative aspects related to their sexual relationship." Sexual satisfaction is achieved when partners' benefits exceed their expectations of what they deserve, when both partners' benefits are approximately equal, or when they feel treated fairly (Rokach & Patel, 2021). This concept is influenced by various factors, including occupational stress, marital conflicts, education and cultural levels, economic problems, ethical and sexual norms, and physical and mental health issues of the partners (Peta, 2017). In this regard, Oshaghi and Ahangari (2020) conducted a study titled "Comparison of Coping Styles and Marital Satisfaction in Patients with Bipolar Disorder and Healthy Individuals," which demonstrated a significant difference in marital satisfaction between patients with bipolar disorder and healthy individuals (Oshaghi & Ahangari, 2020).

Given the presented topic, the literature also confirms the impact of bipolar disorder on sexual function (Lee et al., 2015). Sexual function refers to how the body responds during various phases of the sexual response cycle. Aspects of sexual function include sexual desire, arousal, orgasm, and ejaculation (Agustus et al., 2017). In this context, many researchers believe that sexual dysfunction plays a significant and reciprocal role in marital problems, especially among individuals with mental disorders. Furthermore, sexual dysfunction may exacerbate certain disorders or delay therapeutic responses (Namli & Tamam, 2018). However, there is limited information on the sexual and marital functions of individuals with severe mental disorders (Aggarwal et al., 2019). Studies indicate that 40% of women experience sexual dysfunction during their marital lives and are more affected by sexual disorders than men (Karami et al., 2017). Nevertheless, female sexual function and dysfunction have historically been understudied and poorly understood (Kammerer-Doak & Rogers, 2021).

Given the high prevalence and negative consequences of bipolar disorder, addressing therapeutic interventions is of significant importance and should be prioritized. Various therapeutic approaches have been proposed, including acceptance-based and mindfulness-based therapies, which are considered third-wave cognitive-behavioral therapies. Mindfulness does not imply escaping from anxious thoughts and feelings but rather recognizing them as transient phenomena (Hoge et al., 2020). Mindfulness can aid in freeing individuals from automatic thoughts, unhealthy habits, and behavioral patterns, thus playing an important role in behavioral regulation. Therefore, mindfulness emphasizes altering awareness and developing a new relationship with thoughts rather than changing them. This intervention is a structured, short-term eight-session program with a strong focus on practical training. Similar to traditional cognitive therapy, the goal is not to change thought content but to foster a different relationship with thoughts, feelings, and emotions through sustained, moment-to-moment attention and a non-judgmental acceptance-oriented attitude. Studies show that mindfulness-based cognitive training significantly affects generalized anxiety disorder (Porfaraj & Miladi, 2022), sexual relationships (Segal et al., 2018), quality of sexual relationships (Koerner & Jacobson, 2019), anxiety, and dysfunctional attitudes in both clinical and non-clinical populations (Hazlett-Stevens, 2022).

Another approach used in this study is transactional analysis. Transactional analysis is a psychological framework introduced by Eric Berne in 1950 (Clarkson et al., 2013). This perspective is noteworthy for several reasons. First, as a modern psychoanalytic approach, it has

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gained prominence within both systemic and analytical paradigms, making it a reliable method for preventing and treating behavioral and relational disorders within family systems (Zamani et al., 2018). Many scholars in this approach assert that adaptive processes in couples, which influence marital satisfaction, include proper behavioral exchanges, active expression of affection and other positive emotions, conflict resolution communication, fulfillment of essential life duties, mutual support between partners, sexual satisfaction, shared beliefs and expectations, and high communication skills in response to life events (Polenick et al., 2017). Studies have demonstrated that this form of psychotherapy leads to increased positive emotions (Sardarpur et al., 2016), enhanced sexual satisfaction (Honari, 2014), strengthened positive personality traits, reduced clinical symptoms, increased happiness (Reed, 2015), and improved psychological well-being (Haghighi Cheli et al., 2019).

