Proceedings S.Z.M.C. Vol: 39(1): pp. 30-36, 2025 **PSZMC-968-39-1-2025**

Islamic Integrated Cognitive Behavioral Therapy for Treating Depression in Young Adults: A Quasi-Experimental Study

[1]Binish Nawaz, [1]Tahira Yousuf

ABSTRACT

Introduction: Integrating Islamic principles along with the traditional Cognitive Behavioral Therapy (CBT) is used to help reduce the symptoms of depression in young adults. Islamic integrated cognitive Behavioral Therapy (IICBT) helps boosting spiritual feelings of the patients which have the potential to reduce depressive symptoms.
Aims & Objectives: Aims to study the effectiveness of Islamic Integrated Cognitive Behavioral Therapy (IICBT) in the reduction of depressive symptoms among young adults.
Place and Duration of Study: The study was completed over six months period from March 2023 to September 2023, in the Outpatient Department of Clinical Psychology, Fazaia Ruth Pfau Medical College.
Material & Method: Quasi-experimental study design was implemented on 24 young Muslims. Participants were divided into control groups (n=12) and experimental (n=12). Beck Depression Inventory (BDI) was used to assess the level of depression and Religious Orientation Scale was used as an inclusive criterion to observe the religious orientation of the participants. Data was analyzed using SPSS version 23. A p-value < 0.05 was considered significant.
Results: Significant differences were observed between the control and experimental groups. Mean scores of BDI were significantly low in post-test i.e. 15.7 compared to pre-test i.e. 31.3 ($p < 0.001$). In contrast, the control group showed no significant changes, as their pre-test mean of 32.9 only decreased to 26.3 post-test ($p > 0.05$). Additionally, a significant difference ($p = 0.033$) was observed in post-test BDI scores between the experimental and control groups, confirming the effectiveness of IICBT in managing depression.
Conclusion: Findings of the study support the positive impact of Islamic Integrated Cognitive Behavioral Therapy in addressing depression among young adults. The study also highlights the importance of culturally adapted therapeutic approach as considerable reduction in overall levels of BDI, that tends to make the symptoms of depression less severe as compared to the control group.

Keywords: Depression, Islamic Integrated Cognitive Behavioral Therapy

INTRODUCTION

Major Depressive Disorder (MDD) is widely recognized as a major cause of disability worldwide, substantially impacting individuals' quality of life[1]. Studies indicate that it lowers life satisfaction more significantly than debt, divorce, or diabetes, and it can intensify comorbid conditions like heart disease, anxiety, and cancer[2-5]. While many individuals with MDD respond well to pharmacological treatments and psychotherapy, a substantial number remain resistant to these interventions[6-8]. Furthermore, only 51% of high-income countries and 20% of low- and lower-middle-income countries have treatment coverage, indicating that access to appropriate treatment is frequently restricted[9]. Social support, psychiatric therapies, and medication are effective and efficient treatment methods for depressive disorders[10]. Prioritizing mental health and reducing the burden of severe mental disorders like major depressive disorder (MDD) have gained more global attention in recent times[11]. Treatment rates for depression are still extremely low, despite the fact that it is a primary cause of disability. Merely 7% to 28% of people suffering from depression are thought to obtain proper care and therapy[12]. Significant regional variations in treatment rates by WHO have been noted in previous reviews; treatment gaps range from 45.4% in Europe to 67% in the African region and 70.2% in the Eastern Mediterranean region[13]. Furthermore, different resource settings provide different levels of care. From 22.4% in high-income countries to just 3.7% in lower-middle-income countries, the percentage of people receiving minimally adequate treatment (MAT), which is the combination of treatment

[1]*Institute of Professional Psychology Bahria University, Karachi*

Correspondence:
Dr. Binish Nawaz, *PhD Scholar, Institute of Professional Psychology Bahria University, Karachi Campus*
Email: binish.nawaz@hotmail.com

Submission Date: 4th September, 2024
1st Revision Date: 3rd February, 2025
Acceptance Date: 11th March, 2025

