Efficacy of EMDR Therapy in the Treatment of Depression

by

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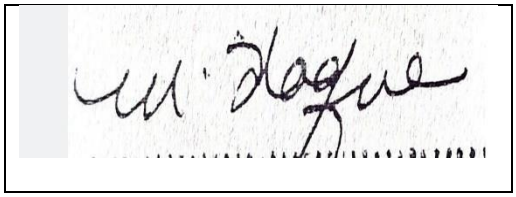
Approval Sheet

This is to certify that I have read the thesis entitled “Efficacy of EMDR therapy in the treatment of depression” submitted by Mariyam Sultana, in partial fulfillment of the requirements for the degree of Master of Philosophy in Counselling Psychology and this research was carried out by her under my supervision and guidance.



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Dated, Dhaka

May, 2025

Dedication

Dedicated to my

cherished family members

and

teachers

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Abstract

Eye movement and Desensitization and Reprocessing (EMDR) is well established treatment for post-traumatic stress disorders. The literature review emphasizes that Eye Movement Desensitization and Reprocessing (EMDR) therapy is also effective in treating depression, making it a promising intervention for mental health challenges. Among Bangladeshi population the prevalence of depression is 57.9%. The effectiveness of EMDR Therapy within the context of Bangladeshi culture stays underexplored. This gap in knowledge is a core motivation for investigating the efficacy of EMDR therapy in treating patients with depression in Bangladesh. The Current Research purpose is to investigate whether EMDR Therapy is effective in treating clients with Depression And also to Compare EMDR with CBT and TA as comparative approaches to see whether they are equally effective in treating Depression clients. To collect data the convenience and purposive sampling techniques were used. In this study 21clients participated in total. Among 21 participants, 9 were receiving EMDR therapy, 6 were receiving CBT and 6 were receiving TA. A total of 16 Therapists participated for data collection from clients and for providing data (both Quantitative & Qualitative data) to researcher. Informed Consent was taken from participants and therapists. In data collection purpose researcher was also included in EMDR therapy group and TA group. The 3 groups were assessed with Bangla PHQ-9 scale and Bangla Warwick Edinburgh Mental Wellbeing Scale (WEMWBS). The scales were applied with clients in 1st, 3rd and 6th session with every participant. The Result shows The EMDR group had a continuous decrement of depression over time, and the CBT and TA groups had a high but sometimes irregular pattern in reducing depression. EMDR reduced depression to the greatest extent, CBT reduced depression to the second greatest extent, and TA reduced

depression to the least extent. As a result, the findings appear to be utilized for treatment purposes in psychotherapy for depression and for future research. This study confirms previous studies about Depression treatment with EMDR therapy to some extent although it has some different outcomes adjacent with Bangladeshi culture and perspectives.

Keywords: EMDR therapy, treatment, depression

Efficacy of EMDR Therapy in the Treatment of Depression

Efficacy of EMDR Therapy in the Treatment of Depression

Depression is a pervasive psychological disorder. It is recognized as a significant and growing global public health challenge. It is estimated to affect over 280 million people worldwide, with cases rising sharply due to increased stressors such as the COVID-19 pandemic (Hawes et al., 2021). Depression is typically characterized by prolonged sadness, a lack of interest or pleasure, low self-worth, and disruptions in sleep, appetite, and lack of concentration. These symptoms may vary in intensity and duration, impacting the lives of individuals and their close ones over months or even years (WHO, 2017). The other traditional treatment methods for depression include cognitive behavioral therapy (CBT), psychodynamic psychotherapy, and pharmacotherapy (DGPPN, 2015). However, these conventional approaches are not universally effective, leading researchers to explore alternative therapies that may offer different mechanisms of healing. Moreover, EMDR can complement traditional therapies like Cognitive Behavioral Therapy (CBT) or psychodynamic psychotherapy. While traditional methods focus on present-day coping, EMDR addresses underlying past traumatic memories that may fuel depression.

EMDR Therapy

Eye Movement Desensitization and Reprocessing (EMDR) therapy is a structured, eight-phase psychotherapy approach developed by Francine Shapiro in the late 1980s. Originally designed to treat post-traumatic stress disorder (PTSD), EMDR therapy employs bilateral stimulation, such as guided eye movements, while the client focuses on disturbing memories. This method enables the reprocessing of distressing memories and alleviates associated symptoms (Shapiro, 2001). EMDR therapy's efficacy in treating PTSD has been well-documented, with evidence suggesting that it may work faster than some other trauma-focused

therapies (Bisson et al., 2013; van Etten & Taylor, 1998). Given that stressful life events are a significant risk factor for depression onset (Risch et al., 2009), there is growing interest in applying EMDR therapy to treat depression, especially in cases where traumas are underlying contributors.

The adaptive information processing (AIP) model, which underpins EMDR, posits that psychological distress arises from maladaptively stored memories of past disturbing experiences. This model suggests that reprocessing these memories can facilitate an adaptive resolution, thereby reducing symptoms of PTSD and other mental health conditions (Shapiro & Maxfield, 2002; Hofmann & Schneider, 2014). Many studies have shown that depression is often linked with childhood trauma, abuse, or household dysfunction, which increase vulnerability to depressive disorders (Heim et al., 2008; Chapman et al., 2004). This connection has spurred research into EMDR therapy's potential as a therapeutic option for individuals whose depression may be rooted in unresolved traumatic memories.

TABLE 1 *AIP MODEL OF EMDR*

Table: Overview of Eight Phases eye movement desensitization and reprocessing (EMDR) Therapy Treatment

Phase	Purpose	Procedures
History Taking	Taking background information, identify suitability for EMDR treatment, identify processing targets from events in client's life according to standardized three-pronged protocol (past-Present-Future)	Identify presenting problems, patterns, goals for treatment, Adaptive memory networks, maladaptive memory networks, Clinician's assessment, Development of therapeutic

		relationship
Preparation	Develop the therapeutic alliance, set expectations for the process, informed consent, EMDR therapy mechanics and parameters, prepare client for disturbing memory reprocessing	Education regarding the symptoms of picture Metaphors and techniques that foster stabilization and a sense of personal control
Assessment	Access the target for EMDR processing by stimulating primary aspects of the memory	Arrange the setting, elicit the image, negative belief currently held, desired positive belief, current emotion, physical sensation and baseline measures
Desensitization	Process target memory and associated experiences toward an adaptive resolution (no disturbance)	Standardized protocols incorporating eye movements (taps or tones) that allow the spontaneous emergence of insights, emotions, physical sensations, and other memories
Installation	Ensure the connections between positive belief and experience of self	Enhance the validity of the desired positive belief and fully integrate

		the positive effects within the memory network
Body Scan	Ensure that the body is congruent with the reprocessed memory and the associated positive cognition	Concentration on and processing of any residual body sensations
Closure	To bring closure to a reprocessing session and ensure client stability between sessions	Focus into the "here and now", offer brief, affirmation, clinician provide hopeful feedback
Reassessment	Ensure maintenance of therapeutic outcomes and stability of client	Evaluation of treatment effects Evaluation of integration within larger social system

Note. This table provides an overview of the eight phases of Eye Movement Desensitization and Reprocessing (EMDR), summarizing their purpose and associated procedures.

Theoretical Foundation of EMDR Therapy

In 1990 the theoretical foundation of EMD turns into EMDR which recognizes lots of changes. EMDR is not solely a reduction/elimination of distress as determined by subjective units of Disturbance (SUD) but also include emotional shift in understanding and meaning experience(s). EMDR spontaneously accesses the networks associated with similar experiences. Sometimes it is shown that similar experiences are often naturally processed. The main goals of EMDR are- 1) transform maladaptively stored memory networks into adaptive thereby increasing the ability to respond appropriately to present-day situations. 2) lasting shifts in

maladaptive perceptions, perspectives and responses. This is not a temporary shift in one's emotional state facilitated by a change in focus of attention, known as "state change". 3)Incorporate needed skill, behaviors, and adaptive beliefs about self and others. 4) Achieve the most effective and efficient treatment effects while maintaining client stability and safety.

EMDR Therapy Worldwide

Recent research into the use of EMDR therapy for depression shows promise, yet there remain methodological variations in study designs, treatment settings, and depression severity among patients that challenge the generalizability of those findings (Wood & Ricketts, 2013; Hase et al., 2015). Nonetheless, studies in inpatient and outpatient settings have indicated that EMDR therapy, when combined with traditional treatments, may lead to better outcomes for depression than conventional therapy alone (Hofmann et al., 2014). As EMDR therapy has been integrated into the mental health landscape across different regions, including the United States, Europe, and Asia, its relevance for a variety of mental health challenges, including depression, has gained purchase.

EMDR Therapy in Asia

EMDR Therapy is very common all over the world. EMDR Asia was informally established in 2008, having its first conference in 2010 in Bali, Indonesia leading to the formation of EMDR Asia, EMDR therapy training began soon after its presence in the USA and Europe in the 1990s.

Enormous EMDR therapy work during the natural disasters in Asia brought everyone collectively. Although EMDR has been associated with specific natural disasters in Asia, it is

now becoming accepted among mental health professionals for a variety of clients. Psychotherapists have imbibed EMDR therapy as a method within their existing practices.

Since the formation of EMDR Asia in 2010, the National EMDR Associations started networking periodically and providing EMDR Therapy Basic/Advance training across Asia. That time biggest challenge was lack of uniformity in the training curriculum, methodology and training contents. To beat this challenge, training standards of the 'EMDR Global Alliance' were accepted by EMDR Asia board in 2014.

Due to lack of uniformity in educational standards in Asia, different levels of participants' selection criteria were applied, therefore EMDR training too has had degree of difference approaches. The University departments, NGOs, Psychological Associations came all together to organize EMDR therapy training and later to form EMDR Associations across Asia.

EMDR Asia has formed the Training, Standards & Accreditation (TSA) Committee from 2017 to initiate a think tank for creating a possible roadmap ahead for bringing uniformity in EMDR Therapy Basic/Standard training. Now EMDR Asia has guidelines for Trainers, facilitators and Consultants training which are like those of EMDR Institute and HAP, barring some adaptations to cultural requirements. The training guidelines have been carefully outlined by following EMDR Europe, EMDR Institute and Trauma Recovery/HAP procedures. Currently all EMDR Asia Trainings are utilizing EMDR Institute most updated manual and teaching aids. TSA members are in constant contact with EMDR Institute and Trauma Recovery/HAP for to keep informed. EMDR Asia's process for Accreditation is roughly equal to the standards meeting most International Certification practices.

National boundaries for selecting the participants for the training are monitored by the training organizers. Several Trainers and Facilitators/ Consultants from the other National Organizations are invited for sharing and cross learning.

The Basic/Standard training courses in Asia are presented by the EMDR Associations, by the trainers accredited/certified by EMDR Asia. Private training by individual trainers as commercial training is not granted and certified by National Associations and EMDR Asia so that we can maintain the quality and standards set up by EMDR Asia. There are mixed practices of private trainers providing the training by non-certified trainers from outside Asia, some maintaining high standards and others of substandard qualities. Every Asian country does not have own EMDR trainers and trainers from other Asian Countries and frequently invited to conduct the local trainings and to support for preparing new consultants and trainers.

During the lockdown and COVID restrictions several online Trainings have been organized and have witnessed the enriching experience of cross learning by participating in the trainings supervised by the National Organizations. Some training courses have had Trainers and Consultants doing their portions, part fulfilment of Trainers and Consultants training, including Supervision of Supervision during these online trainings.

Currently there are 19-member countries/ Special Administrative Regions in EMDR Asia (Bangladesh, Cambodia, China, (Mainland), Hong Kong, India, Indonesia, Iran, Japan, S. Korea, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand, Vietnam. Some countries don’t have the Associations yet, but in the process and may join as members soon (Bhutan, Maldives, Mauritius, Nepal), however, participants often join the training organized by any of the Asian countries.

The establishment of EMDR Asia and its role in training and standardizing practices has facilitated the spread of EMDR therapy throughout Asia, including Bangladesh, where national EMDR associations and foundational training programs have been well-known. In Bangladesh, the prevalence of depression is estimated at 57.9% and mental health resources are limited, hence investigating culturally adapted treatments is crucial (WHO, 2017). Here, EMDR therapy is emerging as an alternative to traditional therapies, particularly for individuals resistant to pharmacotherapy or CBT. EMDR therapy's ability to address trauma-related symptoms and help clients develop inner resources aligns with the needs of Bangladeshi populations, where unresolved trauma is often linked to depressive symptoms.

EMDR Therapy in Bangladesh

EMDR therapy was revived in Bangladesh under the leadership of Dr Shamim F Karim in 2015 with the office of HAP/Trauma Aid Switzerland. Hanna Egli-Bernd, (Dipl.Psych.) set the grounds by providing intensive training on psycho-traumatology to ensure sustainability. Total 52 mental health professionals successfully received Basic EMDR training from Dr Sushma and her team from EMDR Asia. In March 2019 EMDR-Bangladesh Association was officially established, Dr Shamim F Karim being the president. Presently there are 27 active members and subsequently HAP-Bangladesh was formed under the leadership of Shaheen Islam. Members of EMDR-BD responded to many humanitarian work of disaster like massive fire incident, road accident, political unrest of Bangladesh and suicide incident of school children, Rohingya influx and finally the pandemic COVID 19. EMDR-BD has effectively launched foundation training on "Psycho-traumatology" for trauma informed care.

EMDR-Bangladesh stepped into international community by participating and presenting papers in EMDR Europe congress in the year 2019, 2021 and EMDR Asia conferences in 2017,

2020. EMDR Bangladesh, a small community with a big heart, became the conveyer of Francine Shapiro's dream by making a token contribution to "Francine Shapiro Memorial Fund". The association focuses on strengthening the local body and resources to advance and sustain the benefit that would further guarantee the forward movement of EMDR practice in Bangladesh. There are about total 55 EMDR therapy trainees in Bangladesh now.

Rationale

Eye Movement Desensitization and Reprocessing (EMDR)Therapy is already acknowledged for its success in treating post-traumatic stress disorder (PTSD). Nowadays researchers and clinicians are beginning to discover its efficacy in treating other psychological conditions, including depression.

Depression is one of the most prevalent mental health disorders universally. Among Bangladeshi population the prevalence of depression is 57.9%. In Bangladesh access to mental health services is limited and there is pointed stigma associated with mental health, finding affective, efficient and culturally adapted treatments is critical. Here traditional treatments for depression typically include pharmacotherapy and cognitive behavioral therapy (CBT) which have explained efficacy but not universally effective for all patients. Few patients deny participating in pharmacotherapy or CBT for their personal resistance. This gap has led to the exploration of complementary therapies, such as EMDR therapy, TA (Transactional Analysis), which may offer unique benefits for individuals with depression, especially those with trauma-related symptoms.

The rationale for investigating EMDR therapy in the treatment of depression is based on its unique approaches to processing disturbing memories and easing emotional distress. As our maximum trauma comes from childhood Adverse experiences and with unresolved trauma

nervous system directs as if it is still in danger. EMDR helps to store resources in the body, and it helps clients to consider safe when they need it. EMDR may offer quicker symptom relief compared to some traditional therapies.

The literature review emphasizes that Eye Movement Desensitization and Reprocessing (EMDR) therapy is effective in treating depression, making it a promising intervention for mental health challenges. However, its effectiveness within the context of Bangladeshi culture stays underexplored. This gap in knowledge is a core motivation for investigating the efficacy of EMDR therapy in treating patients with depression in Bangladesh. With a significant prevalence of depression among the Bangladeshi population and a growing number of trained EMDR therapists, recognizing the therapy's cultural applicability and effectiveness becomes needed. This study aims to provide awareness into how well EMDR aligns with the unique cultural and psychological needs of individuals in Bangladesh, potentially guiding its broader application in the country's mental health landscape.

Additionally, this research could impact to the broader global conversation on EMDR's applicability beyond PTSD, particularly in the context of treating depression in diverse settings.

Objectives of the current research

Given the recent research directing that trauma and other adverse life experiences can be the basis of depression, the aim of this study was to determine the effectiveness of EMDR therapy in treating depression.