Despite the numerous therapeutic approaches available for addressing these disorders, without comparative evaluations, it is difficult to determine which treatment method is the "best" for specific cases. Moreover, ensuring fairness in comparisons poses a significant challenge in research, as determining whether a comparison is fair is not always straightforward. Comparisons are inherently human tendencies, often referred to as "appraisals." For instance, a patient might feel that they recovered faster with a new treatment than with a previous one, but it would be unwise for their physician to generalize this information to all patients and shift entirely to the new method. Therefore, the comparative effectiveness of mindfulness-based therapy and transactional analysis in reducing bipolar disorder symptoms has been overlooked by researchers. There is a pressing need for further research to evaluate the efficacy of these therapeutic approaches in clinical psychological disorders. Based on available national research, this study is the first to compare the effectiveness of these two treatments in bipolar disorder. Additionally, psychological treatments must strive to distinguish effective therapies from ineffective ones, with clinical specialists identifying criteria for determining whether a treatment is clinically significant. These criteria will help psychologists reassess the results of previously published therapeutic studies, potentially leading to a reconsideration of their current therapeutic methods. Thus, evaluating clinical interventions, through which expected therapeutic outcomes are defined objectively and measured systematically, is crucial for identifying clinically significant and effective treatments. Comparing the effectiveness of mindfulness-based therapy and transactional analysis will enable therapists to make informed treatment choices and reduce unsuccessful interventions. Consequently, given the evidence supporting the efficacy of these therapies in alleviating psychiatric symptoms, including bipolar disorder, and the limited research comparing them, the present study aims to address the question of whether the effectiveness of mindfulness-based therapy and transactional analysis differs in terms of sexual function and sexual satisfaction in female patients with bipolar disorder.

2. Methods and Materials

2.1. Study Design and Participants

This study is an applied research with a quasi-experimental design, utilizing a pre-test and post-test format with two experimental groups and one control group, along with a follow-up period. The target population comprised all female patients with bipolar affective disorder who referred to the Gyrus Specialty Neurology and Psychiatry Clinic in Tehran during the study period and were diagnosed with bipolar disorder by a psychotherapist based on the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). From this population, patients were selected through voluntary convenience sampling and randomly assigned (by lottery) to two equal groups. To obtain the sample, the researcher attended the Gyrus Specialty Neurology and Psychiatry Clinic, reviewed patient files, and selected 35 patients diagnosed with bipolar disorder based on the selection criteria through referrals from psychiatrists and psychotherapists at the clinic. After obtaining informed consent, 30 patients remained after considering the inclusion and exclusion criteria and were randomly assigned (by lottery) to two equal groups (15 patients in the mindfulness-based therapy group and 15 in the transactional analysis therapy group). Inclusion criteria were being married, willingness to participate in the study by signing an informed consent form, being in a relatively stable phase (i.e., not having acute manic symptoms), not being in an acute phase of the disorder, not receiving psychotherapy in the past six months, not experiencing acute stressful events in the past six months, and not having substance abuse issues, including drugs, psychotropics, or alcohol. Exclusion criteria included missing more than two therapy sessions, participating in concurrent therapeutic programs aimed at reducing sexual or marital problems, and participating in other concurrent therapeutic programs for psychological disorders.

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The mindfulness-based therapy was conducted in eight 90-to-120-minute sessions, held twice weekly, based on a structured protocol to allow participants to comfortably express their issues and receive treatment. The transactional analysis group received therapy in nine 60-to-120-minute sessions, held twice weekly, based on a structured protocol. The mindfulness-based therapy and transactional analysis therapy models used in this study were developed using classical transactional analysis exercises (Stewart & Jones, 2021), transactional analysis games (Berne, 1996), and mindfulness exercises (Kabat-Zinn, 2009).

2.2. Measures

2.2.1. Sexual Function

This questionnaire was developed by Rosen, Brown, Heiman, and Leiblum in 2000, consisting of 19 items assessing female sexual function. Items are scored on a Likert scale ranging from 0 to 5, with the total score obtained by summing the item scores. The individual's score in six domains (desire, arousal, vaginal lubrication, orgasm, satisfaction, and pain) is calculated by summing the item scores within each domain and multiplying by the domain factor. The total sexual function score is obtained by summing the scores of all six domains, with a maximum score of 36. A score below 28 indicates sexual dysfunction. The validity and reliability of this questionnaire were confirmed by Rosen et al. (2000), and Babaei, Abbasi, Mir Mohammadi, and Entezari (2018) reported a Cronbach's alpha coefficient of 0.95 for this questionnaire (Babaei et al., 2018; Rosen et al., 2000).