OPEN ACCESS CC BY

modalities determined by research to be minimally sufficient for treating depression, varies[14]. While some studies have reported an association between religious beliefs and mental health outcomes[15,16], evidence regarding differences between religious and non-religious populations remains mixed; nonetheless, Islamic-based therapeutic approaches—drawing on principles from the Quran and Sunnah—have been developed to address depressive symptoms and promote psychological well-being among the Muslim individuals[17]. Researchers reported that Muslim patients who suffered from depression or anxiety usually preferred to have religious based treatments[18-20]. Therefore, Islamic Integrated Cognitive Behavior Therapy (IICBT) which also encompasses the concepts of Tazkiyah al Nafs (Purification of the Heart) and the Self (Body, Ruh, Qalb, Nafs, and Aql) as presented by Al Ghazali[21] is used to deal with the depressive symptoms and psychological wellbeing of individuals aged between 25 to 58 years. This study is performed to explore the utilization of Islamic Integrated Cognitive Behavioral Therapy (IICBT) in addressing depression among young adults.

MATERIAL AND METHODS

The study was conducted using a quasi-experimental design over a six- months period, from March 2023 to September 2023 after the approval by the Ethical Review Board (Reference # BU/80/2023, dated 1st February 2023) of Bahria University Karachi. Participants were recruited using purposive sampling from the Psychology OPD (Non-Entitled) at Fazaia Ruth Pfau Medical College and its affiliated teaching hospital, Karachi, Pakistan. The study included a total of 24 individuals, 12 of whom were male and 12 were female. They were divided into two groups: a control group (n=12) and an experimental group (n=12), each group consisted of 6 males & 6 female patients who underwent therapy using Islamic Integrated Cognitive Behavioural Therapy (IICBT). As per the study's inclusion requirements, participants had to be between the ages of 22 and 29 years, score in the moderate to severe range (moderate range 20–28, severe range 29–63) on the Beck Depression Inventory, and have average intrinsic and extrinsic religious orientation. Participants needed to be Muslims and capable of understanding the languages of instruction, which were basic English and Urdu. Conversely, the exclusion criteria ruled out individuals with a history of psychosis, severe mental illness, or organic brain damage, particularly in recent years. In patients, those currently taking or who had recently taken related medications, and individuals with an active or recent physical addiction to alcohol or drugs were excluded. Additionally, individuals diagnosed with drug or substance abuse, as well as those already receiving psychological therapy for stress, depression, hopelessness, or any other reason, were not included in the study. The demographic information sheet translated in Urdu was required from the participants to fill out information that helped the researcher to obtain data about the sample/participants of the study. It inquired about the participant's age, gender, education, occupation, illness history and all the questions related to the study.

Beck Depression Inventory Urdu version (BDI)

The Beck Depression Inventory Urdu Version (BDI) is a 21-item, self-report rating inventory, originally developed by Aaron Beck in 1996, but later on translated and validated in Urdu by Dr. Sheikh Abdul Khaliq in 2017 [28]. Beck's depression inventory has 21 items, and all of them have Cronbach's Alpha scores greater than 0.75, indicating that the Urdu version of the questionnaire has good and adequate consistency. The minimal range was 0–13, the moderate range was 20–28, the severe range was 29–63, and the 14–19 score was deemed mild.

Religious Orientation Scale

This scale was created by Allport and Ross in 1967. It measures religious inclination (extrinsic and intrinsic) using a 14-item Likert scale. A total of eight items indicates an intrinsic religious orientation, whereas six items demonstrate an extrinsic orientation. This scale was later translated into Urdu following the standard beck translation procedure by Khan, Ghous and Malik in 2015 ($\alpha = 0.79$)[29].

Islamic Integrated Cognitive Behavioral Therapy (IICBT)

The IICBT therapeutic technique called Islamic Integrated Cognitive Behavioral Therapy which may help depressed Muslim patients build antidepressant attitudes and behaviors that are based on their own Islamic resources, practices, and beliefs. In 2018, a manual was created by Dr. Zuraida Ahmed Sabki and colleagues. It is an adaptation of the Religious Integrated Cognitive Behavioral Therapy (RICBT). It is strongly believed that having ten sessions together of IICBT may serve as an antidepressant for the customers.