I. To investigate whether EMDR Therapy is effective in treating clients with Depression

II. To Compare EMDR therapy with CBT and TA as comparative approaches to see whether they are equally effective in treating Depression clients

Literature Review

Limitations of Traditional Therapies for Depression

The literature on depression and the efficacy of various therapeutic interventions presents substantial evidence of the challenges and limitations in treatment effectiveness. Depression is a pervasive mental health disorder that appears high rates of disability, comorbidity, and setbacks (Fournier et al., 2010; Tol et al., 2013). Traditional therapies, such as antidepressant medication and cognitive-behavioral therapy (CBT), have shown varied success rates, with a substantial portion of patients experiencing limited long-term relief or indicating resistance to these treatments. Given these limitations, eye movement desensitization and reprocessing (EMDR) therapy has appeared as an alternative and adjunctive treatment for depression with promising results.

Introduction to EMDR as an Alternative Therapy

Shapiro, 2011 described different EMDR therapy strategies that were used depending on case history and patient's present illness. One of the most useful targeting strategies was to focus on the events that had triggered the (last or worst) depressive episode(s) in line with Shapiro's approach to focus on the events that set the psychopathology into action. Frustaci et al, 2010 also had this type of finding that, most of these events did not fit into the PTSD condition category but could be classified as meaningful upsetting memories, which are effective targets for EMDR therapy reprocessing. Interestingly these memories often focused on life events that are known to be related to the onset or continuation of depression (Kendler et al. 2003). (Hase et al., 2015)

E. Wood et al (2018) conducted research with thirteen people with recurrent and/or long-term depression, hired from primary care mental health services and provided standard protocol

EMDR for a maximum of 20 sessions. The levels of depression were assessed before and after treatment and at follow-up, clients also rated their mood each day of therapy. As the result of this study shown of the nine people who fully engaged with the treatment program, eight had a clinically significant and statistically reliable positive outcome. Five people scored as subclinical for depression at the end of therapy. All participants would recommend it to friends and family. This indicates that (1) EMDR can be presented to this patient group without observed difficulties in this small sample, (2) the treatment was acceptable, and (3) the treatment was associated with reduction in the symptoms of depression. Among the participants only one person's depression deteriorated during treatment. When asked about this, the participant did not feel the EMDR had been a cause of the deterioration, and he stated that he would like to try this therapy again in the future. Treatment safety should be taken as seriously in psychotherapy as it is in pharmacology (Parry, Crawford, & Duggan, 2016).(Wood et al., 2018)

Jahanfar et al. (2020) conducted research with the objective of investigating the efficacy of eye movement desensitization and reprocessing (EMDR) on the quality of life (QOL) in patients with major depressive disorder (MDD). 70 patients with MDD were selected through convenience sampling. Patients were then assigned to two groups of intervention and control (35 patients in each group). The assignment was presented randomly. For the intervention group, EMDR performed in eight 90 mins sessions over 3 weeks. For the control group, no intervention was provided. This study showed that the QOL in all its domains (physical health, psychological health, social relationships and environments) was considerably improved in patients with MDD in the intervention group after 8 sessions of EMDR. The post-treatment effect for the EMDR condition was 2.11, with a confidence interval of 1.3 to 2.7. Another finding of this study was

that there was a statistically significant difference in the QOL scores in patients in the control group before and after the treatment; however, the mean difference in the intervention group was more than the control.(Jahanfar et al., 2020)

Recently J. Seok & J.Kim (2024) also said in their study findings that- EMDR has been primarily associated with the treatment of PTSD, can also be effectively applied to treat mental health issues such as depression. Their results of meta-analysis reveal that EMDR therapy was more effective in treating depression compared to the control groups. Their meta-regression analysis confirmed that the effectiveness of EMDR was consistent regardless of the study methodology (e.g., number of sessions and sample size) or participants' demographic characteristics (e.g., age), which align with earlier research. This suggests that EMDR therapy is consistently effective in reducing depressive symptoms across diverse conditions.(Seok & Kim, 2024)

Comparative Research with Other Therapies

According to C. De Roos, R. Greenwald, M. den Hollander-Gijsman et. al EMDR therapy is more efficient than CBT. Both CBT and EMDR are efficient in substantially reducing children's symptoms of post-traumatic stress, anxiety, depression, and behavioral problems presenting in a community mental health setting. The post-treatment gains of both treatments were maintained at 3-months follow-up, while no side effects were reported. (de Roos et al., 2011)

A. Hofmann, W. Schneider (2014), the study revealed a significant difference in the reduction of the BDI-II (Beck's Depression Inventory) scores after treatment, showing that the patients helped from CBT and from CBT with adjunctive EMDR treatment. Results also showed

a larger decrease in BDI-II scores for TAU+EMDR compared to CBT treatment alone. Although CBT has been a highly effective and well-established treatment for depression for many years, adjunctive EMDR sessions may enhance the beneficiary effect of the treatment in depression.(Hofmann & Schneider, 2014)

M. Hase et al (2015) administered research with a group of 16 patients with depressive episodes, and the participants were in the inpatients' place. These 16 patients were treated with EMDR therapy by reprocessing of memories linked to stressful life events in addition to treatment as usual (TAU). They were contrasted to a group of 16 controls matched regarding diagnosis, degree of depression, sex, age and time of admission to hospital, which were receiving TAU only. Finding this research was that Sixty-eight percent of the patients in the EMDR group showed full remission at the end of treatment. The EMDR group showed a greater reduction in depressive symptoms as calculated by the SCL-90-R depression subscale. This difference was significant even when modified for duration of treatment. In a follow-up period of more than 1 year the EMDR group stated less complaints related to depression and less relapses than the control group.(Hase et al., 2015)

M. Hase et al (2018) showed in their study that patients suffering from depression advantage from adjunctive EMDR in the acute depression treatment. In the experimental group (EMDR + TAU), there was a notably better improvement of BDI-II scores than in the control group (TAU only).(Hase et al., 2018)

Role of Childhood Trauma and EMDR's Efficacy

It is evident that Childhood trauma has a direct and strong threat factor for developing depression later in life (Heim, Newport, Mletzko, Miller, & Nemeroff, 2000). There is a strong

dose response correlation between adverse childhood experiences and lifetime depressive illness (Chapman et al., 2004), and it can be counted a determinate for chronicity (Wiersma et al., 2009), earlier onset (Bernet & Stein, 1999), more lifetime episodes (Bernet & Stein, 1999), and treatment resistance (Kaplan & Klinetob, 2000).

Y. Gauhar (2016) conducted research to see the efficacy of EMDR therapy in the treatment of depression. In the result it showed that the first memory acted as a gateway to other dysfunctional memory networks and that it also connected with negative beliefs. When one memory got processed, another linked memory would surface and would become the target of EMDR for processing. As the targeted beliefs were processed and closure was made, in the subsequent session, new targeted negative beliefs were identified for processing. However, participants stated that many of the other negative beliefs, which they had identified at the beginning of treatment, no longer felt true. The shift in the validity of the targeted cognition appeared to generalize to other untreated negative cognitions. (Gauhar, 2016)

F. Shapiro (2017) saw in her experiment that twenty-four randomized controlled trials support the positive effects of EMDR therapy in the treatment of emotional trauma and other adverse life experiences relevant to clinical practice. Seven of 10 studies reported EMDR therapy to be more rapid and/or more effective than trauma-focused cognitive behavioral therapy. Twelve randomized studies of the eye movement component recorded rapid decreases in negative emotions and/or vividness of disturbing images, with an additional 8 reporting a variety of other memory effects. Numerous other estimates document that EMDR therapy provides relief from a variety of somatic complaints.(Carletto, Ostacoli, Colombi, Calorio, Oliva, et al., 2017)

The study of Paauw et al. (2019) with 32 adolescents diagnosed with MDD, their research results suggest that a significant decrease in depressive symptoms and comorbid posttraumatic stress, anxiety, somatic complaints and overall social- emotional functioning with EMDR therapy treatment. More than 60% of the adolescents ending treatment no longer fulfilled the criteria of an MDD diagnosis after treatment. The medium to large effect sizes recommended clinically relevant effects that were maintained at 3 months of follow-up.(C. Paauw et al., 2019)

S. Altmeyer et al. (2022) linked childhood depression and EMDR therapy in their research. They have mentioned other studies show the correlation between childhood trauma and developing depression in adult life. In their study EMDR therapy leads to a high rate of remission and is associated with decreased number of relapses in patients with depression. The results of this observational study confirm data from previous research that EMDR is a promising method for treating depression as well as depressive symptoms in patients with history of childhood trauma. (Altmeyer et al., 2022)

In 2023 C.Paauw el al. (2023) had done another study on that study he hypothesized that traumatic memories play a role in the onset and continuation of depressive disorders. Especially in adolescence, early treatment of these traumatic memories is warranted to prevent a more chronic or recurrent disorder. For adults, there is some indication that EMDR is effective in treating traumatic memories in MDD. It is expected that EMDR will decrease depressive symptoms as well as comorbid post-traumatic stress, anxiety, somatic complaints and overall social emotional functioning in adolescent patients with a primary diagnosis of a depressive

disorder who also experienced at least one distressing or traumatic event associated to depressive symptomatology.(C. C. Paauw et al., 2023)

Systematic Reviews and Meta Analyses Supporting EMDR Therapy

In a systematic Review of Carletto et al (2001 to 2016) seven studies were counted in, of which 6 were published. Three studies used a controlled design and four randomized clinical trials. studies varied greatly for population and intervention characteristics, with an insufficient methodological quality. The aim of that study was to systematically review available facts about EMDR efficacy on depression as a primary diagnosis. When compared with an inactive control group (i.e. waiting list or no intervention) EMDR therapy appears to be a feasible and effective intervention in reducing depressive symptoms. When compared with active intervention, EMDR demonstrates its superiority against psychoeducation and to be comparable to CBT, that acknowledged as the gold standard intervention to treat depression, according to clinical guidelines (National Collaborating Centre for Mental Health, UK, 2010). (Carletto, Ostacoli, Colombi, Calorio, & Oliva, 2017)

In 2021 A.Sepehry, K. Lam. M. Sheppard et al. did the first meta-analysis examining for the effect of EMDR comparing to various control modalities on depression with dose-response. Thirty-nine studies were encompassed for investigation after a review of the related literature. The study found (a) that studies were balanced at onset in terms of depression severity, and (b) a large and significant effect of EMDR on depression at the end of trials. Moreover, the significance of the cumulative effect-size estimate at the end of trials was unchanged by the consumption of psychotropic medications, informed demographic variables, or EMDR methodology.(Sepehry et al., 2021)

Limitations and Challenges

Despite these promising findings, limitations remain. Existing research findings lacks cultural diversity, and findings from Western contexts may not fully generalize to populations in Bangladesh and other cultural situations without region-specific studies. This gap highlights the need for culturally adapted findings to confirm EMDR's effectiveness and address depression in a global context.

Method

Research Design

The goal of this research is to find out the effectivity of EMDR Therapy with patient of Depression to compare with CBT and TA to see whether they are equally effective for trauma recovery in Bangladeshi perspective. The Bangla PHQ-9, and The Bangla Warwick Edinburgh Mental Wellbeing Scale (WEMWBS), were selected to serve the purpose of the present study.

TABLE 0-2 RESEARCH DESIGN

Phase	**Session/Interval**	**Activities**	**Measurement tools**	**Key Outcomes**
Pre-Test Assessment	Session 1	- Pre-Test (PHQ-9 + WEMWBS) - Initial Assessment	Structured assessment tools (PHQ-9, WEMWBS)	-Baseline mental health and well-being - Participant profiling
Intervention	Session 2	- Intervention Phase 1	Intervention	Initial engagement and response
	Session 3	- Intervention Phase 2 + Intermediate Test	PHQ-9, WEMWBS	Short-term changes

	Session 4	- Intervention Phase 3	Intervention strategies	Progress tracking
	Session 5	- Intervention Phase 4	Intervention strategies	Continued progress
	Session 6	- Intervention Phase 5 + Post-Test	PHQ-9, WEMWBS	Post-intervention mental health and well-being
Follow-Up	One-month Interval	- Follow-up interview	Semi-structured interview	Relapse symptoms and sustained improvements

Note. The table outlines a phased approach, starting with a pre-test assessment to start baseline measures, followed by structured intervention sessions, and concluding with a post-test and follow-up to estimate sustained outcomes and relapse symptoms.

Participants

A total of 31 participants were taken for the study (EMDR-17, CBT-7 & TA-7), 6 samples were disqualified as they didn't match the inclusion criteria; 4 were dropped out (2 from EMDR, 1 from CBT, 1 from TA). Among the 2 EMDR participants drop out reasons were that one has stopped session for starting academic examination and another one didn't specify the reason for discontinuation. 1 CBT client dropped out and that participant didn't specify the reason for discontinuation. And 1 TA client dropped out because of starting physical

complications as that participant was aged. As a result, the total working sample size was 21. 9 participants were taken for EMDR group, 6 participants were taken for CBT, and 6 participants were taken TA.

TABLE 3: *PARTICIPANT'S NUMBER FOR RESEARCH*

EMDR	CBT	TA	Full Sample
9	6	6	21

Note. Only participants who completed the study were included in the final count.

The age range of participants was from 18 to 65. Among 21 participants 3 were male and 18 were female. In terms of ethnicity, all the participants were from Bangladesh and therefore Asian.

Table 4 summarizes all the demographic characteristics of the EMDR therapy participants and CBT and TA Therapy participants.

TABLE 0-4 *SOCIODEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS: EMDR GROUP, CBT GROUP AND TA* GROUP

Baseline	**EMDR (42.86%)**		**CBT (28.58%)**		**TA (28.57%)**	
Characteristics	N	%	n	%	N	%
Gender						
Male	0	0%	1	16.67%	2	33.33%
Female	9	100%	5	83.33%	4	66.67%
Age						
Young Adults (18-40)	9	100%	5	83.33%	4	66.67%
Middle Age (40-65)			1	16.67%	1	16.67%

Old Age (65- up)					1	16.67%
Marital Status						
Married	1	11.11%	4	50%	2	33.33%
Unmarried	8	88.89%	2	50%	4	66.67%
Separated	0	0	0	0	0	0
Divorced	0	0	0	0	0	0
Socio-Economic Status						
High	2	22.22%	1	16.76%	3	50%
Middle	4	44.44%	5	83.33%	3	50%
Low	3	33.33%	0	0%	0	0%
Highest Level of Educational						
Honor's	4	44.44%	1	16.67%	2	33.33%
Masters	3	33.33%	4	66.67%	2	33.33%
Higher Education (M.Phil., PHD)	0%	0%	0		1	16.67%
SSC, HSC	2	22.22%	1	16.67%	1	16.67%

Note. N = 21. The average age of EMDR therapy clients, CBT client and TA client and total participant was respectively 25.44 years (SD = 4.88), 18.33 years (SD = 5.85) and 37.0 years (SD = 13.90). F=Female, M=Male, UM=Unmarried, M=Married.

Participants were first screened by psychiatrist who conducted the initial Interview meant for gathering information on psychiatric history including trauma history and depression history. The targets for EMDR therapy were selected by the participants determining the negative

cognitions most strongly associated with reduced functioning and then identifying a related disturbing event. The results of the screening with depression criteria were eligible to participate. Written consents were obtained. Participants received 6 individual weekly sessions of 60-90 min duration. When there were still severe complaints after four sessions, the therapist could decide to offer more trauma treatment. 18 participants were referred for additional treatment (not trauma-related) after the research protocol was completed: 9 in the EMDR condition and 5 in the CBT condition, and 4 in TA condition.

Inclusion Criteria were:

- The presence of diagnosis of depressive disorders or depressive symptoms
- Aged between 18 and 65 years
- Capacity to give informed consent to the treatment
- Presence of traumatic experiences
- No type of antidepressant will be taken by participants.

Exclusion Criteria were:

- Presence of acute suicidality
- Taking Psychiatric drugs/medication

Participation in this study happened naturally when clients came to take sessions to therapists.

Sampling Technique:

To collect data the convenience and purposive sampling techniques were used.

Measure:

For assessing depression among patients DSM-V has been extensively used. The assessment was done at the entry to the study. Depression and Mental wellbeing were measured 3 times with all

individual patients, 1st session, 3rd session and 6th session. Then after one month a follow-up interview was taken for all participants. All therapists who have participated in the study have trained to use all the measures.