2.2.2. Sexual Satisfaction

Developed by Larson, Anderson, Holman, and Niemann in 1998, this questionnaire consists of 25 items measuring four components: willingness to engage in sexual relationships, sexual attitudes, quality of sexual life, and sexual compatibility, using a five-point Likert scale. The total score ranges from 25 to 125, with scores below 50 indicating sexual dissatisfaction and scores above 100 indicating high sexual satisfaction (Larson et al., 1998). Hudson, Harrison, and Crosscup (1999) reported reliability coefficients of 0.91 for Cronbach's alpha and 0.93 for test-retest reliability (Hudson et al., 1999). The questionnaire's reliability was also reported as 0.87 by Cronbach's alpha in the study by Bahrami, Yaqubzadeh, Sharif Nia, Soleimani, and Hagh Dost (2016) and 0.91 in the study by Fatehi, Gholami Hassanaroudi, and Nazanin (2021), indicating a high level of internal consistency and reliability (Bahrami et al., 2016; Fatehi et al., 2021).

2.3. Intervention

2.3.1. Mindfulness-Based Therapy

The mindfulness-based therapy protocol consisted of eight structured sessions. The first session involved establishing rapport, conceptualizing the problem, and administering the pre-test. This session laid the foundation for therapeutic engagement by discussing the participants' challenges related to bipolar disorder, sexual function, and marital satisfaction. The second session introduced progressive muscle relaxation, focusing on tensing and relaxing muscle groups while providing instructions on proper posture during relaxation exercises. This technique aimed to reduce physiological arousal and promote relaxation. The third session expanded on muscle relaxation, guiding participants through six muscle groups with closed eyes. Homework was assigned for daily practice, emphasizing the importance of consistent relaxation exercises for 20 minutes, with instructions provided on a handout.

The fourth session introduced mindful breathing, teaching participants to anchor their awareness to their breath as a means of staying present. The fifth session focused on body scan techniques, encouraging awareness of bodily sensations from head to toe. Participants were assigned homework to practice mindful eating, paying close attention to taste and texture, possibly involving their families. The sixth session addressed mindfulness of thoughts, teaching participants to observe their thoughts without judgment. The seventh session reinforced previously taught techniques (breathing, body scan, and mindfulness of thoughts) through repeated practice. The final session involved administering the post-test and encouraging participants to incorporate mindfulness techniques into their marital lives to enhance sexual function and satisfaction.

2.3.2. Transactional Analysis

The transactional analysis protocol included nine structured sessions. The first session focused on building rapport, conceptualizing the problem, and administering the pre-test. The second session introduced the Child ego state, explaining its characteristics and four decision-making

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positions, helping participants understand impulsive and emotional responses. The third session covered the Parent ego state, providing examples and identifying its critical and nurturing aspects. The fourth session introduced the Adult ego state, emphasizing responsibility and rational decision-making, encouraging participants to strengthen this state for balanced interactions.

The fifth session explored life scripts, helping participants recognize how early decisions and experiences influence their current behaviors and choices. The sixth session familiarized participants with different types of transactions (complementary, crossed, and ulterior) and their impact on communication. The seventh session focused on identifying and analyzing psychological games, examining their role in interpersonal conflicts. The eighth session introduced strokes, emphasizing the importance of giving and receiving positive reinforcement in relationships. The final session involved administering the post-test and encouraging participants to apply transactional analysis techniques in their marital relationships to enhance sexual function and satisfaction.

2.4. Data Analysis

Descriptive statistics were used to describe the collected data, and the results were analyzed using SPSS version 26. Descriptive statistics indices (such as mean and standard deviation) were used to describe the information. In inferential statistics, the Shapiro–Wilk test was employed for normality assessment, and repeated measures ANOVA was used to examine intergroup differences considering the within-group factor (test) and between-group factor (group membership). Tukey's test was also used to compare experimental groups with each other and the control group.

3. Findings and Results

Table 1 presents the mean and standard deviation scores of the pre-test, post-test, and follow-up stages for sexual function and sexual satisfaction in the experimental and control groups.

Table 1

Descriptive Statistics of Research Variables

Dependent Variable	Group	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Follow-up Mean	Follow-up SD
Sexual Function	Mindfulness	21.66	4.29	30.38	5.61	28.42	4.99
	Transactional Analysis	19.07	3.74	24.04	4.06	23.32	3.37
	Control	25.85	4.69	25.55	4.25	25.00	4.73
Sexual Satisfaction	Mindfulness	48.50	7.69	63.06	8.20	60.01	8.24
	Transactional Analysis	39.29	6.68	44.64	6.99	43.54	7.29
	Control	40.38	6.60	40.46	6.86	39.27	6.80

In Table 1, the main variables of sexual function and sexual satisfaction are described using mean and standard deviation statistics. The skewness and kurtosis values are within the range of -2 to +2, indicating that the variables are not skewed or kurtotic. The Shapiro–Wilk test was used to assess the assumption of normality, confirming that the distribution of scores for all three groups in sexual function and sexual satisfaction was normal in the pre-test stage.