Once the participants were selected, each participant/patient received the treatment program of Islamic Integrated Cognitive Behavioral Therapy

(IICBT) using the manual (Sabki, 2018), which consisted of 10 therapy sessions, each session consisted of 45 minutes, bi-weekly.

Session 1	Building rapport, assessment and introduction to IICBT
Session 2	Behavioral Activation: Walking by Faith
Session 3	Identifying unhelpful thoughts: the battlefield of the mind
Session 4	Challenging unhelpful thoughts: bringing all thoughts captive
Session 5	Dealing with loss
Session 6	Coping with spiritual struggles and negative emotions
Session 7	Gratitude
Session 8	Altruism and generosity
Session 9	Stress-related and spiritual growth
Session 10	Hope and relapse prevention

Permission from individuals to participate in the research was obtained through the use of an informed consent form translated into Urdu. The consent document informed them regarding confidentiality, any potential risks of discomfort, aim of the study, and freedom to withdraw from it at any moment without facing any consequences. Using the statistical software, Statistical Package for the Social Sciences (SPSS-23) and the Wilcoxin sum rank test, chi square test, and Mann-Whitney test, the pretest and posttest data were compared. Shapiro Wilk test was used to check the normality of data. A p-value of less than 0.05 was considered significant.

RESULTS

The psychometric properties of the study variables were assessed using Cronbach's alpha coefficients, as shown in Table 1. For the Religious Orientation Scale (ROS), the pre-test alpha was 0.771, indicating acceptable internal consistency, while the post-test alpha decreased slightly to 0.701, still within an acceptable range. The Beck Depression Inventory (BDI) had a pre-test alpha of 0.711, which also indicated acceptable internal consistency, and the post-test alpha decreased slightly to 0.710.

Table 1: Psychometric properties of study variables (n=24)

Scales	Pre-test α	Post-test α
ROS	0.771	0.701
BDI	0.711	0.710

Note: ROS =Religious Orientation Scale, BDI= Beck Depression Inventory

Variable	Categories	Control Group n (%)	Experiment Group n (%)
Gender	Male	6(50.0)	6(50.0)
	Female	6(50.0)	6(50.0)
Education	Matric to Inter	3(25)	2(16.7)
	Graduation	8(66.7)	9(75)
	Post Graduation	1(8.3)	1(8.3)
Religion	Muslim	12(100.0)	12(100.0)
Marital status	Single	7(58.3)	6(50)
	Married	4(33.4)	5(41.7)
	Separated	1(8.3)	1(8.3)
Family type	Nuclear	5(41.7)	4(33.3)
	Joint	7(58.3)	8(66.7)
Birth Order	Firstborn	6(50)	3(25)
	Middle born	5(41.7)	5(41.7)
	Last born	1(8.3)	4(33.3)
Job	Employed	9(75)	6(50)
	Unemployed	3(25)	6(50)
Number of Children	No Children	8(66.7)	7(58.3)
	One	1(8.3)	2(16.7)
	Two or more	3(25)	3(25)
ROS (Baseline)*	Mean ± SD	1.68 ± 44	1.79 ± 0.48

Table 2: Characteristics of study participants (n=24)

Note. *ROS =Religious Orientation Scale, p <0.05*

Participants in the control and experimental groups shared similar demographic characteristics for a number of variables. Both groups were equally divided by gender and religion, with all participants being Muslim. There were slight variations in education levels, marital status, family type, birth order, employment status, ROS score and the number of children, but these differences were not statistically significant (p>0.05)

Table 3: Comparison of BDI Severity (n=24) and Pre- and Post-Test Scores (within & within groups)