Instruments:

Bangla PHQ-9 Scale:

Bangla PHQ-9 (Patient Health Questionnaire) is a self-report instrument to assess the severity of depressive symptomatology and its change in response to treatment. The instrument also includes a functional health assessment. This asks the patient how emotional difficulties or problems impact work, life at home, or relationships with other people. Patient response of 'very difficult or 'extremely difficult' suggests that the patient's functionality is impaired. After treatment begins, functional status and number score can be measured to assess patients' improvement. The score between 1-4 indicate Minimal depression, 5-9 indicate mild depression, 10-14 indicate moderate depression, 15-19 indicate moderately severe depression, 20-27 indicate severe depression. The PHQ-9 Scale is included in Appendix B.

Bangla Warwick Mental Wellbeing Scale:

Bangla Warwick Mental Wellbeing measuring Scale for Bangladeshi Population. 14 items and each item have 5 options, and they are scored from 1 to 5. The highest Score of the scale is 14x5=70 and the lowest score of the scale is 14x1=14. 70 indicates the highest level of wellbeing and 14 indicates the lowest level of wellbeing. The Bangla Warwick Mental Wellbeing Scale is included in Appendix C.

Demographic Questionnaire:

The demographic questionnaire included questions on the participants' age, gender, marital status, socio economic status and the highest educational qualifications were added to the questionnaire that were not included in the original PHQ-9 and Bangla Warwick Mental Wellbeing Scale. The Demographic questionnaire form is included in Appendix F.

Therapist Selection Procedure:

1. The researcher approached different therapists of EMDR, CBT and TA and so on over phone, emails and messages and within the community regarding conducting the research.

2. Those of the therapists who showed interest in participating were sent emails regarding consent form, scales, protocol. Each of the therapists treated at least one participant in each condition.

3. In this research the researcher also participated in collecting data for the EMDR group and TA group.

Training Procedure:

All EMDR therapists were selected based on 5 years plus experience. All CBT therapists and TA therapists were also selected based on 5 years plus experiences.

(a) Arranged a zoom training on providing EMDR DeprEnd protocol with depressant patients
(b) Arranged in-person meeting with other CBT and TA therapists
(c) Regular communication and feedback meetings were held every week
(d) Log/documents were being maintained
(e) Every Therapists took supervision from their respective supervisors

Treatment adherence:

Several actions were taken to support and evaluate treatment adherence.

Supervision: The supervisor provided supervision to the therapists to ensure that therapists receive supervision during treatment with each research participant.

Supervision checklist forms: The EMDR therapists, CBT therapists and TA therapists have received supervision from their respective supervisors whenever they needed. And that was documented properly by the supervisor so that it can be recorded properly for assessing client's improvement or relapse symptoms. Supervision checklist includes questions related to client's present condition, improvement sign, if any relapse symptom comes back to client, and if any specific verbatim of client has related with received type of therapy (EMDR, CBT or TA).

The supervisor also followed specific set of questions during supervision so that every therapist can provide all kinds of relevant information related with treatment procedure to the researcher.

To optimize treatment adherence, clinicians were required to follow detailed session checklist, record client responses, apply PHQ-9 and WEMWBS questionnaire 3 times (during the 1st, 3rd and 6th session). For EMDR, the DeprEnd protocol provided a step-by-step sequence of interventions consistent with the respective treatment manual. And for CBT and TA Therapists had to follow their usual treatment protocol with their clients.

Procedure for data collection:

The academic committee of the University of Dhaka's Department of Educational and Counselling Psychology received and approved the research project proposal. Following academic committee approval, the project was presented to the University of Dhaka's Ethical

Review Committee, which also approved it (Ref. No. 254/Biol. Scs.). As a result, the use of human participants in this study has been approved ethically. The ethical clearance form is included in Appendix A.

Quantitative data Collection from participants:

There were 6 EMDR practitioners recruited to collect the data. Before recruiting them Interview and consent from them were taken for doing this data collection. The selection criteria of all therapists were to have 5 years plus experience with EMDR therapy practice. The participants for the research will have diagnosis of Depressive Disorder or Depressive symptoms. Two more groups of therapists were taken: one group is practicing CBT, and another group is practicing TA. There were 7 CBT practitioners, and 3 TA practitioners recruited to collect the data. For three groups the procedure of data collection was the same. They applied 2 scales with the participants-the Bangla PHQ-9 and the Bangla Warwick Mental wellbeing Scale in the 1st, 3rd and 6th session.

Taking Qualitative data from Interview of Therapists:

The researcher has taken weekly time to interview the therapists (EMDR, CBT, TA) to know about the improvement of the clients. Interviewing them has given valuable information about client's feedback about session effectiveness, questioning pattern, trauma symptoms, relapse symptoms etc. The researcher has followed a specific question pattern to take information from the therapists. The questions were as follows:

1) How does your client accept the therapy?
2) What are their present conditions?
3) If any improvement happens, what are they?
4) If any symptom comes back again, what are they?

5) What technique or approaches helped the client?
6) Any specific feedback from the client that proves the efficacy of the therapy?

To collect qualitative data, the researcher conducted interviews with all EMDR, CBT, and TA therapists who participated in this study to understand the specific dimensions of the therapies they practice. This interview took place after completing all the data from all therapists. The few interviews were conducted in-person and others were online, depending upon therapist availability. Each interview took 20 to 30 minutes with each therapist. The comparative discussion questions to the therapists were as follows:

1) What therapy does the therapist prefer to use with depression/trauma client in general among EMDR, TA, CBT? And why?

2) What kind of Client receive specific therapy in what context. For example -age, sex, education, marital status etc. Explanation according to therapist's own experience.

3) what are the challenges the therapist face comparatively using EMDR/ TA/ CBT with trauma related depression client?

4) In your practical experience what are the strengths you found among those therapies dealing with trauma related depression client (EMDR, CBT, TA)?

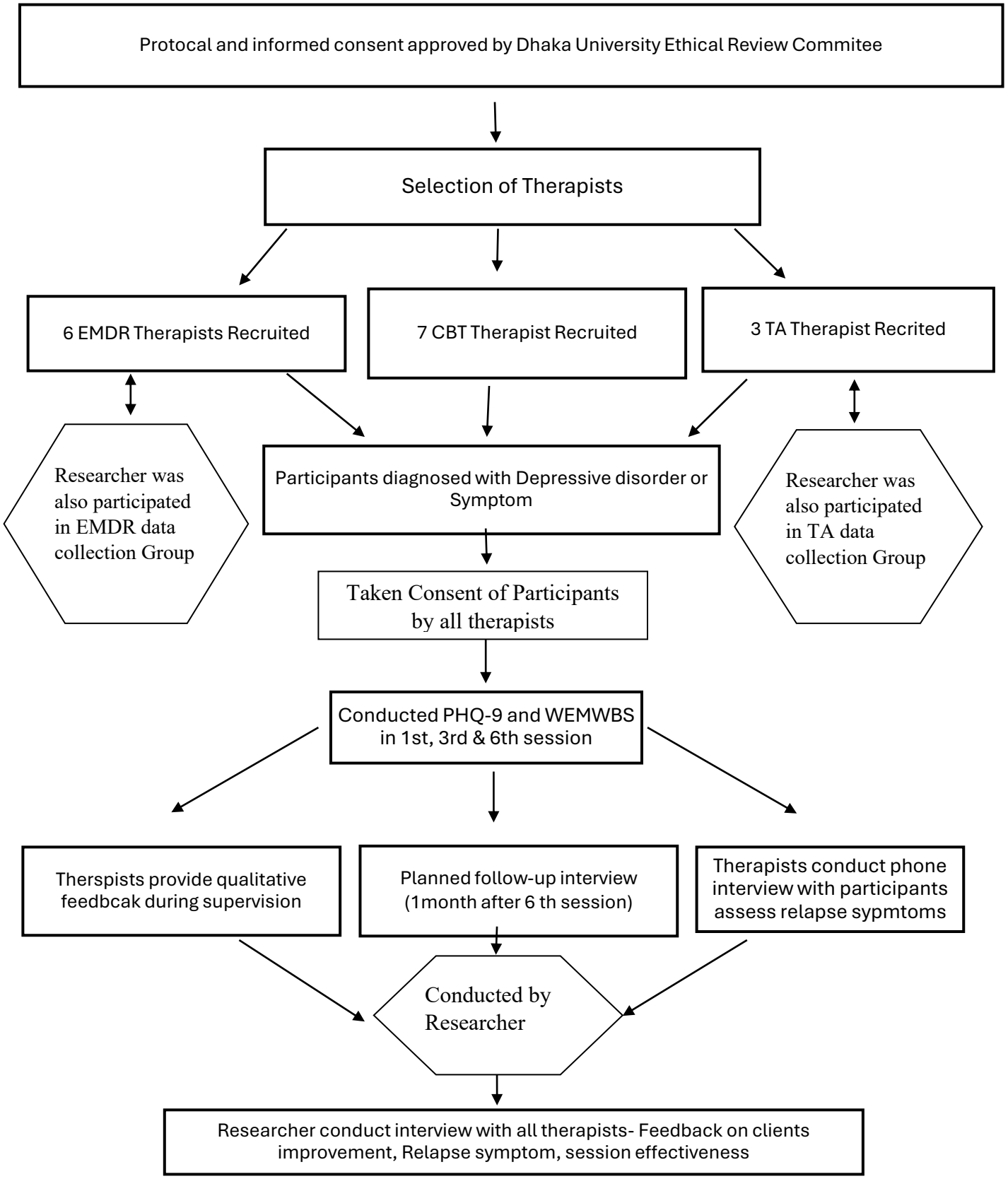

FIGURE 1: *STAGES FOLLOWED DURING THE DATA COLLECTION*

Treatment Methods:

EMDR Treatment

The EMDR therapy group comprised with depressive symptomatology satisfying the in- and exclusion criteria listed above. These patients were treated with the EMDR DeprEnd Protocol (participation 90 min per week). They didn't receive any antidepressant medication (which is listed as an inclusion criterion above).

THE EMDR-DEPREND PROTOCOL The basic outline of this EMDR DeprEnd protocol was published 2016 in Marilyn Luber's EMDR scripted protocols (Hofmann, 2016) and is described in more detail in the upcoming book Treating Depression with EMDR Therapy, which is currently being translated from German (Hofmann et al. 2020). The six steps of the EMDR DeprEnd protocol are:

1. Get an overview and a treatment plan
2. Check for comorbidity and the need for stabilization
3. Focus and process episode triggers
4. Focus and process negative belief systems
5. Focus and process residual depression related states
6. Initiate relapse prevention (D & D, 2022)

Thinking from the AIP model, there are two ways we try to identify these networks in the EMDR:

DeprEnd protocol. The first way to identify these networks is to look for proof Memories. The second way to identify the networks behind the negative beliefs is to float back. With an

overview of that are foundational for the negative belief system and start processing them with EMDR. (D & D, 2022)

Cognitive Behavior Therapy (CBT)

As a traditional therapy, the cognitive behavior therapy (CBT) incorporates a range of psychotherapeutic theories and practices, including behavior therapy, behavior modification, cognitive therapy and cognitive behavior therapy, all of which have their roots in learning theories (Rachman, 1997).

It is assumed that within CBT problematic thoughts, feelings and behaviour patterns are learned through the same processes as normal thoughts, feelings and behaviour. These learning processes include operant and classical conditioning, and various cognitive processes such as modelling and identification.

CBT involves coaching clients to replace problematic habits with more adaptive ways of thinking, feeling, behaving and interacting with others. This coaching process is based on the principles of learning theory. Specific CBT treatment programmes are designed for specific problems and the efficacy and effectiveness of these empirically evaluated. CBT programmes typically include interventions that alter antecedents that signal the onset of problematic thoughts, feelings and behavior; interventions that challenge non-adaptive beliefs and styles of information processing that accompany problematic behavior; and interventions that change the consequences of problematic thoughts, feelings and behavior so that more adaptive alternatives to problematic patterns are developed and reinforced. Evidence from treatment outcome studies

reviewed in Nathan and Gorman (2002) provide support for the efficacy and effectiveness of CBT for depression and anxiety disorders.

CBT is based on several core principles, including:

1. Psychological problems are based, in part, on faulty or unhelpful ways of thinking.
2. Psychological problems are based, in part, on learned patterns of unhelpful behavior.
3. People suffering from psychological problems can learn better ways of coping with them, thereby relieving their symptoms and becoming more effective in their lives.

CBT treatment usually involves efforts to change thinking patterns. These strategies might include:

- Learning to recognize one's distortions in thinking that are creating problems, and then to reevaluate them in light of reality.
- Gaining a better understanding of the behavior and motivation of others.
- Using problem-solving skills to cope with difficult situations.
- Learning to develop a greater sense of confidence in one's own abilities.

CBT treatment also usually involves efforts to change behavioral patterns. These strategies might include:

- Facing one's fears instead of avoiding them.
- Using role playing to prepare for potentially problematic interactions with others.
- Learning to calm one's mind and relax one's body.

Not all CBT will use all these strategies. Rather, the psychologist and patient/client work together, in a collaborative fashion, to develop an understanding of the problem and to develop a treatment strategy.

CBT places an emphasis on helping individuals learn to be their own therapists. Through exercises in the session as well as "homework" exercises outside of sessions, patients/clients are helped to develop coping skills, whereby they can learn to change their own thinking, problematic emotions, and behavior.

CBT therapists emphasize what is going on in the person's current life, rather than what has led to their difficulties. A certain amount of information about one's history is needed, but the focus is primarily on moving forward in time to develop more effective ways of coping with life.

Non EMDR group will also follow the same structure for assessing the improvement rate of therapy, participants didn't receive any antidepressant medication (CBT, TA, REBT or other therapies).

Transactional Analysis (TA)

Transactional Analysis is a theory of personality and behavior and a systematic tool for personal growth and personal change. TA gives us a picture of how people are structured psychologically. TA also provides a theory of communication. TA offers a theory of child development-the concept of life script explains how our present life patterns originated in childhood.

The philosophical assumptions of TA are:

People are ok.

Everyone has the capacity to think.

People decide their own destiny, and these decisions can be changed.

From these assumptions there follow two basic principles of TA practice:

Contractual method: In therapy both client and therapist take part in the process of change. In that process both are clearly committed to how the task will be shared. Therefore, they enter a contract. This is a statement of the responsibility of each party.

Open communication: In TA practice case notes are open to the client's inspection. The practitioner encourages the client to learn the ideas of TA. Thus, the client can play an equal role in the process of change.

Result

To answer the two objectives of this Research-I. To investigate whether EMDR Therapy is effective in treating clients with Depression And II. Compare EMDR therapy with CBT and TA as comparative approaches to see whether they are equally effective in treating Depression clients. The data obtained was analyzed using SPSS-26. Since the sample size was small and the data wasn't supposed to meet parametric assumptions, a non-parametric test was carried out. The results were shown first for depression and later for well-being status.

Table 0-5: Descriptive statistics of depression score across the three measurement times

Measurement Time	Therapy	N	M	SD	Min	Max
Base-line	EMDR	9	16.56	5.64	9	24
	CBT	6	12.50	7.87	0	22
	TA	6	15.00	7.01	3	21
Mid-line	EMDR	9	15.00	3.91	9	22
	CBT	6	9.00	7.01	0	21
	TA	6	11.00	5.90	3	17
End-line	EMDR	9	13.33	5.87	6	25
	CBT	6	9.83	7.94	0	23
	TA	6	11.33	7.06	4	23

The table 0-5 presents the participants' number (n), mean (M), standard deviation (SD), minimum (Min) score, and maximum (Max) score related to depression status measured by the PHQ-09 for EMDR therapy, CBT, and TA across the three measurement times: baseline, midline, and endline. The baseline mean depression scores for EMDR therapy, CBT, and TA were 16.56 (SD=5.64), 12.50 (SD=7.87), and 15 (SD=7.01), respectively. Again, the midline mean depression scores for EMDR therapy, CBT, and TA were 15 (SD=3.91), 9 (SD=7.01), and 11 (SD=5.9), respectively. And finally, the endline mean depression scores for the EMDR, CBT, and TA were 13.33 (SD = 5.87), 9.83 (7.94), and 11.33 (SD = 7.06), respectively.

