EFFECTIVENESS OF MINDFULNESS BASED STRESS REDUCTION (MBSR) ON PSYCHOLOGICAL DISTRESS AND QUALITY OF LIFE AMONG MIGRAINE SUFFERERS

HAMIDAH

03-275232-019

BAHRIA UNIVERSITY LAHORE CAMPUS

EFFECTIVENESS OF MINDFULNESS BASED STRESS REDUCTION (MBSR) ON PSYCHOLOGICAL DISTRESS AND QUALITY OF LIFE AMONG MIGRAINE SUFFERERS

HAMIDAH

03-275232-019

Supervisor: Dr. Tanzila Tanzeem

A thesis submitted in fulfillment of the requirements for the award of degree of Master of Science (Clinical Psychology) institute of professional Psychology

BAHRIA UNIVERSITY LAHORE CAMPUS

AUGUST 2025

APPROVAL FOR EXAMINATION

Scholar's Name. HAMIDAH

Registration No. 03-275232-019

Program of Study: Master of Clinical Psychology

Thesis Title: Effectiveness of Mindfulness Based Stress Reduction on Psychological Distress and Quality of Life among Migraine Sufferers.

I hereby confirm that I am satisfied with the completion of the scholar's thesis, and I believe it meets the appropriate standards for examination and submission. The plagiarism test, conducted using the HEC-prescribed software, returned a similarity index of 16 %, which is within the permissible limit set by the HEC for MS theses. Additionally, the thesis adheres to BU's recognized format for MS theses.

Principal Supervisor's Signature: _____

Date: _____

Name: _____

AUTHOR'S DECLARATION

I, Hamidah, hereby state that my MS thesis titled " Effectiveness of Mindfulness Based Stress Reduction on Psychological Distress and Quality of Life among Migraine Sufferers" is my work and has not been submitted previously by me for taking any degree from this university, Bahria University, or anywhere else in the country/world.

At any time, if my statement is found to be incorrect even after my postgraduate degree, the university has the right to withdraw/cancel my MS degree.

Name of scholar: Hamidah

Date: August 22, 2025

PLAGIRISM UNDERTAKING

I solemnly declare that the research work presented in the thesis titled “Effectiveness of Mindfulness Based Stress Reduction on Psychological Distress and Quality of Life among Migraine Sufferers " is solely my research work with no significant contribution from any other person. Small contribution/help, wherever taken, has been duly acknowledged and that the complete thesis has been written by me.

I understand the zero-tolerance policy of HEC and Bahria University towards plagiarism. Therefore, I as an Author of the above-titled thesis declared that no portion of my thesis has been plagiarized, and any material used as reference is properly referred to/ cited.

I undertake that if I am found guilty of any formal plagiarism in the above-titled thesis, even after awarding of MS degree, the university reserves the right to withdraw/revoke my MS degree, and that HEC and the University have the right to publish my name on the HEC/ University website on which names of students are placed who submitted plagiarized thesis.

DEDICATION

I dedicate my work to humanity and my family for their endless love, support and encouragement.

ACKNOWLEDGMENTS

First and foremost, I offer my deepest gratitude to Allah, the Almighty, for His countless blessings. His guidance has supported me throughout my research journey and allowed me to complete this study. I would like to extend my deepest gratitude to my research supervisor, Dr. Tanzila Tanzeem, for her invaluable support throughout this journey. Her exceptional leadership, insightful guidance, and unwavering encouragement have been a constant source of inspiration. Her dedication and belief in my abilities pushed me to strive for excellence, and it has been both a privilege and an honor to learn and grow under her mentorship. I am truly grateful for her role in shaping my research and this entire experience.

To my dearest parents (Bashir Ahmad & Musarrat Bashir), words fall short when I try to express the depth of my gratitude for everything you've done for me. Your constant prayers, endless love, and unwavering belief in me have been my guiding light. Through every challenge and triumph, your support has been my greatest strength and inspiration. I am beyond blessed to have you by my side, and I will forever be thankful for the love and wisdom you've given me. You are the reason I stand tall today, and for that, I am eternally grateful.

I am truly grateful to my siblings & friends for their incredible support during the difficult process of writing this thesis. Having them by my side made this journey not only manageable but also unforgettable. I deeply appreciate their love, understanding, and constant encouragement throughout.