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Table 2

Results of Repeated Measures ANOVA for the Effectiveness of Mindfulness and Transactional Analysis on Sexual Function and Sexual Satisfaction

Therapy	Source of Effect	Sum of Squares	df	Mean Square	F	p
Mindfulness (Sexual Function)	Time	1016.817	1	1016.817	318.492	0.000
	Time * Group	1000.417	1	1000.417	313.798	0.000
	Error	89.267	42	3.188		
Transactional Analysis (Sexual Function)	Time	504.60	1	504.60	131.635	0.000
	Time * Group	493.06	1	493.06	128.626	0.000
	Error	107.33	42	3.833		
Mindfulness (Sexual Satisfaction)	Time	914.803	1	914.803	209.112	0.000
	Time * Group	936.039	1	936.039	381.700	0.000
	Error	61.907	42	4.090		
Transactional Analysis (Sexual Satisfaction)	Time	441.38	1	441.38	170.174	0.000
	Time * Group	416.74	1	416.74	133.419	0.000
	Error	90.77	42	3.912		

The results in Table 2 indicate that the interventions of mindfulness and transactional analysis were statistically significant ($p < 0.05$), meaning that the mean scores for sexual function and sexual satisfaction changed significantly from pre-test to post-test in both groups.

Table 3

Results of Repeated Measures ANOVA for Between-Group Effects of Mindfulness and Transactional Analysis on Sexual Function and Sexual Satisfaction

Variable	Source of Variation	Sum of Squares	df	Mean Square	F	p	Eta Squared	Power
Mindfulness (Sexual Function)	Group	6100.900	1	6100.900	7.731	0.010	0.579	0.602
	Error	7776.43	42	2770.730				
Transactional Analysis (Sexual Function)	Group	1095.511	1	1095.511	1.358	0.015	0.360	0.379
	Error	30005.9	42	1154.1				
Mindfulness (Sexual Satisfaction)	Group	5149.145	1	5149.145	9.192	0.001	0.601	0.688
	Error	6458.30	42	3586.414				
Transactional Analysis (Sexual Satisfaction)	Group	1095.511	1	1095.511	5.154	0.015	0.414	0.423
	Error	2014.15	42	1682.15				

Table 3 results show that the main effect of group on sexual function was significant for the mindfulness group ($F = 7.731$, $p \leq 0.000$) and the transactional analysis group ($F = 1.358$, $p \leq 0.015$). According to eta squared, 57.9% of the changes in sexual function were due to the mindfulness intervention, and 36% were due to the transactional analysis intervention. The main effect of group on sexual satisfaction was also significant for the mindfulness group ($F = 9.192$, $p \leq 0.000$) and the transactional analysis group ($F = 5.154$, $p \leq 0.015$), with 60.1% of the changes in sexual satisfaction attributed to mindfulness and 41.4% to transactional analysis.

Table 4

Summary of Tukey's Post Hoc Test Results for Differences Between Pre-test, Post-test, and Follow-up in the Experimental Groups

Pre-test	Stages	Mean Difference	Standard Error	Sig.
Sexual Function	Post-test	0.695	0.152	0.001
	Follow-up	0.724	0.152	0.001
Post-test	Follow-up	0.255	0.152	0.431
Sexual Satisfaction	Post-test	0.612	0.152	0.001
	Follow-up	0.518	0.152	0.001
Post-test	Follow-up	0.319	0.152	0.202

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The results in Table 4 indicate significant differences in sexual function and sexual satisfaction scores between the pre-test and post-test stages, as well as between the pre-test and follow-up stages. There were no significant differences between the post-test and follow-up stages, indicating the stability of the interventions. The mean comparisons suggest that sexual function and sexual satisfaction in female patients with bipolar disorder significantly improved from the pre-test to the post-test and follow-up stages, with mindfulness-based therapy showing a greater impact than transactional analysis.

Table 5

Summary of Tukey's Post Hoc Test Results for the Two Experimental Groups

Variable	Groups	Mean Difference	Standard Error	Sig.
Sexual Function	Mindfulness – Transactional Analysis	1.35	0.184	0.001
Sexual Satisfaction	Mindfulness – Transactional Analysis	7.26	0.433	0.001

The results in Table 5 show a significant difference in sexual function and sexual satisfaction scores between female patients with bipolar disorder in the mindfulness-based therapy group and those in the transactional analysis group.