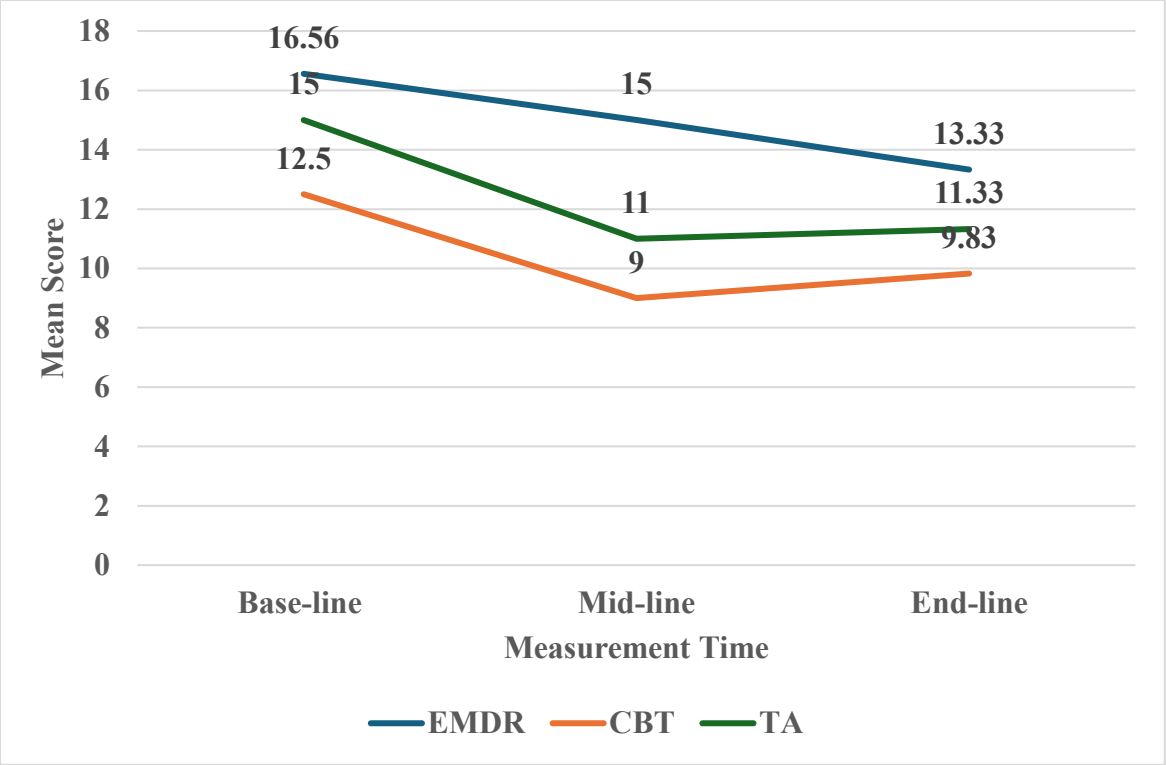

Figure 2: *Line-graph showing mean depression scores across the three measurement times of EMDR, CBT and TA*

Figure 02 shows the baseline, midline, and endline mean depression scores for EMDR therapy, CBT, and TA. In the case of EMDR therapy, the mean depression score decreased from baseline to endline, maintaining a straight line. Interestingly, for CBT and TA, the mean depression scores decreased from baseline to midline but slightly increased from midline to endline. The above interpretation indicates that the EMDR therapy group had a continuous decrement of depression over time, and the CBT and TA groups had a high but sometimes irregular pattern in reducing depression.

Hence, the sample size for EMDR therapy, CBT, and TA were very small, and the data were not normal, to compare whether the EMDR therapy, CBT, and TA were equally effective in treating depression, the non-parametric 'Kruskal Wallis H test' was employed using SPSS-26.

Table 0-6: *Statistics for 'Kruskal-Wallis H Test' comparing depression status of participants receiving EMDER, CBT, and TA*

Measurement Time	Therapy	N	Mean Rank	Kruskal- Wallis H	df	Asymp. Sig.
Base-line	EMDR	9	12.39	1.253	2	.534
	CBT	6	8.75			
	TA	6	11.17			
Mid-line	EMDR	9	13.94	4.088	2	.13
	CBT	6	7.5			

	TA	6	10.08			
	EMDR	9	12.89			
End-line	CBT	6	9.17	1.523	2	.467
	TA	6	10			

Table 6 represents the mean ranks based on the depression scores of the participants in three independent therapy conditions (EMDR therapy, CBT, and TA) across the three measurement times (baseline, midline, and endline). The baseline mean rank for EMDR therapy, CBT, and TA based on depression scores was 12.39, 8.75, and 11.17, respectively. The 'Kruskal-Wallis H test' showed that the baseline mean ranks of the three independent therapy conditions (EMDR therapy, CBT, and TA) were not statistically significant (H = 1.253, df = 02, p> .05). Therefore, in the baseline, the depression status of the participants in EMDR therapy, CBT, and TA was the statistically same. Besides these, the midline mean rank for EMDR therapy, CBT, and TA based on depression scores were 13.94, 7.5, and 10.08, respectively. Again, the 'Kruskal-Wallis H test' indicated that the midline mean ranks of three independent therapy conditions (EMDR therapy, CBT, and TA) were not statistically significant (H=4.088, df = 2, p>.05); that is, in midline measurement, it was found that the depression status among the participants under EMDR therapy, CBT, and TA therapy was not statistically different. Finally, the table 6 also showed that in endline measurement the mean rank for EMDR therapy, CBT, and TA was 12.89, 9.17, and 10, respectively, and the non-parametric ‘Kruskal-Wallis H test’ indicated that these mean ranks were not significantly different (H=1.523, df = 2, p>.05).

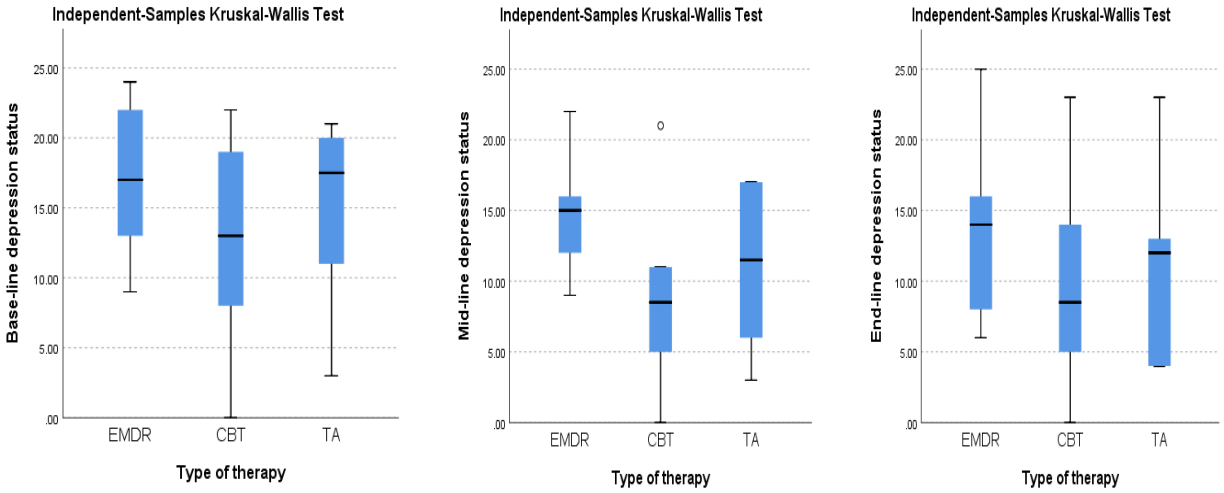

Figure 3: Box-Plots for showing depression status among participants across the three therapy conditions

Figure 3 indicates that the CBT-receiving participants had the lowest median scores, and the EMDR therapy-receiving participants had the highest median scores in baseline, midline, and endline among the three therapy groups (EMDR therapy, CBT, and TA). Moreover, in the baseline, the middle 50% scores of the CBT group were most spread out compared to the other two groups. In the midline, the TA group had the second lowest median score, and the middle 50% scores were more spread out among the three therapy conditions (EMDR therapy, CBT, and TA). In the endline, the relative positions of median scores of EMDR therapy, CBT, and TA were almost the same as in the baseline and midline. For the EMDR therapy group, the median scores gradually decreased from baseline to midline to endline. Again, for the CBT group, the median scores showed a similar decreasing trend from baseline to midline to endline. But, for the TA, the median score decreased from baseline to midline and increased from midline to endline. Since the depression was measured using the PHQ-9 scale and a higher score on PHQ-9

indicates a higher depression level, thus the depression status was lowest for the CBT group compared to the other two groups in all three measurement times (baseline, midline, and endline). Moreover, the depression level slightly but gradually decreased for the EMDR therapy group from baseline to midline to endline. Besides these, for the CBT and TA groups, depression levels sharply reduced from baseline to midline but slightly increased from midline to endline.

Table 0-7: *Statistics for the 'Kruskal Wallis H test' for comparing change in depression status in three therapy conditions (EMDR, CBT, and TA) from baseline to midline, midline to endline, and baseline to endline*

Change in depression status	Therapy	N	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.
From baseline to midline	EMDR	9	9.56	0.888	2	.641
	CBT	6	11.83			
	TA	6	12.33			
From midline to endline	EMDR	9	14	4.306	2	.116
	CBT	6	7.5			
	TA	6	10			
From baseline to endline	EMDR	9	11.61	0.159	2	.923
	CBT	6	10.42			
	TA	6	10.67			

Table 7 presents the results from employing the Kruskal-Wallis H test to compare the change in depression status among EMDR therapy, CBT, and TA groups from baseline to midline, midline to endline, and baseline to endline. Since, the sample size is small and parametric assumptions are potentially absent in data, the non-parametric Kruskal-Wallis H test seemed appropriate. Based on the change in depression status from baseline to midline, the mean rank for EMDR therapy, CBT, and TA were 9.56, 11.83, and 12.33, respectively. There was no significant difference (Kruskal-Wallis $H = 0.88$, $df = 2$, $p > .05$) based on the change in depression status among the EMDR therapy, CBT, and TA groups. It indicates that the three therapies hadn't significant difference in reducing depression from baseline to midline. The table 7 also shows that for the change in depression status from midline to endline, the mean rank for EMDR therapy, CBT, and TA groups were 14, 7.5, and 10, respectively. Again, there was no significant difference (Kruskal-Wallis $H = 4.306$, $df = 2$, $p > .05$) among EMDR therapy, CBT, and TA in reducing depression from midline to endline assessments. Finally, Table 7 reveals that the mean rank based on the change in depression from baseline to endline for the EMDR therapy, CBT, and TA groups were 11.61, 10.42, and 10.67, respectively. The Kruskal-Wallis H test indicated that there was no significant difference (Kruskal-Wallis $H = 0.159$, $df = 2$, $p > .05$) among these EMDR therapy, CBT, and TA groups in reducing depression from baseline to endline assessments.

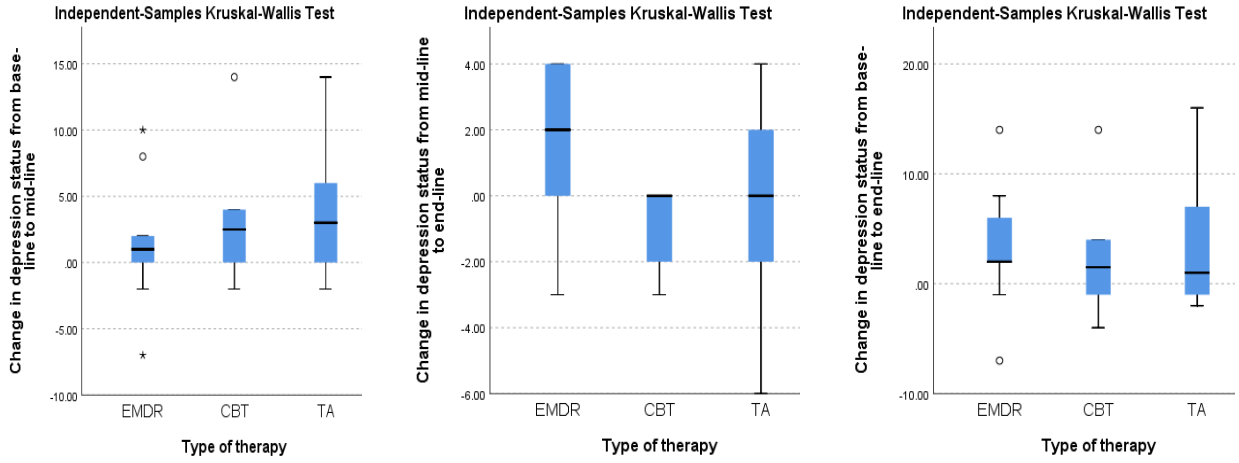

Figure 4: Box-Plots for showing change in depression status in three therapy conditions (EMDR, CBT, and TA) from baseline to midline, midline to endline, and baseline to endline

Figure 4 shows the box plots for change in depression status in EMDR therapy, CBT, and TA conditions from baseline to midline, midline to endline, and baseline to endline. In the case of the change in depression status from baseline to midline, the median score based on change was positive for each of the three therapy conditions: the TA group had the highest, CBT had the second highest, and EMDR therapy had the least median score. Therefore, the depression levels decreased in all three therapy conditions. The TA group had the highest reduction, the CBT group had the second highest reduction, and the EMDR therapy group had the least reduction in depression levels. In the case of change in depression status from midline to endline, the median score based on the change was positive for the EMDR therapy group; thus, the depression level reduced for the EMDR therapy group, but the CBT and TA groups had almost no change in depression level from midline to endline. In the case of the ultimate change in depression status from baseline to endline, figure 4 presents that the median score based on the change was positive for all the three therapy conditions, and the median score was highest for EMDR therapy, second highest for CBT, and lowest for the TA group. Therefore, EMDR therapy

reduced depression at the greatest extent, CBT reduced depression at the second greatest extent, and TA reduced depression at the least extent. Figure 4 also reveals that the EMDR therapy showed a gradual positive change in reducing depression from baseline to midline to endline; CBT and TA showed positive change in reducing depression from baseline to midline, but from midline to endline, both CBT and TA showed nearly no changes in depression status.

Table 0-8: *Descriptive statistics of wellbeing score across the three measurement times*

Measurement time	Therapy	N	M	SD	Min	Max
Base-line	EMDR	9	32.56	8.47	14	45
	CBT	6	43.33	13.29	26	66
	TA	6	39.17	8.01	28	46
Mid-line	EMDR	9	31.22	10.37	11	45
	CBT	6	44.83	13.21	33	68
	TA	6	40.50	12.58	27	62
End-line	EMDR	9	34.56	8.02	23	48
	CBT	6	51.83	9.85	39	64
	TA	6	42.33	12.53	23	62

The table 0-8 presents the participants' number (n), mean (M), standard deviation (SD), minimum (Min) score, and maximum (Max) score related to wellbeing status measured by the WEMWBS for EMDR, CBT, and TA across the three measurement times: baseline, midline, and

endline. The baseline mean wellbeing scores for EMDR therapy, CBT, and TA were 32.56 (SD=8.47), 43.33 (SD=13.29), and 39.17 (SD=8.01), respectively. Again, the midline mean wellbeing scores for EMDR therapy, CBT, and TA were 31.22 (SD=10.37), 44.83 (SD=13.21), and 40.50 (SD=12.58), respectively. And finally, the endline mean wellbeing scores for the EMDR therapy, CBT, and TA were 34.83 (SD = 8.02), 51.83 (9.85), and 42.33 (SD = 12.53), respectively.