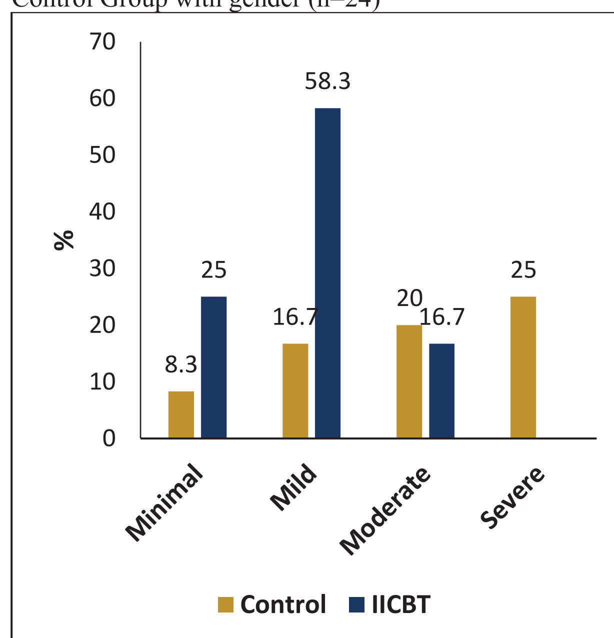
	CG (n=12)		**IICBT (n=12)**		**p-value***
	Mean (SD)	***Median (Range)***	***Mean (SD)***	***Median (Range)***	
BDI Scores					
Pre-Test	32.9 (5.3)	31 (20)	31.3 (8.66)	34 (21)	> 0.05
Post-Test	26.3 (3.4)	25 (10)	15.7 (3.4)	15.5 (11)	< 0.001
p value**	> 0.05		< 0.001		
BDI Severity	**n (%)**		**n (%)**		**p value*****
Pre-Test					
Moderate	6 (50)		5 (41.7)		0.682
Severe	6 (50)		7 (58.3)		
Post-Test					**p value*******
Minimal	1 (8.3)		3 (25)		0.033
Mild	2 (16.7)		7 (58.3)		
Moderate	6 (50)		2 (16.7)		
Severe	3 (25)		0		

Note: BDI= Beck Depression Inventory, CG = Control Group, IICBT = Islamic Integrated Cognitive Behavioral Therapy, *(Mann-Whitney Test, 2-sided test, < 0.05 significant), ** (Wilcoxon Signed Ranks Test, 2-sided test, < 0.05 significant), *** (Chi-square test), **** (Fisher's Exact test)

The Beck Depression Inventory (BDI) pre- and post-test scores were compared between and within the Islamic Integrated Cognitive Behavioural Therapy (IICBT) group and the control group (CG) in **Table 3**. For the BDI, the pre-test mean score for the CG was 32.9 $\pm$ 5.3 and the median was 31, while the IICBT group's mean was 31.3 $\pm$ 8.66 and the median was 34. There was no statistically significant difference between the groups' pre-test results ($p > 0.05$). Post-test scores revealed a mean of 26.3 $\pm$ 3.4 and a median of 25 for the CG, compared to a mean of 15.7 $\pm$ 3.4 and a median of 15.5 for the IICBT group. There was a statistically significant difference between the groups after the test ($p = 0.033$). Within-group comparisons indicated no significant change in the CG ($p > 0.05$), while the IICBT group showed a significant reduction in scores from pre-test to post-test ($p < 0.001$). These findings suggest that the IICBT intervention was effective in significantly reducing BDI scores among participants, whereas the control group showed no significant changes.

Figure 1 depicted the post-treatment Beck Depression Inventory (BDI) categories between the IICBT and control groups. In the IICBT group, 3 (25%) of participants fell into the minimal depression category, 7 (58.3%) were in the mild category, and 2 (16.7%) were in the moderate category. Notably, 1 (8.3%) of participants in the control group showed minimal depression. In control group, 2 (16.7%) were in the mild category, 6 (50%) were in the moderate category, and 3 (25%) fell into the severe category.