4. Discussion and Conclusion

The results indicated that mindfulness-based therapy and transactional analysis had significant effects on the dependent variables. In other words, there was a significant difference between the experimental and control groups in at least one of the variables of sexual function and sexual satisfaction, consistent with previous research (Chadwick et al., 2021; Kamran et al., 2022; Keyvan et al., 2022; Malverdi Desjardi et al., 2022).

The unique characteristics of both mindfulness-based therapy and transactional analysis can explain these findings. Mindfulness techniques can enhance awareness of scripts, games, displays, ego states, and transactions, allowing individuals to observe their moment-to-moment awareness from a third-person perspective (Zvelc et al., 2011). Mindfulness exercises facilitated the growth of the adult ego state in bipolar patients by teaching them to maintain contact with their body and senses in the present moment, significantly improving marital relationships and sexual function in women. Daily mindfulness practices proved beneficial in modifying scripts, and mindfulness itself can be considered a key component in integrating the adult ego state, enhancing self-governance, sexual function, and sexual satisfaction in women with bipolar disorder (Aaberg, 2016).

The superior effectiveness of mindfulness-based therapy compared to transactional analysis may be attributed to its capacity for present-moment awareness and non-judgmental attitudes, enabling individuals to choose more effective responses in interpersonal interactions by preventing automatic, impulsive reactions. This thoughtful cognitive process enhances communication and acceptance in relationships. Mindfulness techniques also foster self-compassion, kindness, and self-love, leading to greater marital satisfaction as self-compassionate individuals tend to trust their experiences and rely less on others for emotional validation and security, thereby enhancing marital commitment. The efficacy of mindfulness in improving sexual function can be linked to relaxation, internal awareness, reduced negative emotions, increased distress tolerance, and the ability to identify and replace dysfunctional beliefs through mindfulness-based cognitive therapy, which strengthens individuals' coping abilities by focusing on the present through breathing and body awareness.

Belief in one's sexual self-efficacy, even in the presence of physical deficiencies, helps maintain sexual function, as individuals with high sexual self-efficacy believe in their ability to perform sexually and be desirable partners, positively correlating with self-esteem, positive attitudes, and marital empathy (Litzinger & Kristina, 2015).

Transactional analysis therapy, though less effective than mindfulness, also serves as a tool for enhancing marital communication and mutual understanding by providing couples with mechanisms to understand themselves and their partners, fostering effective interaction and mutual recognition (Morris, 2006). Awareness of one's personality structure in transactional analysis expands individuals' abilities, aiding in mood regulation and social rhythm. The primary goals of transactional analysis counseling include improving communication skills, managing emotions, expanding resources, and preventing distress by fostering self-governance and spontaneous, intimate relationships,

allowing women with bipolar disorder to experience honest, non-manipulative interactions, thereby enhancing sexual desire, arousal, and marital satisfaction.

Transactional analysis emphasizes the dynamic exchange of information between individuals, promoting effective communication through the understanding of complementary, crossed, and ulterior transactions, enhancing sexual satisfaction by equipping individuals with communication skills to manage conflicts and foster intimacy, reducing negative interactions, and encouraging mutual empathy.

5. Suggestions and Limitations

This study faced limitations, including challenges in working with bipolar patients, potential therapist bias as the same therapist conducted both interventions, and limited willingness among women for face-to-face therapy due to its confrontational nature. Personality differences and prior experiences of participants may have influenced the results, as did participants' attitudes towards assessments, cooperation levels, honesty, and commitment to the intervention. Despite requests for participants to avoid concurrent treatments, some may have engaged in other therapies, impacting the outcomes. Future research with larger samples, diverse cultural backgrounds, and broader clinical populations is recommended, along with replication in various clinical settings for greater generalizability.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

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

Transparency Statement

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

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. This article is extracted from the master's thesis of the first author at Lahijan Branch, Islamic Azad University, Lahijan, Iran, and has received an ethics code with the identifier IR.IAU.LIAU.REC.2024.115 from the Research Ethics Committee of the Islamic Azad University, Lahijan Branch.