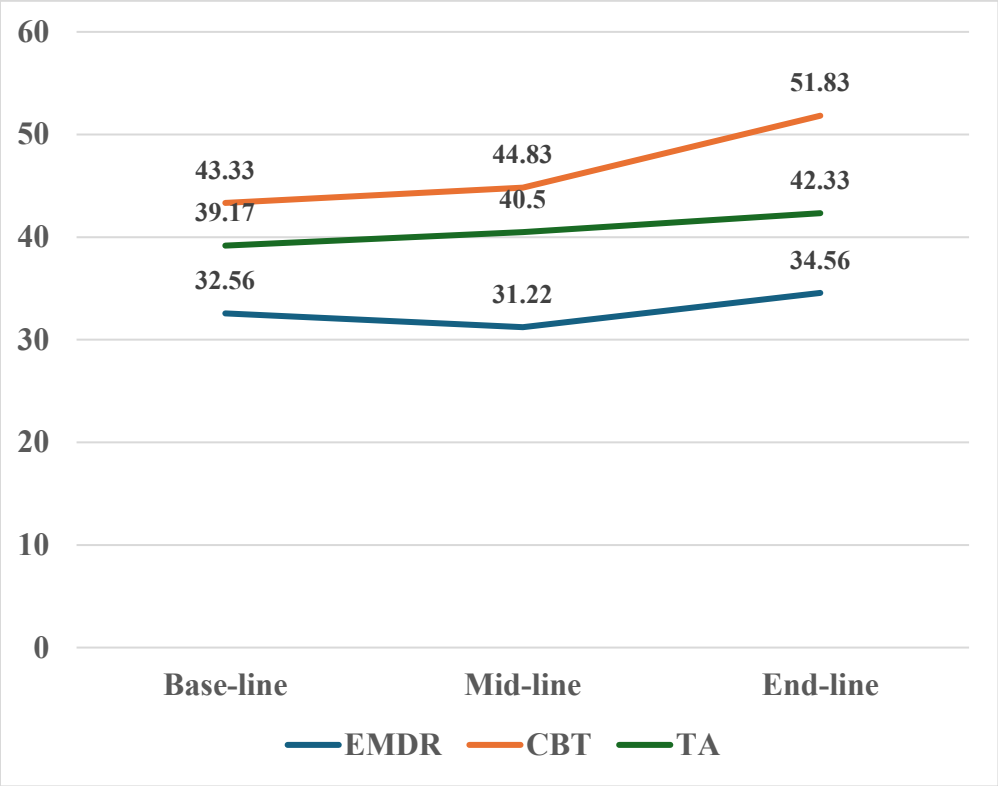

Figure 5: Line-graph showing mean wellbeing scores across the three measurement times of EMDR, CBT and TA

Figure 5 shows line graphs representing the mean well-being score of EMDR therapy, CBT, and TA groups across the three measurement times. The figure also reveals that the mean well-being

score of the TA group gradually increased from baseline to midline to endline. But, for the CBT group, the mean well-being score slightly increased from baseline to midline and sharply increased from midline to endline. The EMDR therapy group showed a different pattern, and the mean well-being score of this group slightly decreased from baseline to midline and increased from midline to endline. Based on these results, TA progressively increased well-being, and CBT increased well-being initially to a smaller extent, and after a few sessions, well-being increased remarkably. EMDR therapy was slow to improve well-being among participants.

Table 0-9: *Statistics for 'Kruskal-Wallis H Test' comparing wellbeing status of participants receiving EMDER, CBT, and TA*

Measurement Time	Therapy	N	Mean Rank	Kruskal- Wallis H	Df	Asymp. Sig.
Base-line	EMDR	9	8	3.863	2	.145
	CBT	6	13.92			
	TA	6	12.58			
Mid-line	EMDR	9	8.06	4.007	2	.135
	CBT	6	14.42			
	TA	6	12			
End-line	EMDR	9	7.39	7.661	2	**.022**
	CBT	6	16.42			
	TA	6	11			

Table 0-9 reveals that the mean rank based on the baseline well-being scores of the participants treated using EMDR therapy, CBT, and TA was 8, 13.92, and 12.58, respectively. The statistics for the Kruskal-Wallis test revealed that there was no significant difference (Kruskal-Wallis H = 3.863, df = 2, $p > .05$) among EMDR therapy, CBT, and TA groups based on the baseline well-being scores. Table 9 also shows that, in the case of midline well-being scores, the mean rank for EMDR therapy, CBT, and TA was 8.06, 14.42, and 12, respectively. The non-parametric Kruskal-Wallis test indicated there was no significant difference (Kruskal-Wallis H = 4.007, df = 2, $p > .05$) among EMDR therapy, CBT, and TA groups based on the midline well-being scores. Besides the above results, Table 9 presents the mean rank based on endline well-being scores of EMDR therapy, CBT, and TA groups as 7.39, 16.42, and 11, respectively. The Kruskal-Wallis test results indicate there was a significant difference (Kruskal-Wallis H = 7.661, df = 2, $p < .05$) among EMDR therapy, CBT, and TA groups based on the endline well-being scores.

As $p < .05$ for endline comparison among the three therapies, it indicates a significant difference exists in at least one pair of groups, and to identify which pair(s) had significant differences, Dunn's post-hoc tests were carried out on each pair of groups.

Table 0-10: *Dunn-Bonferroni's post-hoc tests for pairwise Comparisons of type of therapy for end-line wellbeing status*

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.[a]
EMDR-TA	-3.611	3.262	-1.107	.268	.805
EMDR-CBT	-9.028	3.262	-2.768	.006	.017

TA-CBT	5.417	3.573	1.516	.130	.389

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .05.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Table 0-10 showed no significant difference for all pairs except the EMDR-CBT pair. In the case of the EMDR-CBT pair, there was a significant difference ($p<.05$) in well-being, and the CBT group showed better well-being than then EMDR group.

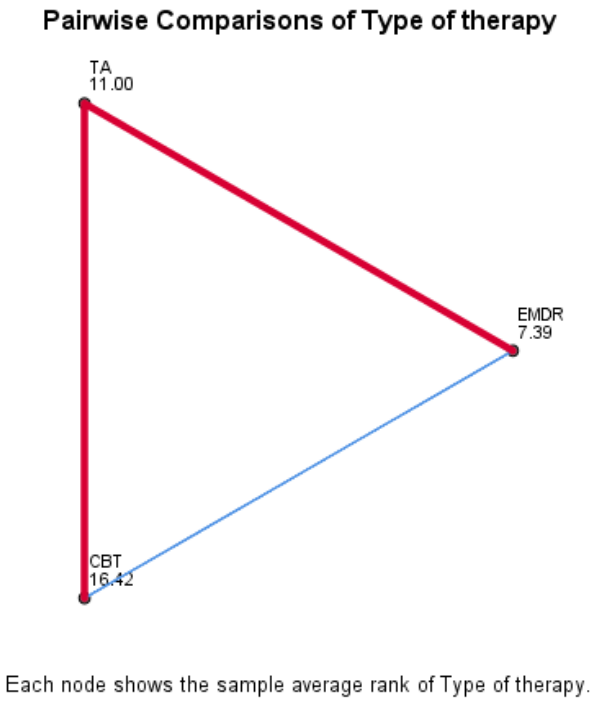

Figure 6: Graph for showing sample average rank of type of therapy

Figure 6 shows that the mean rank based on the endline wellbeing score for EMDR therapy, CBT, and TA were 7.39, 16.42, and 11, respectively. It also presents red lines which indicate no significant difference and blue line indicated the significant difference.

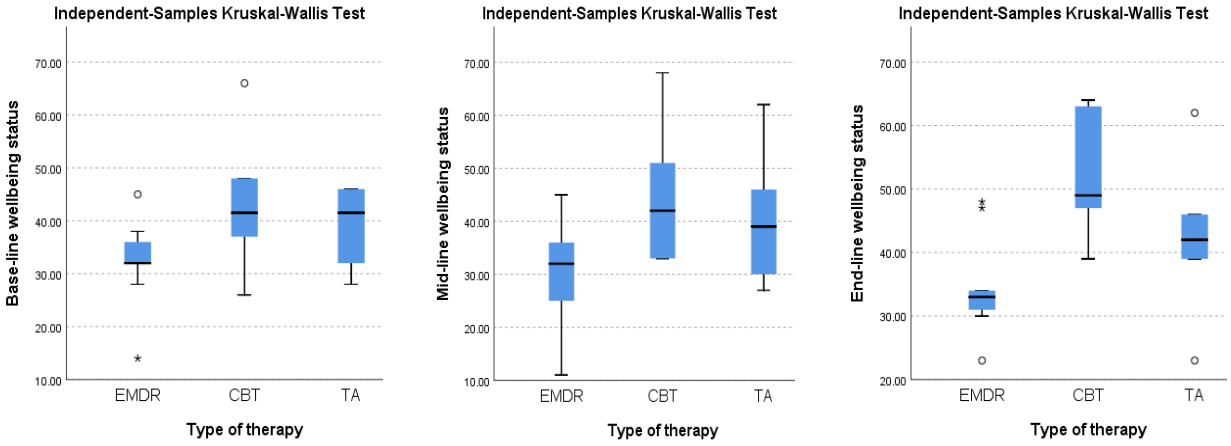

Figure 7: Box-Plots for showing wellbeing status among participants across the three therapy conditions

Figure 7 reveals box-plots based on the wellbeing status of EMDR therapy, CBT, and TA groups across the three assessment times (Baseline, Midline, and Endline). In baseline box-plot, the CBT had largest median score and EMDR therapy had smallest median score among three therapy conditions. Similarly, the relative positions based on wellbeing status of the three therapies were remained same in midline and endline assessment times.

Table 0-11: Statistics for the 'Kruskal Wallis H test' for comparing change in wellbeing status in three therapy conditions (EMDR, CBT, and TA) from baseline to midline, midline to endline, and baseline to endline

Change in wellbeing status	Therapy	N	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.
From base-line to mid-line	EMDR	9	11.61	0.276	2	.871
	CBT	6	9.92			
	TA	6	11.17			
From mid-line to end-line	EMDR	9	10.78	0.333	2	.846
	CBT	6	10.17			
	TA	6	12.17			
From base-line to end-line	EMDR	9	12.11	0.613	2	.736
	CBT	6	9.58			
	TA	6	10.75			

Table 0-11 represents the statistics for the Kruskal-Wallis H test for comparing the change in well-being scores in three therapy conditions: baseline to midline, midline to endline, and baseline to endline. For the baseline to midline change in well-being, the mean rank was 11.61, 9.92, and 11.17 for EMDR therapy, CBT, and TA, respectively. The Kruskal-Wallis test indicated no significant difference (Kruskal-Wallis H=0.276, df=2, p>.05) among the three therapies based on the change in well-being from baseline to midline. Regarding the change in well-being status from midline to endline, the mean rank for EMDR therapy, CBT, and TA was 10.78, 10.17, and 12.17, respectively. The non-parametric Kruskal-Wallis test revealed no significant difference (Kruskal-Wallis H=0.333, df=2, p>.05) among three therapies based on the

change in well-being from midline to endline. Table 11 also reveals that the mean rank based on the change in well-being scores from baseline to endline was 12.11, 9.58, and 10.75 for EMDR therapy, CBT, and TA, respectively. And there was no significant difference among the therapies based on the change in well-being from baseline to endline, revealed by the Kruskal-Wallis test (Kruskal-Wallis H=0.613, df=2, p>.05).

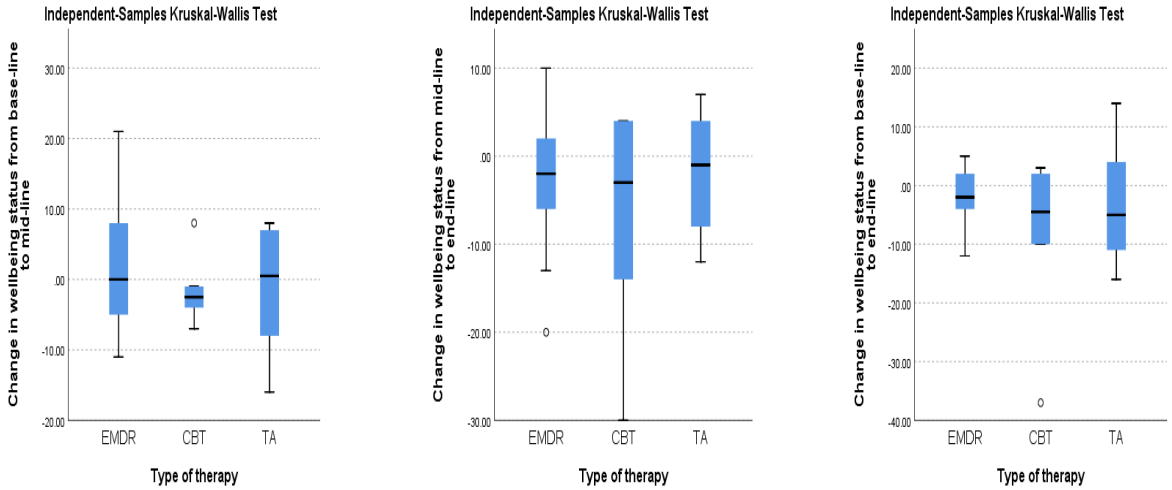

Figure 8: Box-Plots for showing change in wellbeing status in three therapy conditions (EMDR, CBT, and TA) from baseline to midline, midline to endline, and baseline to endline

Figure 8 presents box plots based on the change in the well-being status of EMDR therapy, CBT, and TA from baseline to the midline, midline to endline, and baseline to endline. In the case of change in well-being from baseline to midline, the CBT group gained the highest change, the TA group had the lowest change, and the EMDR therapy group had almost no change. Wellbeing was measured using the Bangla Warwick Edinburgh Mental Wellbeing Scale (WEMWBS), and a higher score on WEMWBS indicates a higher wellbeing status. Therefore,

deducting the midline/endline well-being score from the baseline score, irrespective of the sign, the obtained number indicates the magnitude of change, and the higher the number, the greater the change. The positive or negative sign indicates the direction of change, improvement, or decrement. Here, a positive sign indicates a decrement, and a negative sign indicates improvement, as the later scores (midline/endline) were deducted from initial or previous scores. Based on this situation, the well-being status was improved more in the CBT group than in the other two groups. Again, in the case of midline to endline change in wellbeing, the CBT group had the lowest median, but the middle 50% scores were more spread out than the other two groups, which means that the CBT group had high improvement in wellbeing, but the improvement magnitude was more spread out. Finally, in the case of change in well-being from baseline to endline, the TA group had a high magnitude of change, but their middle 50% change scores were more spread out around the median score. The CBT group had the second largest magnitude of change, and their middle 50% change scores were less spread out than the TA group. And the EMDR group had the lowest magnitude of change, but their middle 50% change scores were the least spread out than the other two groups. The above interpretation indicates that the EMDR group had continuous and slow improvement in well-being, while the CBT and TA groups had a high but irregular pattern of improvement in well-being.

Summary of quantitative results

The EMDR group had a continuous decrement of depression over time, and the CBT and TA groups had a high but sometimes irregular pattern in reducing depression (Figure 2). Comparing depression scores, EMDR, CBT, and TA groups didn't significantly differ in baseline, midline, and endline (Table 6). However, the non-significant difference among EMDR, CBT, and TA groups, by interpreting the box plots based on the depression scores, the two

identified tendencies were (figure 3): a). Depression levels slightly but gradually decreased for the EMDR group from baseline to midline to endline; b). In the CBT and TA groups, depression levels sharply reduced from baseline to midline but slightly increased from midline to endline (Figure 3). For analyzing how far the EMDR, CBT, and TA do the change in depression across the assessment times, change scores for depression were calculated in three levels: 1). Subtracting midline from baseline; 2). Subtracting endline from midline; and 3). Subtracting endline from baseline. In all cases, the EMDR, CBT, and TA groups didn't have significant differences, and all three therapies had statistically the same effect in reducing depression among clients (Table 7). EMDR reduced depression to the greatest extent, CBT reduced depression to the second greatest extent, and TA reduced depression to the least extent. EMDR showed a gradual positive change in reducing depression from baseline to midline to endline; CBT and TA showed positive change in reducing depression from baseline to midline, but from midline to endline, both CBT and TA groups showed nearly no changes in depression status (Figure 4).

In the case of well-being, TA progressively increased well-being, and CBT increased well-being initially to a smaller extent, and after a few sessions, well-being increased remarkably. EMDR was slow to improve well-being among participants (Figure 5). The well-being status of EMDR, CBT, and TA groups didn't significantly differ in baseline and midline. But for the endline, there was a significant difference (Kruskal-Wallis $H = 7.661$, $df = 2$, $p < .05$) among EMDR, CBT, and TA groups (Table 9). Dunn's post-hoc test results showed the EMDR-CBT pair had a significant difference in well-being, and the CBT group showed better well-being in the endline than the EMDR group (Table 10). For analyzing how far the EMDR, CBT, and TA do the change in well-being across the assessment times, again, change scores for well-being were calculated in three levels: 1). Subtracting midline from baseline; 2). Subtracting endline from

midline; and 3). Subtracting endline from baseline. In all cases, based on the change in well-being status, the EMDR, CBT, and TA groups didn't have significant differences, and all three therapies had statistically the same effect in improving well-being among clients (Table 11). The EMDR group had continuous and slow improvement in well-being, while the CBT and TA groups had a high but irregular pattern of improvement in well-being (Figure 8).