Figure 1: Post BDI Categories between Experimental & Control Group with gender (n=24)



The Fisher's Exact test indicated that these differences were statistically significant ($p < 0.001$). Comparison of the IICBT group's depression severity to that of the control group's revealed that the Islamic Integrated Cognitive Behavioural Therapy (IICBT) intervention was successful in reducing depression severity.

DISCUSSION

The results of this study provide initial evidence supporting the efficacy of Islamic Integrated Cognitive Behavioral Therapy (IICBT) in reducing depression symptoms among young adults. Demographically, the control and experimental groups were well-matched, eliminating potential

confounding variables related to gender, religion, marital status, family type, birth order, employment status, education level, and number of children. Because the observed variations in depression outcomes can be more reliably attributed to the intervention rather than extraneous variables, the findings' validity is strengthened by the homogeneity of the demographic variables. The primary outcome measure, BDI scores, demonstrated a significant reduction in depression severity in the IICBT group compared to the control group. Pre-test scores were similar across both groups, indicating comparable baseline levels of depression. In contrast, the control group showed a modest and non-significant reduction in BDI scores.
The severity of depression, as categorized by the BDI, also revealed notable improvements. Post-intervention, a higher proportion of participants in the IICBT group fell into the minimal and mild depression categories, whereas the control group had a higher prevalence of moderate and severe depression. This shift in severity distribution underscores the therapeutic impact of IICBT. Trimulyaningsih and her colleagues also support this idea that religiosity and practicing Islam plays a major role in personal growth[22]. Results also display the reduction of depressive symptoms in those individuals who were exposed with the intervention process which is supported by Sabki and her research fellows that depressive symptoms can be treated by practicing Islamic principles and beliefs in therapeutic process[17]. Munawar et al, study findings suggest that adapting Cognitive Behavioral Therapy (CBT) to include religious/Islamic components could be an appropriate treatment approach for religious Muslims experiencing mental health issues[23].
These findings align with previous research highlighting the effectiveness of culturally adapted cognitive behavioral therapies. For instance, studies have shown that integrating cultural and religious elements into therapy can enhance engagement and outcomes among Muslim populations. Therefore, the IICBT as incorporation of Islamic principles, provides the participants an additional cognitive and emotional resources and it add value in way to foster deep therapeutic impact on the participants[24-25].
Nevertheless, significantly decrease in the symptoms of depression found out the group of IICBT that suggests the IICBT intervention highlights the importance while addressing cultural and spiritual needs in our society, which eventually enhances the effectiveness of the therapy. The findings align with the literature indicating the importance of its need being a culturally sensitive interventions can also improve the overall mental well-being of an individual that deeply connects with the individual's personal beliefs and values[26-27].

CONCLUSION

To summarize, the current study provides opening evidence for the effectiveness of IICBT in treating young adults, experiencing depressive symptoms. As the results show, the significant reduction in depressive symptoms in BDI levels underscores the need of IICBT as one of the culturally adopted therapies. As recommended, exploring long term effects of IICBT and its application across diverse Muslim communities with different ethnicity, as well as efficacy with other therapeutic modalities can be compared.

Limitations of the study:

As one of the limitations that can be considered was its limited sample size and the approach used that is quasi experimental, limits the findings in general and ability to demonstrate the causality. Furthermore, in an exclusion criteria e.g. individuals with mental illness and those in process of receiving currently receiving psychological therapy in any form, narrows the findings in general. In future, researchers should engage randomized controlled trials with more diverse, bigger samples to reach these limitations.

REFERENCES

1. Noetel, M., Sanders, T., Gallardo-Gómez, D., Taylor, P., Del Pozo Cruz, B., van den Hoek, D., et al. (2024). Effect of exercise for depression: systematic review and network meta-analysis of randomised controlled trials. *BMJ*, 384, e075847. https://doi.org/10.1136/bmj-2023-075847. Erratum in: *BMJ*, 385, q1024. https://doi.org/10.1136/bmj.q1024.
2. Birkjær, M., Kaats, M., & Rubio, A. (2020). Wellbeing adjusted life years: A universal metric to quantify the happiness return on investment. *Happiness Research Institute*. Retrieved from https://www.happinessresearchinstitute.com/waly-report.
3. Rugulies, R. (2002). Depression as a predictor for coronary heart disease: A review and meta-analysis. *American Journal of Preventive Medicine*, 23(1), 51-61. https://doi.org/10.1016/S0749-3797(02)00439-7.
4. Jacobson, N. C., & Newman, M. G. (2017). Anxiety and depression as bidirectional risk factors for one another: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 143(11), 1155-1200. https://doi.org/10.1037/bul0000111.