References

Aaberg, V. (2016). The state of sexuality education in baccalaureate nursing programs. *Nurse Education Today*, *44*, 14-19. https://doi.org/10.1016/j.nedt.2016.05.009

Aggarwal, S., Grover, S., & Chakrabarti, S. (2019). A comparative study evaluating the marital and sexual functioning in patients with schizophrenia and depressive disorders. *Asian Journal of Psychiatry*, *39*, 128-134. https://doi.org/10.1016/j.ajp.2018.12.021

Agustus, P., Munivenkatappa, M., & Prasad, P. (2017). Sexual Functioning, Beliefs About Sexual Functioning and Quality of Life of Women with Infertility Problems. *Journal of Human Reproductive Sciences*, *10*(3), 213-220. https://doi.org/10.4103/jhrs.JHRS_137_16

American Psychiatric Association. (2019). *American psychiatric association*. https://www.medscape.com/viewcollection/34853

Babaei, E., Abbasi, A., Mir Mohammadi, M., & Entezari, S. (2018). Investigating the relationship between sexual schemas and sexual performance with marital conflicts of women involved in domestic violence. *Journal of Zanak Medical Sciences and Kurdistan University of Medical Sciences*, 96-87. http://zanko.muk.ac.ir/article-1-436-en.html

Bahrami, N., Yaqubzadeh, A., Sharif Nia, H., Soleimani, M. A., & Hagh Dost, A. z. (2016). Psychometric characteristics of the Persian version of the Larson sexual satisfaction questionnaire in a sample of Iranian infertile couples. *Iranian Journal of Epidemiology*, *12*(2), 18-31. https://doi.org/10.1016/j.nedt.2016.02.112

Berne, E. (1996). Principles of transactional analysis. *Indian Journal of Psychiatry*, *38*(3), 154-159. https://journals.lww.com/indianjpsychiatry/abstract/1996/38030/principles_of_transactional_analysis.8.aspx

Chadwick, P., Kaur, H., Swelam, M., Ross, S., & Ellett, L. (2021). Experience of Mindfulness in People with Bipolar Disorder: A Qualitative Study. *Psychother Res*, *21*(3), 277-285. https://doi.org/10.1177/00221678231168667

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

Çınaroğlu, M. (2024). Psychotherapies for the Treatment of Bipolar Disorder. *Psikiyatride Guncel Yaklasimlar - Current Approaches in Psychiatry*, *16*(2), 373-382. https://doi.org/10.18863/pgy.1332919

Clarkson, P., Deah, A., Wayne, L. C., DuBow, A., Melun, J.-P., & Juster, R.-P. (2013). *Transactional analysis psychotherapy: An integrated approach Conventional versus Mindfulness-based Interventions for Anxiety and Worry: A Review and Recommendations Current Psychiatry Research and Reviews Formerly: Current Psychiatry Reviews Chapter 21 - Allostatic load: Implications for the pathophysiology, evolution, and treatment of bipolar disorder Neurobiology of Bipolar Disorder* (Vol. 16). Routledge Academic Press. https://doi.org/10.4324/9780203753996-8 10.2174/2666082216666200220121648 10.1016/j.neubiorev.2007.10.005

Clayton, D., & Burlingame, G. M. (2024). Evidence-Based Group Therapy for Mood Disorders: Treatment for Depression and Bipolar Disorders. *Group Dynamics Theory Research and Practice*, *28*(3), 132-147. https://doi.org/10.1037/gdn0000218

Fatehi, N., Gholami Hassanaroudi, M., & Nazanin, A. (2021). The mediating role of marital forgiveness and mental well-being in the relationship between mindfulness and sexual satisfaction of married men and women in Tehran: a descriptive study. *Journal of Rafsanjan University of Medical Sciences*, *20*(6), 645-660. https://doi.org/10.52547/jrums.20.6.660

Gabrielle, F. F. (2024). The Psychopathology Among the Offspring of Schizophrenia and Bipolar I Disorder Patients in an Egyptian Sample: A Comparative Study. *International Journal of Social Psychiatry*, *70*(3), 482-488. https://doi.org/10.1177/00207640231216354

Haghighi Cheli, A., Mohtashami, J., Zadehmodares, S., & Arabborzu, Z. (2019). The effect of transactional analysis group behavioral therapy on infertile women's marital satisfaction. *Crescent J Med Biol Sci*, *6*, 375-380. https://doi.org/17.1328/j.neubiorev.2019.07.16