Qualitative data findings after having Interview with therapists who participated in this Research:

Objective II aimed to Compare EMDR with CBT and TA as comparative approaches to see whether they are equally effective in treating Depression clients. The researcher has conducted interviews with the therapists who have attended the research work. In that comparative discussion interview the therapists provided important information regarding each therapy what we have considered for conducting the research (EMDR, CBT & TA). The qualitative data findings from the therapists have supported the qualitative data findings in this research.

Comparative Effectiveness among EMDR, CBT & TA According to therapists' perspective:

The Researcher made a list of therapists and made pseudo name of the therapist. Several domains were obtained from the step-by-step analysis of qualitative data provided by the therapists who gave consent to participate in the research. Firstly, the time effectiveness of the therapy. Secondly, the cost effectiveness of the therapy and thirdly, the sustainability of the

therapy. These themes are illustrated upon with relevant therapist's quotations with their pseudo name.

Time Efficacy:

According to several therapists who have participated in the research, they have mentioned different opinions regarding time required for successful therapy conduction in terms of EMDR, CBT and TA.

In Interview therapists described their experiences including the time efficacy. KAK (EMDR Therapist) mentioned several difficulties associated with time efficacy of EMDR therapy. She was like-

> "EMDR takes lots of time to make client prepared; after doing lots of stabilizations once client develop a good rapport with therapist and then Reprocessing Phase can be started. Sometimes clients need to take long break from therapy in the middle of one trauma memory Reprocessing because of Bangladeshi political instability or educational purposes, like exams. So often trauma cluster of memory remain untreated. So, this is one obstacle I face doing EMDR". This therapist also added "Sometimes it is difficult to manage time from therapist's side as a therapist I may require a sufficient amount of time to sit in EMDR session"

Another EMDR Therapist MAK also shared that-

> "In EMDR Therapy Reprocessing sometimes gets unfinished because EMDR is very time consuming. Sometimes it is hard for clients to identify the 'Touchstone memory' for memory Reprocessing. So, in Assessment phase takes a long time".
>
> On the other hand, one CBT Therapists MIM has reported- "I prefer CBT for dealing with trauma clients. Because it is very quick and takes less time to make improvements, sometimes it is possible to see improvements within 5/6 sessions. And CBT is an activity-based therapy that is helpful to achieve goals. That's why It helps working with corporate clients, who comes from different organization to get therapy". She also added "CBT is more structured and less time consuming".

Another CBT Therapist SAS shared her experience like this-

> "As CBT is less time-consuming maximum benefit can be ensured with this therapy".

TA therapists shared the experiences in terms of time efficacy-

> AIA reported, "TA is Time consuming. If the client is not ready, the therapeutic procedure is not possible to start. In TA building rapport with the client is very important and without establishing rapport client can feel uncomfortable to take any psychoeducation".
>
> CBT Therapist ASA reported, "TA is helpful for creating awareness though it takes time and Sessions are lengthy**."**

Cost Effectiveness:

> The therapists provided some information regarding cost effectiveness of the therapy. One EMDR therapist MAS shared- "EMDR needs lots of session for Preparation and

traumatic memory Reprocessing. So, it is very time consuming. And require lots of money, because it require to do session after session."

EMDR Therapist KAK shared- "In EMDR therapy lots of sessions are needed for trauma Reprocessing, that's why client needs lots of money. So sometimes clients must stop the session."

On the other hand, CBT Therapist ASU Shared – "As CBT is very structured, so it requires minimum number of sessions, and this is less costly. Especially male clients like to do therapeutic work in a structured manner and CBT is that kind of approach, less time consuming and cost effective".

CBT therapist MIM shared- "The clients who comes for session from corporate sector, they have a mind set to ensure maximum benefit within short period of time. They are very motivated to do CBT because they want to ensure maximum benefit within minimum number of sessions in low price."

This is how TA therapist MAS shared her experience regarding cost effectiveness of - "TA needs long time to make rapport with the client, TA is more psychoeducation-based therapy. Intellectual clients are very comfortable with TA. The client who is more aware about self they show interest in TA. It takes time to develop interest and rapport and that's why cost becomes an issue in TA."

Sustainability of Therapy:

Sustainability is the 3rd dimension of comparative discussion with the therapists.

EMDR therapist KAK shared that – "EMDR focuses the core fundamental issues of a client, so it starts work with client's deep issue. So, this is time consuming. EMDR is helpful for dealing with trauma as it takes lots of time to stabilize clients and he/she gets confidence and starts to believe that his/her past trauma has been over. He/she can remember the trauma but that doesn't affect so much after having Reprocessing sessions. One client shared feedback after Reprocessing that he was used to feeling head heaviness, now he is not feeling head heaviness anymore. That client also shared that it seems like the glasses of my eyes are clear to me now, what was hazy before. He accepts reality now. He stopped to ask 'Why' question about what he used to do before. He started to feel light."

KAK also shared that- "Another client of mine shared that her perspective has changed after applying 'Dialogue Protocol'. She can recognize that her past days are not her present life. 'Dialogue protocol' as a EMDR therapy technique helps a lot to bring the awareness and sustain the improvement".

EMDR Therapist MAS shared- "EMDR is very helpful for the clients who have trauma related depression because EMDR provides 'Resources' to use whenever it is needed for clients. EMDR has lots of techniques to Stabilize the client. So, it feels safe to use. If any technique fails with any specific client, I can choose another one. So, the client can also be able to identify his/her best way to feel safe and that is sustainable if the client practice

this more often. One of my clients reported about her calm feeling after practicing 'Container Exercise'.

EMDR practitioner MAK shared- "I prefer to use EMDR with Depression clients. Clients feel hopeful when therapists start doing EMDR therapy. It does Hope generation in client's mind. EMDR is very organized therapy. 'Resource Development and Installation (RDI)' help a lot (Inner Garden, safe and calm state) to stabilize. EMDR takes more preparation, so clients get enough time to accept it more. The client feels happy about EMDR therapy because it can help him to rescue him from traumatic memory experiences."

EMDR practitioner NER shared about her client- "I prefer doing EMDR with Depression client. Depressant clients have lots of negative thoughts and those have come from their adverse childhood experiences. So, it requires me to work on those trauma memories. And from my experience I saw that using 'Cognitive Interweave' has a very positive impact on session. One of my clients shared that he could specify the positive state they have created in his mind. My client shared that without any direction from my side. He told me that immediately after BLS, this is how the client expressed his feelings- 'I can focus now and that is very helpful for me' - it's like upside down to me as a therapist. My client is doing better than in the previous condition. I think EMDR is more sustainable in term of Improvement". This finding has matches with Y. Gauhar (2016), As the targeted beliefs were processed and closure was made, in the subsequent session, new targeted negative beliefs were identified for processing. However, participants stated that many of the other negative beliefs, which they had identified at the beginning of treatment, no longer felt true.

CBT therapist LAK shared- “My client shows relapse symptoms in the 5th number of session although he had improvement in 3rd and 4th session. He was a bit relaxed. And in 5th number of session, he shared that he experienced panic attack again. CBT sometimes bring quick improvement, and it has relapse tendency”.

SAS is a CBT practitioner. She shared about her cases that- “Few of her clients tend to not accept any homework or activity. Some clients cannot connect with the physical sensation in CBT, so their improvement sustains for a short time as their issues remain unhealed.”

MSU shared that- “the clients whose logical brain is very active they accept CBT more. For the clients who have grieve issue, interpersonal relationship issue and emotional unstable client faces difficulty to work with CBT.”

TA therapist AIA reported that- “One client of mine who had attended this research work showed relapse symptoms as he had faced some triggers very recently.” AIA shared that in her therapeutic work few clients show a good improvement with TA and relapse symptoms are not uncommon for few and sometimes it is difficult to apply when the client is not ready. It requires lots of time and it sustains when the client is properly ready.

MAS Shared- “TA is not helpful to use with the clients who have low intelligence. TA is helpful for ventilation. The clients who are highly motivated to work on psychotherapy and have high interest in knowing thy-self they show improvement in TA therapy.”

According to Jahanfar et al. (2020) study they found that client has improved their Quality of life (physical, psychological, social and environmental domains) after taking 90

minutes sessions over 3 weeks of EMDR therapy. Our study also aligns that findings that after taking 6 EMDR therapy sessions the therapists who participated in this study have reported a positive slow and steady improvement in client's life.

According to A. Hofmann, W. Schneider (2014) study, they revealed in their study a significant difference in the reduction of Depression scores after treatment, showing that the patients helped from CBT and from CBT with adjunctive EMDR treatment. Results also showed a larger decrease in Depression scores for TAU+EMDR compared to CBT treatment alone. Although CBT has been a highly effective and well-established treatment for depression for many years, adjunctive EMDR sessions may enhance the beneficiary effect of the treatment in depression.(Hofmann & Schneider, 2014). Our current study also shows that for both quantitative and qualitative part of data that EMDR has a sustainable improvement in therapy. In this study finding, CBT has a fast symptom reduction tendency and relapses happening quickly and in EMDR therapy showing slow and steady improvement indication.

Considering objective II to Compare EMDR with CBT and TA as comparative approaches to see whether they are equally effective in treating Depression clients, we see that EMDR, CBT and TA all three are effective in treating Depression. But EMDR therapy's effectiveness is in its sustainability compared with CBT and TA.

In Future this research can be conducted again with a complete number of sessions so that the researcher can measure the final effectiveness of the therapy.

Discussion

The EMDR therapy group had a continuous decrement of depression over time, and the CBT and TA groups had a high but sometimes irregular pattern in reducing depression. Comparing depression scores, EMDR therapy, CBT, and TA groups didn't significantly differ in baseline, midline, and endline. Depression levels slightly but gradually decreased for the EMDR therapy group from baseline to midline to endline. In the CBT and TA groups, depression levels sharply reduced from baseline to midline but slightly increased from midline to endline. EMDR therapy reduced depression to the greatest extent, CBT reduced depression to the second greatest extent, and TA reduced depression to the least extent. EMDR therapy showed a gradual positive change in reducing depression from baseline to midline to endline; CBT and TA showed positive change in reducing depression from baseline to midline, but from midline to endline, both CBT and TA groups showed nearly no changes in depression status.

In the case of well-being, TA progressively increased well-being, and CBT increased well-being initially to a smaller extent, and after a few sessions, well-being increased remarkably. EMDR therapy was slow to improve well-being among participants. Dunn's post-hoc test results showed the EMDR therapy-CBT pair had a significant difference in well-being, and the CBT group showed better well-being in the endline than the EMDR therapy group. The EMDR therapy group had continuous and slow improvement in well-being, while the CBT and TA groups had a high but irregular pattern of improvement in well-being.

The previous study of Jahanfar et al. (2020) showed how EMDR therapy is capable to bring an improvement of life and that is helpful for decreasing depression.

A. Hofmann, W. Schneider (2014) study showed that EMDR therapy and CBT bring positive results adjunctively to treat depression clients.

M. Hase et al (2015) administered research with a group of 16 patients with depressive episodes. Finding this research was that Sixty-eight percent of the patients in the EMDR group showed full remission at the end of treatment. Our current study shows the indication that if the clients of EMDR group could go with the full treatment procedure there is a chance of their full remission of Depression compared with CBT and TA group.

In a systematic Review of Carletto et al (2001 to 2016) have shown, when compared with active intervention, EMDR demonstrates its superiority against psychoeducation and to be comparable to CBT, that acknowledged as the gold standard intervention to treat depression, according to clinical guidelines (National Collaborating Centre for Mental Health, UK, 2010). In our current study, although EMDR is not showing any rapid changes in clients compared with CBT and TA, it has possibilities to prove its effectiveness if the research participants could do a greater number of sessions or complete their full treatment.

The present research study means that although CBT and TA are showing a quick improvement in therapy EMDR therapy has gradual positive change in depression. The relapse symptoms come faster in CBT and TA on the other hand EMDR therapy the improvements are steady.

As CBT and TA are traditional therapy these were effective and as a new therapy EMDR therapy is developing their skills and as newcomers they are under training and still developing. Therapists could be more in new position with the practice of EMDR therapy. So EMDR therapists may have some difficulty practicing EMDR as a new therapy.

Limitations:

Several other limitations must be recognized when considering the present findings.

First, the quite small number of participants may have resulted in a lack of sufficient power and sensitivity to detect small differences among the groups.

Second, the study lacked In-depth interview with the therapists. It would have been informative if in-depth interviews were included.

Third, follow-up assessments were undertaken at only 1 month's post-treatment, thereby limiting conclusions regarding the sustainability of the treatment gains over a longer period.

Finally, in this study, the fidelity assessments were based on session checklists with no systematic review of session recordings to verify the therapists' documentation. Therefore, the current findings must be included under further research scopes with improvement in research design.

Recommendation:

As the present study suggests that EMDR shows a sustainable direction to treatment with depression compared with CBT and TA, future research can be done with the full treatment process to measure the actual improvement of the respective therapy. In future research can be done with a significant number of participants and well-documented by therapists. However, the findings are tentative and need to be supported by larger and more vigorous evaluations

Conclusion:

In Conclusion the research suggests that despite the limitations, this study is the first step to see the efficacy of EMDR therapy in Bangladeshi perspective. This research can contribute to making decisions in treatment to choose type of psychotherapy with depression clients.

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Appendices

Appendix A: Ethical Clearance Certificate

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াবিজ্ঞান অনুষদ
কা বিশ্ববিদ্যালয়, ঢাকা-১০০০, বাংলাদেশ

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Ref. No. 254/Biol. Scs. January 23, 2024

Ethical Review Committee

Professor Dr. Mahjabeen Haque
Department of Educational and Counseling Psychology
University of Dhaka
mahjabeenhaquedu@gmail.com

Sub: Ethical Clearance

Dear Dr. Mahjabeen Haque,

With reference to your application on the above subject, this is to inform you that your research proposal entitled "Efficacy of EMDR therapy in treating patients with depression" has been reviewed and approved by the Ethical Review Committee of the Faculty of Biological Sciences, University of Dhaka.

I wish for the success of your research project.

23.01.2024

Professor Dr. A K M Mahbub Hasan
Dean, Faculty of Biological Sciences
University of Dhaka

Appendix B: Bangla PHQ-9 Scale

বাংলা পিএইচকিউ-৯

আপনার নামঃ
বয়সঃ

গত দুই সপ্তাহে আপনি কতবার নিচের সমস্যাগুলোর সম্মুখীন হয়েছেন? *(প্রতিটি বিবৃতি পড়ার পর পাশের চারটি উত্তরের মধ্যে যেটি আপনার ক্ষেত্রে প্রযোজ্য সেটিতে টিক চিহ্ন দিন)*	একেবারেই না	বেশ কয়েকদিন	অর্ধেকের বেশি দিন	প্রায় প্রত্যেকদিন
১। কোনোকিছু করার ব্যাপারে আগ্রহ বা আনন্দ কম	০	১	২	৩
২। মনমরা, বিষণ্ন, অথবা হতাশ বোধ করা	০	১	২	৩
৩। ঘুম আসতে বা ঘুমিয়ে থাকতে অসুবিধা, বা অতিরিক্ত ঘুম	০	১	২	৩
৪। ক্লান্ত বা শক্তিহীন অনুভব করা	০	১	২	৩
৫। ক্ষুধামন্দা বা অতিরিক্ত খাওয়া	০	১	২	৩
৬। নিজের সম্পর্কে খারাপ বোধ করা- বা নিজেকে ব্যার্থ মনে করা কিংবা নিজেকে বা পরিবারকে ছোটো করেছেন এমন মনে হওয়া	০	১	২	৩
৭। কোনো কিছুতে মনোযোগ দিতে অসুবিধা, যেমন খবরের কাগজ পড়া বা টেলিভিশন দেখা	০	১	২	৩
৮। খুব ধীরগতিতে চলাফেরা করা বা কথা বলা যা অন্যদের নজরে পড়ার মত। কিংবা উল্টোটা- এত চঞ্চল বা অস্থির থাকা যে আপনি স্বাভাবিকের তুলনায় অনেক বেশি চলাফেরা করে বেড়াচ্ছেন	০	১	২	৩
৯। মরে যাওয়াই ভালো এমন চিন্তাধারা, বা কোনোভাবে নিজের ক্ষতি করা	০	১	২	৩

যদি এই সমস্যাগুলির কোনোটি আপনার মধ্যে খেয়াল করেন, তাহলে তা আপনার পেশাগত কাজকর্ম, ব্যক্তিগত কাজকর্ম, বা অন্যদের সাথে মেলামেশাকে কতটা কঠিন করে তুলেছে?	মোটেও কঠিন নয়	কিছুটা কঠিন	খুব কঠিন	চূড়ান্ত রকমের কঠিন