5. Pinquart, M., & Duberstein, P. R. (2010). Depression and cancer mortality: A meta-analysis. *Psychological Medicine*, 40(11), 1797-1810. https://doi.org/10.1017/S0033291709992285.
6. Cuijpers, P., Noma, H., Karyotaki, E., Vinkers, C. H., Cipriani, A., & Furukawa, T. A. (2020). A network meta-analysis of the effects of psychotherapies, pharmacotherapies, and their combination in the treatment of adult depression. *World Psychiatry*, 19(1), 92-107. https://doi.org/10.1002/wps.20701.
7. Cuijpers, P., Quero, S., Noma, H., Ciharova, M., Miguel, C., & Karyotaki, E., et al. (2021). Psychotherapies for depression: A network meta-analysis covering efficacy, acceptability and long-term outcomes of all main treatment types. *World Psychiatry*, 20(2), 283-293. https://doi.org/10.1002/wps.20860.
8. Strawbridge, R., Carter, B., Marwood, L., Bandelow, B., Tsapekos, D., Nikolova, V. L., et al. (2019). Augmentation therapies for treatment-resistant depression: Systematic review and meta-analysis. *British Journal of Psychiatry*, 214(1), 42-51. https://doi.org/10.1192/bjp.2018.233.
9. Moitra, M., Santomauro, D., Collins, P. Y., Vos, T., Whiteford, H., & Saxena, S., et al. (2022). The global gap in treatment coverage for major depressive disorder in 84 countries from 2000-2019: A systematic review and Bayesian meta-regression analysis. *PLoS Medicine*, 19(2), e1003901. https://doi.org/10.1371/journal.pmed.1003901.
10. Patel, V., Chisholm, D., Parikh, R., Charlson, F. J., Degenhardt, L., & Dua, T., et al. (2016). Addressing the burden of mental, neurological, and substance use disorders: Key messages from Disease Control Priorities, 3rd edition. *The Lancet*, 387(10028), 1672-1685. https://doi.org/10.1016/S0140-6736(15)00390-6.
11. Saxena, S., Funk, M., & Chisholm, D. (2013). World Health Assembly adopts Comprehensive Mental Health Action Plan 2013-2020. *The Lancet*, 381(9882), 1970-1971. https://doi.org/10.1016/S0140-6736(13)61139-3.
12. Chisholm, D., Sweeny, K., Sheehan, P., Rasmussen, B., Smit, F., Cuijpers, P., & Saxena, S. (2016). Scaling-up treatment of depression and anxiety: A global return on investment analysis. *The Lancet Psychiatry*, 3(5), 415-424. https://doi.org/10.1016/S2215-0366(16)30024-4.
13. Kohn, R., Saxena, S., Levav, I., & Saraceno, B. (2004). The treatment gap in mental health care. *Bulletin of the World Health Organization*, 82(11), 858-866.
14. Thornicroft, G., Chatterji, S., Evans-Lacko, S., Gruber, M., Sampson, N., & Aguilar-Gaxiola, S., et al. (2017). Undertreatment of people with major depressive disorder in 21 countries. *British Journal of Psychiatry*, 210(2), 119-124. https://doi.org/10.1192/bjp.bp.116.188078.
15. Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry*, 2012, 278730. https://doi.org/10.5402/2012/278730.
16. Saleem, S., & Saleem, T. (2017). Role of religiosity in psychological well-being among medical and non-medical students. *Journal of Religion and Health*, 56(4), 1180-1190. https://doi.org/10.1007/s10943-016-0341-5.
17. Sabki, Z. A., Sa'ari, C. Z., Muhsin, S. B., Kheng, G. L., Sulaiman, A. H., & Koenig, H. G. (2019). Islamic integrated cognitive behavior therapy: A shari'ah-compliant intervention for Muslims with depression. *Malaysian Journal of Psychiatry*, 28(1), 29-38.