Hassas, O., Mashhadi, A., Shamloo, Z. S., & Bordbar, M. R. F. (2024). Emotional Schema Therapy for Bipolar Disorder: Improving Emotional Schemas, Quality of Life, Cognitive Emotion Regulation, and Symptom Management. *International Journal of Cognitive Therapy*, *17*(3), 347-368. https://doi.org/10.1007/s41811-023-00196-8

Hazlett-Stevens, H. (2022). Clinical Significance of Stress, Depression, Anxiety, and Worry Symptom Improvement Following Mindfulness-based Stress Reduction. *Obm Integrative and Complementary Medicine*, *7*(2), 5-14. https://doi.org/07.75219/jrums.2022.08.09

Hoge, E. A., Reese, H. E., Oliva, I. A., Gabriel, C. D., Guidos, B. M., Bui, E., Simon, N. M., & Dutton, M. A. (2020). Investigating the Role of Interpretation Bias in Mindfulness-Based Treatment of Adults With Generalized Anxiety Disorder. *Front. Psychol.*, *11*, 82. https://doi.org/10.3389/fpsyg.2020.00082

Honari, R. (2014). Impact of Transactional Analysis Group Training on Marital Satisfaction of Women's Referred to Counseling Centers and Cultural Centers of Isfahan: Journal of Biological Sciences. *Journal of Biological Sciences*, *6*(5), 191-196. https://doi.org/07.1568/fpsyg.2014.00398

Hudson, W. W., Harrison, D. F., & Crosscup, P. C. (1999). A short-form scale to measure sexual discord in dyadic relationships. *Journal of Sex Research*, *17*(2), 157-174. https://doi.org/04.32569/jrums.1999.129

Janiri, D., Luzio, M. D., Montanari, S., Hirsch, D., Simonetti, A., Moccia, L., Conte, E., Contaldo, I., Veredice, C., Mercuri, E., & Sani, G. (2024). Childhood Trauma and Self-Harm in Youths With Bipolar Disorders. *Current Neuropharmacology*, *22*(1), 152-158. https://doi.org/10.2174/1570159x21666230213155249

Kabat-Zinn, J. (2009). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Hachette Books. https://www.amazon.de/-/en/Wherever-You-There-Are-Mindfulness/dp/1401307787

Kammerer-Doak, D., & Rogers, R. (2021). Female Sexual Dysfunction. In *Pelvic Floor Disorders* (pp. 909-921). Springer. https://doi.org/10.1097/AOG.0b013e31816bbe85

Kamran, A., Mirmehdi, S. R., & Ghaffari Tehjiri, M. (2022). The effectiveness of mindfulness on improving interpersonal relationships and reducing impulsivity in bipolar disorder. *Knowledge and research in applied psychology*(87), 198-189. https://sid.ir/paper/1032176/en

Karami, J., Shalani, B., & Hoveyzi, N. (2017). Relationship between Sexual Self-Esteem and Sexual Dysfunction with Marital Satisfaction in Nurses Hopitals Kermanshah City (Iran). *Qom University of Medical Sciences Journal*, *11*(9), 86-93. https://www.researchgate.net/publication/332962166

Keyvan, S. H., Zandi, A., Firouzi, M., & Shariatzadeh Junidi, G. (2022). Effectiveness of interactional behavior analysis (TA) therapy on depression, anxiety and mindfulness in women. The eighth national conference of modern studies and research in the field of educational sciences, psychology and counseling in Iran,

Koerner, K., & Jacobson, N. J. (2019). Evaluation of the effectiveness of mindfulness-based therapy on the quality of sexual relations. *Current Direction in Psychological Science*, *10*(4), 111-122. https://doi.org/10.1016/j.seizure.2019.10.010

Kopeykina, I., Kim, H. J., Khatun, T., Boland, J., Haeri, S., Cohen, L., & Galynker, I. (2016). Hypersexuality and couple relationships in bipolar disorder: A review. *Journal of affective disorders*, *195*, 1-14. https://doi.org/10.1016/j.jad.2016.01.035

Larson, J. H., Anderson, S. M., Holman, T. B., & Niemann, B. K. (1998). A longitudinal study of the effects of premarital communication, relationship stability, and self-esteem on sexual satisfaction in the first year of marriage. *Journal of sex & marital therapy*, *24*(3), 193-206. https://doi.org/10.1080/00926239808404933

Lee, Y. M., Florez, E., Tariman, J., McCarter, S., & Riesche, L. (2015). Factors related to sexual behaviors and sexual education programs for Asian-American adolescents. *Applied Nursing Research*, *28*(3), 222-228. https://doi.org/10.1016/j.apnr.2015.04.015