Appendix C: Bangla Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)

Bangla Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)

ওয়ারউইক এডেনবারা মানসিক কল্যাণ মাপকাঠি (WEMWBS)

নিজস্ব অনুভূতি ও চিন্তা ভাবনা নিয়ে কিছু বিবৃতি দেয়া হল। দয়া করে ঐ বাক্সে টিক চিহ্ন দিন যা আপনার গত ২ সপ্তাহের অভিজ্ঞতার সাথে মিলে।

বর্ণনা	কখন ও নয়	কখন কখন	মাঝে মধ্যে	প্রায়ই	সব সময়
আমি ভবিষ্যত নিয়ে আশাবাদী					
আমি নিজেকে প্রয়োজনীয় মনে করি					
আমি শান্ত অথবা হালকা বোঢ করছিলাম					
আমি অন্য মানুষের ব্যাপারে আগ্রহী বোধ করছিলাম					
আমার বাড়তি শক্তি ছিল					
আমি সমস্যাগুলোর মোকাবেলা ভালভাবে করতে সক্ষম ছিলাম					
আমি পরিষ্কারভাবে চিন্তা করতে পারি					
আমি নিজের ব্যাপারে ভাল বোধ করি					
আমি অন্যদের কাছাকাছি আছি অনুভব করি					
আমি আত্মবিশ্বাসী বোধ করেছিলাম					
বিভিন্ন বিষয়ে আমি নিজে নিজে সিদ্ধান্ত নিতে সক্ষম ছিলাম					
আমাকে পছন্দ করা হয় বলে বোধ করেছিলাম					
আমি নতুন বিষয়ে আগ্রহী ছিলাম					
আমি আনন্দিত বোধ করেছিলাম					

Appendix D: Consent Form

সম্মানিত অংশগ্রহণকারী,

আমি মরিয়ম সুলতানা, ঢাকা বিশ্ববিদ্যালয়ের এডুকেশনাল এন্ড কাউন্সিলিং সাইকোলজি বিভাগের একজন এম.ফিল গবেষক। আমার বর্তমান গবেষণার উপাত্ত সংগ্রহে আপনার একান্ত সহযোগিতা কামনা করছি।

বর্তমান গবেষণাটির শিরোনাম 'Efficacy of EMDR therapy in the Treatment of Depression.' আমারা এই গবেষণায় EMDR Therapy Depression ক্লাইন্টের ক্ষেত্রে কতটা কার্জকর তা জানতে চাচ্ছি। পুরো প্রক্রিয়াটি সম্পন্ন করতে সর্বোচ্চ ৫/৬ মিনিট সময় লাগবে। ২ টি প্রশ্নমালায় অন্তর্ভুক্ত উক্তিগুলো ভালভাবে বুঝে আপনার ক্ষেত্রে প্রযোজ্য উত্তরটি বাছাই করুন। উত্তর বাছাই এর ক্ষেত্রে কোন ভুল বা সঠিক উত্তর নেই।

বর্তমান গবেষণাটি অধ্যাপক ড.মেহজাবিন হকের তত্ত্বাবধানে করা হচ্ছে এবং সংগৃহীত সকল তথ্য ইথিক্স কমিটির নিয়ম অনুযায়ী গোপন থাকবে। সংগৃহীত তথ্য শুধুমাত্র গবেষণার কাজে ব্যবহার করা হবে। আপনি চাইলে যে কোন সময় এই গবেষণা থেকে নিজেকে প্রত্যাহার করে নিতে পারবেন। সেক্ষেত্রে আপনার সকল তথ্য ডাটাবেজ থেকে মুছে দেয়া হবে।

এই গবেষণাটি নিয়ে আপনার কোন প্রশ্ন বা মতামত থাকলে আমাকে ইমেইল করতে পারেন: Mariyam Sultana, Asst.Conselling Psychologist & M.phil Researcher, Department of Educational and Counselling Psychology, University of Dhaka, Email: mariyampsychologist@gmail.com

Appendix E: Quality Of Therapists

Sl/Name	1.Educational Qualification	2. Total Years of therapeutic Experience	3.Expertise of using different therapy	4.Current Therapeutic approach	5. Current Therapeutic approach Practice years	6. Previous practiced Therapeutic Approaches	7.Supervision hours taken
1. (KAK)	Masters In Counselling Psychology	10 years	-EMDR -CBT -TA	EMDR	6 years	-TA -CBT	400
2. (MAK)	Masters In Counselling Psychology	10 years	-EMDR -CBT -TA	EMDR	5 years	-TA	500
3. (NER)	M.Phill in Counselling Psychology	15 years	-EMDR -TA -NLP	EMDR	7 years	-TA -NLP	650
4. (AUP)	Masters In Counselling Psychology	8 years	-EMDR -TA	EMDR	5 years	-TA -CBT	
5. (RAH)	M.Phill in Counselling Psychology	10 years	-EMDR -TA -CBT -Gestalt	EMDR	5 years	-TA -NLP	
6. (MAS)	Masters In Counselling Psychology	10 years	-EMDR -TA -NLP -Gestalt	EMDR	6 years	-TA -NLP	550
7. (ASA)	Masters In Clinical Psychology	3 years	-CBT	CBT	5 years	-CBT	100
8. (LAK)	Masters In Counselling Psychology	5 years	-CBT	CBT	5 years	-CBT -TA	300
9. (SAS)	Masters In Psychology	8 years	-CBT	CBT	8 years	-CBT	250
10. (ASU)	Masters In Clinical Psychology	13 years	-CBT	CBT	13 years	-CBT	450
11. (MIM)	Masters In Counselling Psychology	4 years	-CBT -TA	CBT	4 years	-TA	300
12. (AIA)	Masters In Counselling Psychology	7 years	-TA -CBT	TA	7 years	-TA -CBT	350
13. (MSU)	Masters In Counselling Psychology	10 years	-TA -CBT	TA	10 years	-CBT -Gestalt	600
14. (MAS)	Masters In Counselling Psychology	10 years	-EMDR -TA -NLP	TA	10 years	-TA -NLP -Gestalt	550

Appendix F: Pseudo Name of Therapists

Pseudo Name of EMDR Therapists:

Number	Pseudo Name	Taken client	Drop out	Excluded	Final data	M/F
1	KAK	6	0	1	5	5F
2	MAK	2	0	0	2	2F
3	NER	2	1	0	1	1F
4	AUP	1	1	0	0	
5	RAH	0	0	0	0	
6	MAS	6	0	5	1	1F
		17	2	6	9	9F

Pseudo Name of CBT Therapist:

Number	Pseudo Name	Taken Client	Drop Out	Final Data	Male/Female
1	ASA	1	0	1	1F
2	LAK	1	0	1	1F
3	SAS	4	0	4	1M, 3F
4	ASU	0	0	0	
5	MIM	1	0	0	
6	JFO	0	0	0	
7	AMA	1	1	0	
		7	1	6	5 F, 1M

Pseudo Name of TA Therapist:

Number	Pseudo Name	Taken Client	Drop Out	Final data	Male/Female
1	AIA	2	0	2	1 F 1M
2	MSU	0	0	0	
3	MAS	5	1	4	3F 1M
		7	1	6	4F, 2M

Appendix G: Demographic Questionnaire

Participant's Socio Demographic Information

Code:

Variables				
Sex	Male	Female		
Age	Young Adult(20-40years)	Middle Age (40-65 years)	Old Age (65 and up)	
Marital Status	Married	Unmarried	Divorced	Separated
Socio Economic Status	Higher	Middle		Low
Highest Educational Qualification				

Appendix H: Meeting Minutes of The 1st meeting with Research supervisors and EMDR therapist who gave consent of participating in Research:

4/5/2024
Efficacy of EMDR therapy in treating patients with Depression

Meeting Topic for Research

1. Consent will be delivered shortly
2. 6 sessions will be taken for every depressant client
3. Incentives will be given per session
4. PHQ-9 Bangla questionnaire will be provided shortly
5. Both depression patient with psychiatrists diagnosis and not diagnosis can be selected as participant
6. Questionnaire will be given to them in 1st session, intermediate session and 6th session
7. Every client can have 3 months follow up for getting their relapse information
8. Train up the therapists about EMDR depressant manual in the same way
9. After every session I have to seat with every therapist for collecting information like verbatim, reprocessing process so that I can reduce biases/to ensure same process/ progress
10. When the client will be in follow up the feedback from client can be taken over phone
11. Supervision- If any therapist is stuck at any point dealing with a client he/she can get supervision directly from Dr. Mahjabeen Haque or Madam will recommend someone
12. I am also trying to collect opposite scales of PHQ-9 like Happiness scale or life satisfaction scale so that we can get the data that how it goes opposite direction if clients take EMDR therapy
13. I need one Time frame with Therapist so that I can get data within a specific time
14. Every therapist has 5+ years' experiences with EMDR
15. Every client will be new, and we cannot take data from our old clients who have taken several sessions already
16. Inclusion criteria -

Inclusion Criteria were as follows:
1) A diagnostic of depressive disorder/ depressive symptoms
2) aged between 18 and 65 years
3) PHQ-9 Scale will show depression
4) legal capacity to consent to the treatment
5) presence the effect of any stressful life stress

Exclusion criteria were as follows:

1. A history of psychotic symptoms or schizophrenia
2. Bipolar disorder or dementia
3. Dissociative disorder
4. Any substance-related abuse or dependence disorder
5. A serious, unstable medical condition
6. Being pregnant
7. Undergoing parallel legal process or applications for pension or social security

Appendix I: Supervision Finding with EMDR Therapist Over Phone

2/6/2024

NER

2 clients (severe depression) - medication taking- EMDR started- Did BLS

Verbatim: “Insight open, network open, cognitive interweaves significant change is happening”

Cognitive interweave is very effective according to therapists. Clients can specify the positive state they have created. “I can focus now on what can help me” - client said that without any direction client told that after BLS, it’s like upside down to therapist.

Client told- “feeling calm” “actually it (trauma) is finished”

Body focused - less suffer feeling

7/6/2024

AUP

1 client (Severe depression) -no medication - no BLS yet

Verbatim: keeping in Present moment client got her awareness “that’s why I am here for my past”

She is feeling better now and she paused the session. Can handle other works smoothly.

26/8/2024

KAK

One female client had an issue with her mother.

After 3 times application with Scales, she has no changes in scale. But she gave her feedback subjectively.

After having BLS she said that She is having less anger toward mother although she didn't do anything except BLS in the trauma session.

8/10/2024

KAK

Memory reprocesses feedback- After every memory reprocessing client gave feedback that he/she is not afraid about Dog. He stays relaxed if he thinks about dogs. Memory is not painful anymore.

Another client realized that others will not be changed, she can be changed.

Another client told that trauma memory recall is not painful anymore. That memory seems normal to him. SUD-0, VOC-7

Therapist is saying after doing client observation -they are looking relaxed than before.

After applying the scale there is no significant change in score but painful experience about the memory has been changed.

6/12/2024

MAK

The 1st client is continuing. Improved significantly. Capacity developed a lot, improved autonomy. Feeling fearless, feeling safe. The technique therapist used- resource development, butterfly hug, inner

garden.

The 2nd client took lots of sessions. That client has complex trauma. Feeling of abandonment, not feeling important, feeling of loss, traumatic body response. Client felt safe in session. Her suicidal ideation removed, increased acceptance, friendship increased, increased awareness. Stabilization did with the client, increased autonomy, increased decision taking ability, assertiveness increased. Cognitive interweave did work well.

15/12/24

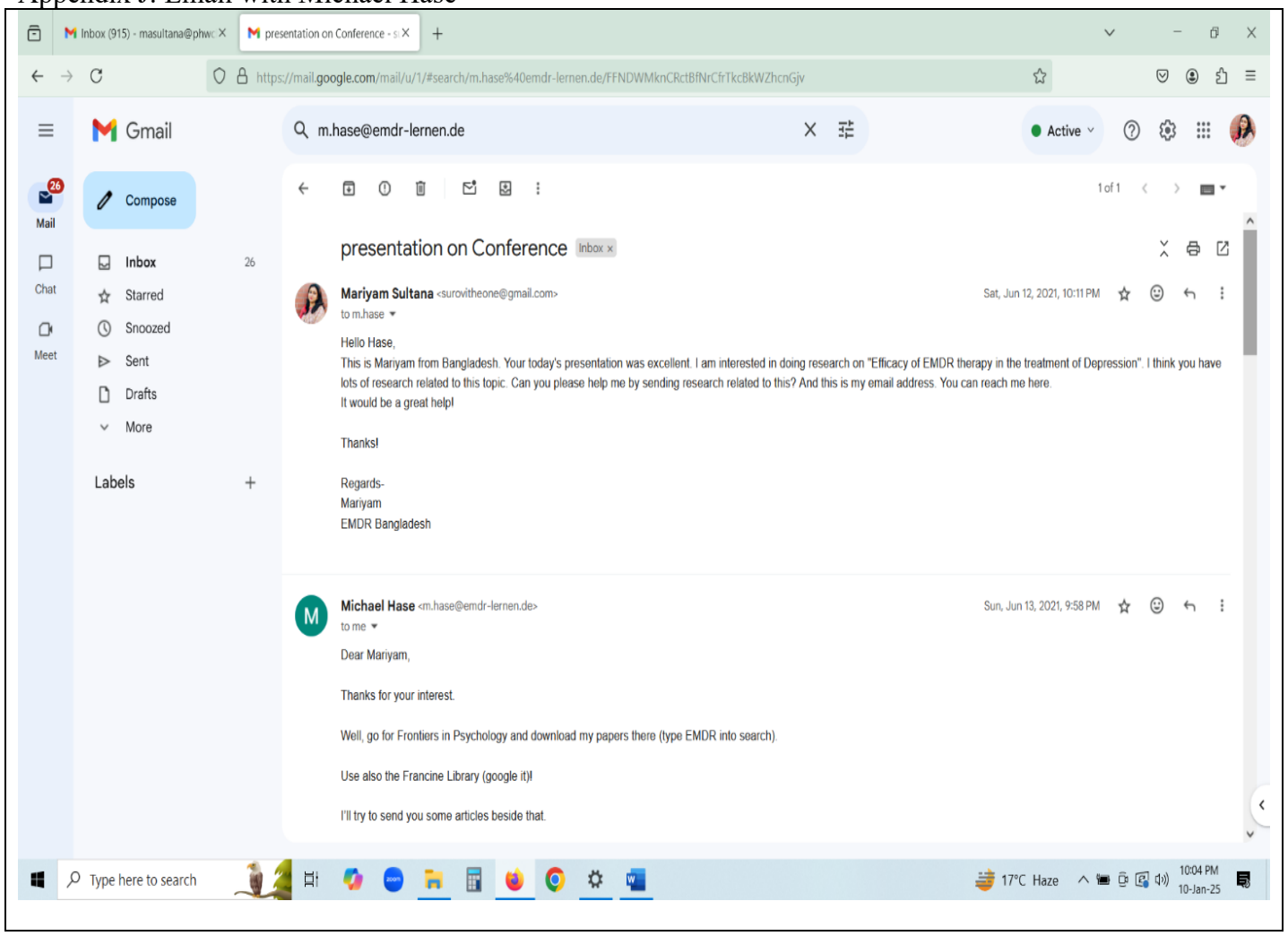
KAK

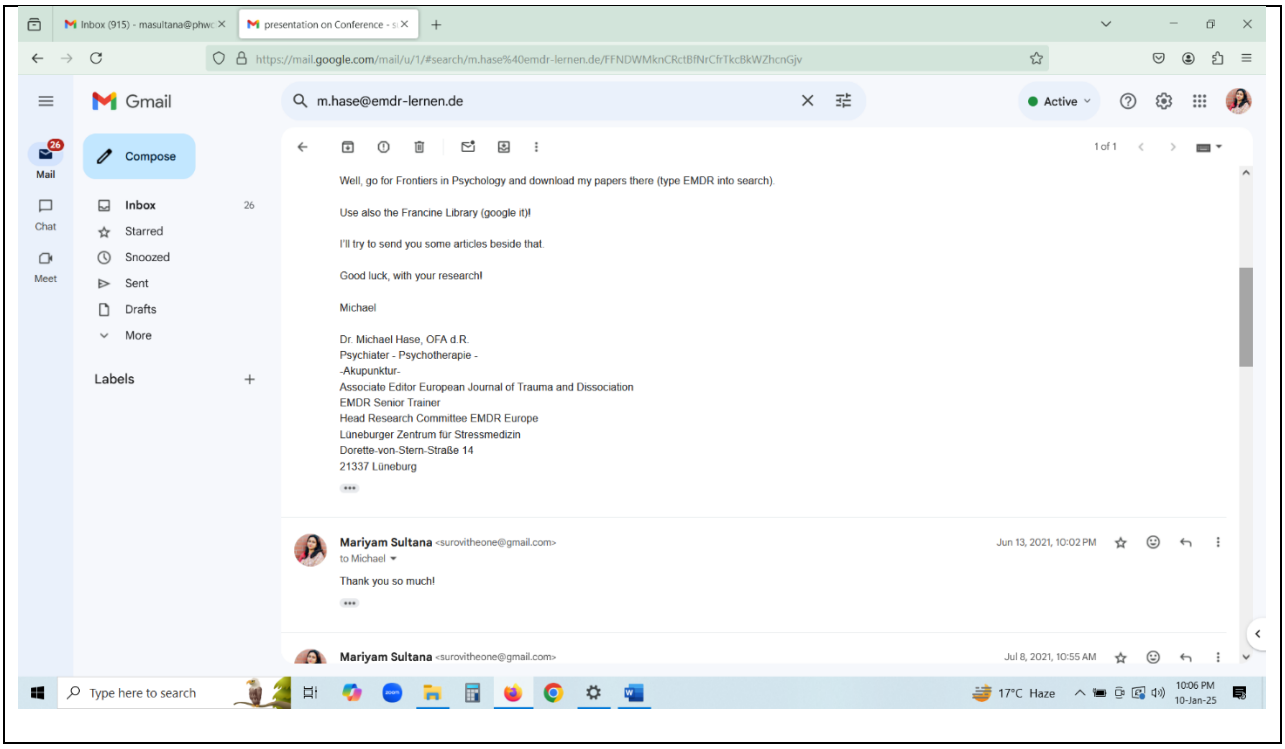
No relapse. All are ongoing clients. Everyone is continuing EMDR. Foe4 exam 1 client is in gap.