18. Azhar, M. Z., Varma, S. L., & Dharap, A. S. (1994). Religious psychotherapy in anxiety disorder patients. *Acta Psychiatrica Scandinavica*, 90(1), 1-3. https://doi.org/10.1111/j.1600-0447.1994.tb01545.x.
19. Azhar, M. Z., & Varma, S. L. (1995). Religious psychotherapy in depressive patients. *Psychotherapy and Psychosomatics*, 63(3-4), 165-168. https://doi.org/10.1159/000288954.
20. Razali, S. M., Hasanah, C. I., Aminah, K., & Subramaniam, M. (1998). Religious-sociocultural psychotherapy in patients with anxiety and depression. *Australian & New Zealand Journal of Psychiatry*, 32(6), 867-872. https://doi.org/10.3109/00048679809073877.
21. Pearce, M. J., Koenig, H. G., Robins, C. J., Nelson, B., Shaw, S. F., & Cohen, H. J., et al. (2015). Religiously integrated cognitive behavioral therapy: A new method of treatment for major depression in patients with chronic medical illness. *Psychotherapy*, 52(1), 56-66. https://doi.org/10.1037/a0036448.
22. Trimulyaningsih, N., & Subandi, K. W. Y. (2019). Determinants of personal transformation among Muslims: Initiator, obstacle, and supporting factors. *ICRMH*. https://doi.org/10.4108/eai.18-9-2019.2293452.
23. Munawar, K., Ravi, T., Jones, D., & Choudhry, F. R. (2023). Islamically modified cognitive behavioral therapy for Muslims with mental illness: A systematic review. *Spirituality in Clinical Practice*. Advance online publication. https://doi.org/10.1037/scp0000338.
24. Cucchi, A. (2022). Integrating cognitive behavioural and Islamic principles in psychology and psychotherapy: A narrative review. *Journal of Religion and Health*, 61(6), 4849-4870. https://doi.org/10.1007/s10943-022-01576-8.
25. Subhas, N., Mukhtar, F., & Munawar, K. (2021). Adapting cognitive-behavioral therapy for a Malaysian Muslim. *Medical Journal of the Islamic Republic of Iran*, 35, 28. https://doi.org/10.47176/mjiri.35.28.
26. Mishu, M. P., Tindall, L., Kerrigan, P., & Gega, L. (2023). Cross-culturally adapted psychological interventions for the treatment of depression and/or anxiety among young people: A scoping review.

PLoS One, 18(10), e0290653. https://doi.org/10.1371/journal.pone.0290653.

27. Cipta, D. A., Andoko, D., Theja, A., Utama, A. V. E., Hendrik, H., & William, D. G., et al. (2024). Culturally sensitive patient-centered healthcare: A focus on health behavior modification in low and middle-income nations—insights from Indonesia. *Frontiers in Medicine*, 11, 1353037. https://doi.org/10.3389/fmed.2024.1353037.

28. Khaliq, S. A., & Gul, A. (2018). Validity and reliability of Urdu version of Beck's Depression Inventory among students of madaris (Islamic institutes). Isra Med J, 10(3), 175–176.

29. Khan, A., Ghous, R., & Malik, J. A. (2016, June 30). Validation of the Urdu version of Religion Orientation Scale. Journal of Pakistan Psychiatric Society, 13(2), 8–11.

The Authors:

Dr. Binish Nawaz
Phd Scholar
Institute of Professional Psychology
Bahria University, Karachi

Dr. Tahira Yousuf
Associate Professor
Institute of Professional Psychology
Bahria University, Karachi

Authorship:

BN: Study designing, planning, intervention, data analysis, write-up

TY: Study design, planning, supervision