I sincerely thank my friends, especially Areej, Tahira, Aqsa and Kinza for their constant support throughout my thesis. Their encouragement, understanding, and shared moments of humor kept

me going during the tough times. Their faith in me meant the world. Thank you for being there every step of the way

Lastly, I want to take a moment to thank myself with heartfelt gratitude. I am proud of the strength, perseverance, and determination I've shown in overcoming the challenges along this journey. Every obstacle faced has been a testament to my resilience, and I am truly thankful for the commitment I made to my goals and growth.

Abstract

The true experimental study aimed to evaluate the effectiveness of Mindfulness-Based Stress Reduction (MBSR) in reducing psychological distress and enhancing quality of life (QoL) among migraine sufferers. Participants with migraine (N = 30) aged 18–30 years were recruited through purposive sampling and allocated using the randomized controlled trial (RCT) method to either the experimental group (n = 15) or the control group (n = 15). The intervention was delivered to the experimental group, while the control group received placebo activities. Pre- and post-assessments were conducted using the Kessler Psychological Distress Scale (K10) and the Migraine-Specific Quality of Life Questionnaire (MSQ v2.1). The MBSR program consisted of an eight-week structured curriculum including guided meditation, body scan, gentle yoga, stress education, and daily mindfulness practice. Data were analyzed using descriptive statistics, paired t-tests, and independent t-tests. Findings demonstrated statistically significant improvements in psychological distress and QoL in the experimental group, with large effect sizes, while no significant changes were observed in the control group. The study followed ethical guidelines and ensured participant confidentiality. The findings provide strong evidence of the effectiveness of MBSR as a non-pharmacological intervention for migraine management, with potential implications for clinical and psychological practice.

Key Words: Mindfulness-Based Stress Reduction, Migraine, Psychological Distress, Quality of Life, Randomized Controlled Trial

List of Abbreviations

Abbreviations	Full Form
APA	American Psychological Association
SPSS	Statistical Package for the Social Sciences
WHO	World Health Organization
MBSR	Mindfulness Based Stress Reduction
QoL	Quality of Life

List of Appendices

Appendices	Title
Appendix A	Permission from Authors
Appendix B	Permission Letter from Department of Professional Psychology
Appendix C	Consent Form
Appendix D	Questionnaire
Appendix E	Plagiarism Report

List of Symbols

Symbol	Full Form
f	Frequency
M	Mean
SD	Standard Deviation
%	Percentage

Table of Contents

APPROVAL FOR EXAMINATION i
AUTHOR'S DECLARATION ii
PLAGIRISM UNDERTAKING iii
DEDICATION iv
ACKNOWLEDGMENTS v
Abstract vii
List of Abbreviations viii
List of Symbols x
CHAPTER 1 1
INTRODUCTION 1
1.1 Background 1
1.1.2 Psychological Distress 5
1.1.3 Quality of Life 9
1.1.4 Mindfulness Based Stress Reduction (MBSR) 10
1.2 Research Gap 14
1.3 Problem Statement 16
1.4 Research Questions 17
1.5 Research Objectives 17
1.6 Hypotheses 18
Significance of Study 18
CHAPTER 2 20
LITERATURE REVIEW 20
2.1 Mindfulness-Based Stress Reduction (MBSR) 21
2.2 Psychological Distress 22
2.3 Quality of Life 26
THEORETICAL FRAMEWORK 28
CHAPTER 3 36
METHODOLOGY 36
3.1 Research Design 36
3.2 Sampling Strategy 36

3.2.1 Sample Size 36
3.2.2 Inclusion Criteria 38
3.2.3 Exclusion Criteria 38
3.3 Assessment Measures 38
3.3.1 Demographic Sheet 38
3.3.2 Kessler Psychological Distress Scale (K10) 39
3.3.3 Migraine-Specific Quality of Life Questionnaire Version 2.1 (MSQ v2.1) 39
3.4 Operational Definition 40
3.4.1 Psychological Distress 40
3.4.2 Quality of Life 40
3.4.3 Mindfulness-Based Stress Reduction (MBSR) 40
4.5 Procedure 41
3.6 Ethical Considerations 44
3.7 Statistical Analysis 44
CHAPTER 4 67
RESULTS 67
CHAPTER 5 78
DISCUSSION 78
5.2 Implications of the Study 84
5.3 Limitations 86
5.4 Future Research Recommendations 87
Conclusion 88
REFERENCES 90
APPENDICES 105
APPENDIX A 106
APPENDIX B 112
APPENDIX C 114
APPENDIX D 116