Litzinger, S., & Kristina, G. (2015). Exploring relationships among communication, sexual satisfaction, and marital satisfaction. *Journal of Sex and Marital Therapy*, *31*(5), 409-424. https://doi.org/10.1080/00926230591006719

Mahini, E. A., Hosseyni, S. A., Ebrahimkhani, M., Mohammadi, M., & Shokri, S. (2024). Bipolar Disorder and Its Factors. *Advances in Social Sciences Research Journal*, *11*(9), 01-11. https://doi.org/10.14738/assrj.119.17524

Malverdi Desjardi, Z., Taheri Sedeh, F., & Shibani Nougabi, A. (2022). The effectiveness of mindfulness-based therapy on the quality of sexual relationships and negative self-future thoughts in Isfahan couples. *New Ideas of Psychology Quarterly*, *13*(17), 229-212. http://jnip.ir/article-1-724-en.html

Morris, G. L. (2006). Altered states: Using Transactional Analysis Education to prevent conflict escalation and violence. *International Journal of Psychological Studies*, *8*(4), 51. https://doi.org/10.5539/ijps.v8n4p51

Namli, Z. A. U. K. G., & Tamam, L. (2018). Assessment of Dyadic Adjustment and Sexual Functions in Patients with Bipolar

Disorder. *Archives of Neuropsychiatry*, *55*(2), 171-176. https://doi.org/10.5152/npa.2017.19213

Oshaghi, M., & Ahangari, E. (2020). Comparison of coping styles and marital satisfaction in patients with bipolar disorder with normal people. *Journal of Medical Sciences and Health Management*, *2*(3), 1-9. http://sjmshm.srpub.org/article-3-54-en.html

Peta, C. (2017). Disability is not asexuality: the childbearing experiences and aspirations of women with disability in Zimbabwe. *Reprod Health Matters*, *25*(50), 10-19. https://doi.org/10.1080/09688080.2017.1331684

Polenick, C., Zarit, S., Birditt, K. S., & Bangerter, L. R. (2017). Intergenerational support and marital satisfaction: Implications of beliefs about helping aging parents. *Journal of marriage and family*, *79*(1), 131-146. https://doi.org/10.1111/jomf.12334

Porfaraj, M., & Miladi, Z. (2022). The effectiveness of mindfulness-based stress reduction treatment on severity of symptoms and anxiety in patients with generalized anxiety disorder. *Journal of Torbat Heydarieh University of Medical Sciences*, *10*(1), 75-85. http://jms.thums.ac.ir/article-1-1078-en.html

Reed, P. (2015). A transactional analysis of changes in parent and chick behaviour prior to separation of Herring Gulls (Larus Argentatus): A three -term contingency model. *Behav Processes*, *118*, 21-27. https://doi.org/10.1177/0192513X18763226

Rokach, A., & Patel, K. (2021). *Human Sexuality: Function, Dysfunction, Paraphilias, and Relationships*. Academic Press. https://doi.org/13: 9780128191743

Rosen, R., Brown, C., Heiman, J., & Leiblum, S. (2000). The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. *J Sex Marital Ther*, *26*, 191-208. https://doi.org/10.1080/009262300278597

Sardarpur, M., Zagar, Y., Bassak Nejad, S., & Mehrabizadeh Honarmand, M. (2016). The effectiveness of transactional analysis therapy on social intimacy and coping styles with stress among students. *J Clin Psychol*, *1*, 85-102. https://doi.org/10.12850/jomf.18652

Segal, Z., Williams, M., & Teasdale, J. (2018). *Mindfulness-based cognitive therapy for depression*. Guilford Publications. https://doi.org/10.1037/0022-006X.76.3.524

Stewart, I., & Jones, V. (2021). *Interaction analysis: new methods in psychology*. Circle. https://doi.org/10.1037/0045.2574.3269.3258

Zamani, M., Tavoli, A., Khasti, Y., Sedighimornani, N., & Zafar, M. (2018). Sexual Therapy for Women with Diabete and Its Impact on Quality of Life. *Iranian Journal of Psychiatry*, *12*(1), 58-69. https://doi.org/10.30476/IJCBNM.2021.91530.1793

Zvelc, G., cerneti, M., & Kosak, M. (2011). Mindfulness-based transactional analysis. *Transactional Analysis Journal*, *41*(3), 241-254. https://doi.org/10.1177/036215371104100306

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