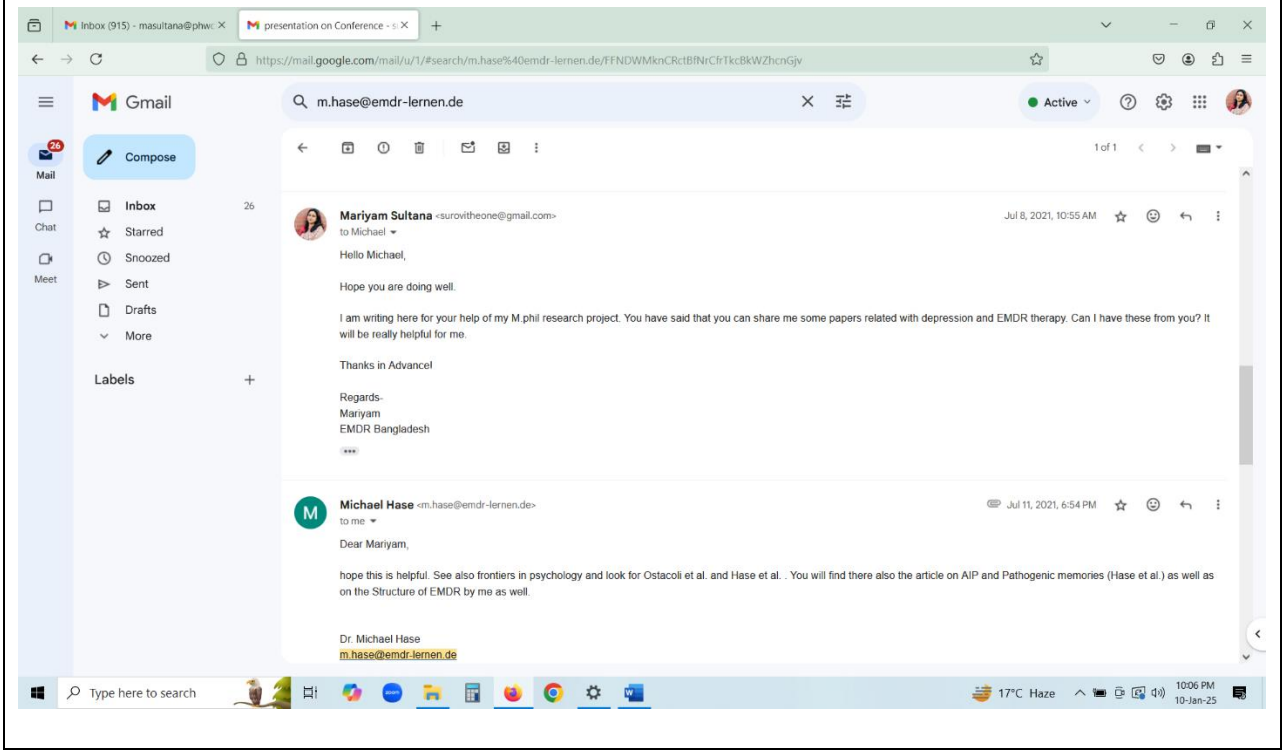
After reprocessing, once client gave feedback that he was used to feeling head heaviness, now he is not feeling head heaviness. He gave one verbatim -"it seems like the glasses of my eyes are clear to me now, what was hazy before." He accepts reality. He stopped to ask 'Why' questions. He started to feel light.

1 client's seeing perspective has changed. She can recognize that her past days are not her present life.

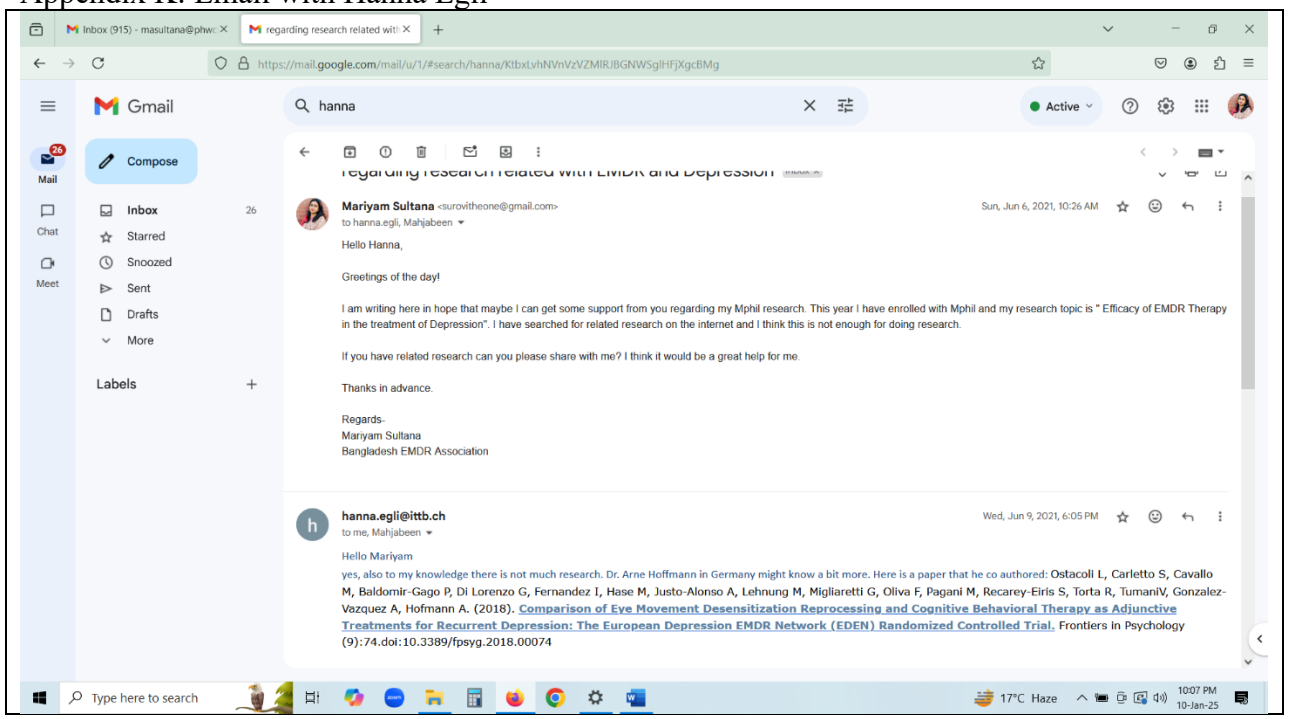
Appendix J: Email with Michael Hase

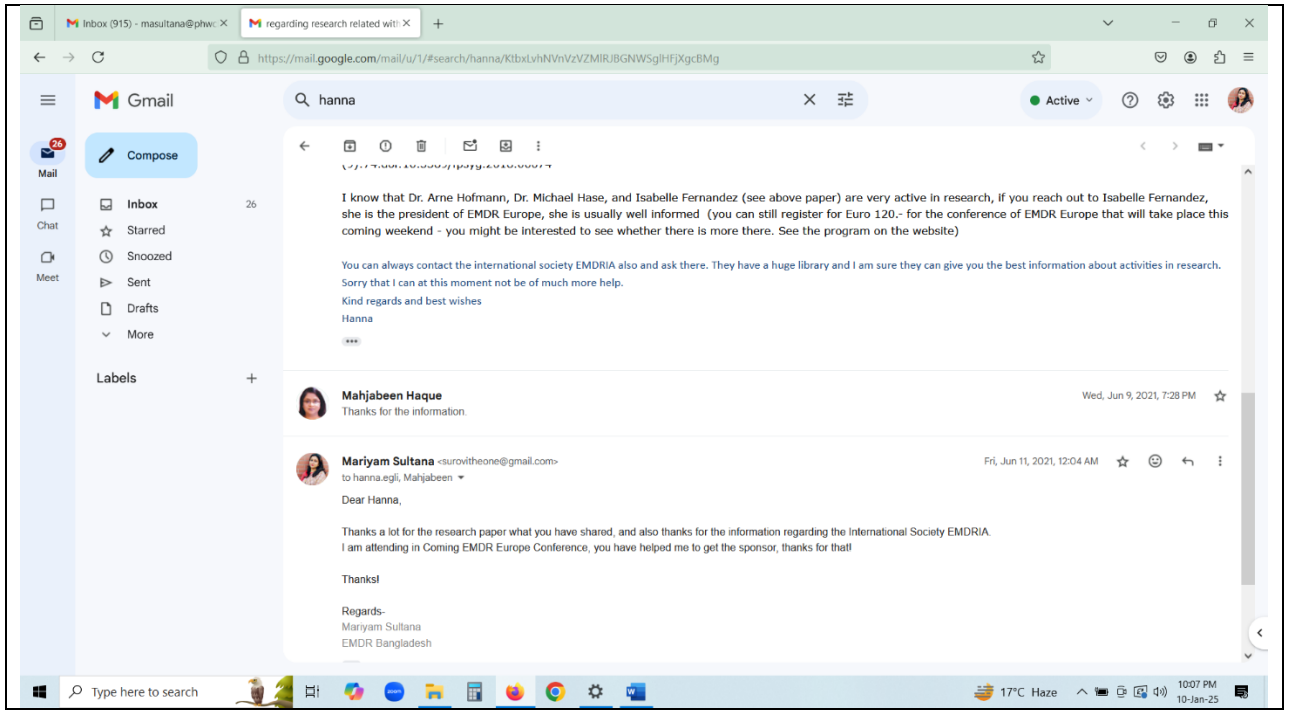






Appendix K: Email with Hanna Egli





Appendix L: Dimentions of EMDR, CBT and TA

Dimensions of EMDR according to therapist's practical experiences

EMDR What therapy you prefer to use with depression/trauma client in general among EMDR, TA, CBT? And Why?	Client context	Strength	Challenges
• EMDR has lots of techniques to stabilize the client. So, it feels safe to use. If any technique fails with any specific client, I can choose another one. (MAS)	• Adult clients are more comfortable with EMDR • EMDR is also applicable with Child client but therapist need to be more creative • Higher SES and social background are suitable for using EMDR. (MAS)	• *EMDR therapy has 8 phase structure and that is very helpful to make one client prepare (MAS)* • EMDR is very helpful for the clients who have trauma related depression because EMDR provides resources to use whenever it is needed for clients. (MAS)	• Sometimes it has been seen that few clients don't like EMDR because of their personality pattern, for example- they do not like to follow instruction in Desensitization phase. (MAS) • EMDR needs lots of session. So it is *time consuming*. And require lots of money. (MAS)
• Prefer EMDR for dealing with Depression and Trauma client (KAK) •	• Young adults/ adolescents more in number who take EMDR (KAK) • Female clients are more in number (KAK) • Middle class is more in number taking EMDR therapy (KAK) • Maximum are Educated clients (KAK)	• EMDR do work on core fundamental side (KAK) • It is related with Memory that is helpful to deal with client's issue. (KAK) • EMDR technique 'Dialogue protocol' helps a lot (KAK) • Evidence based practice (AMA) • Work with BLS and helps to deal with stress (AMA)	• *Time are challenging in Bangladeshi context because lots of the time students must face unrest situation of government or exam schedule. That why they have to take long break from therapy. (KAK)* • Without reprocessing few clients have to take pause sessions, that's why the other trauma cluster of memory remains untreated (KAK) • In EMDR lots of sessions are needed for trauma reprocessing they need lots of money. So *sometimes clients must stop the session. (KAK)* • Therapist's time also a considerable matter *sometimes it is also difficult to manage time for giving the therapy. (KAK)* • Therapists need clear knowledge

			about trauma therapy EMDR (KAK) • EMDR needs good attachment with therapist. (KAK) • *EMDR needs proper preparation (KAK)* • *Secure attachment/ rapport building is very required for EMDR therapy. It takes time. After doing lots of stabilization once the client can trust therapist. (KAK)*
LAK		• EMDR is the best therapy approach for trauma therapy. (LAK)	• Therapist can feel unconfident if he/she hasn't proper knowledge about trauma therapy (LAK)
MAK • EMDR she prefers to use. Client feels hopeful when therapist starts EMDR. Does Hope generation in client.	• Young adult clients accept EMDR. • Education qualified/ Intelligent client accept more preferably •	• EMDR is very organized therapy • Resource developments help a lot (Inner Garden, safe and calm state) • Stabilization techniques help a lot	• *Reprocessing sometimes gets unfinished because EMDR is very time consuming* • Selecting touch stone memory is difficult
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Dimensions CBT of according to therapist's practical experiences:

Preference What therapy you prefer to use with depression/trauma client in general among EMDR, TA, CBT? And Why?	Client Context	Strengths	Challenges
CBT Therapists *Prefers doing CBT with trauma based depression client (ASU)*	• Males are more convenient to go with CBT (ASU) • Young adults are more in CBT (ASU) • Educational qualification sometimes impacts easier to make clients understand (ASU) • In the context of low education CBT needs to be modified in terms of terms/question modification. For example, Socratic question (ASU) • Male clients are more curious to use CBT because it is very result based. They like format, formulation .12-16 for male session needed (ASU) • Female clients like ventilation so they are more focused to share at the beginning. CBT they receive after time later. 20 sessions needed for female. (ASU)	• More structured (ASU) • Proper formulation helps clients (ASU) • Increases awareness (ASU) • They can reflect (ASU) • Can identify the block, how it manifested, prolonged (ASU)	• Direct approach is sometimes risky because client might can feel threatened (ASU) • To deal with Psychosomatic response clients sometimes refuse CBT • CBT is not Emotion focused, it is challenging for both client and therapist

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AMA	• All age range is applicable for CBT (AMA) • Education level affect for using CBT because CBT uses lots of terms (AMA)	• CBT is Evidence based practice (AMA) • CBT works with Skill development (AMA) • CBT works with self-growth (AMA) • CBT works with client's thinking pattern (AMA)	• The conflict between emotional brain and logical brain CBT faces challenge to deal with as it is more logical and structure focus. (AMA) •
ASA	• at the age where cognitive ability is developed, Education plays also a role (ASA)	• If client is cognitively sound, It's an extra benefit for using CBT as therapeutic approach. (ASA) • As CBT particularly focuses on the associated thoughts, clients who have trauma incidents, struggle initially to elaborate the thoughts or somehow relieve the moment again. (ASA) • *it helps to know the thoughts, feelings, physical reaction and behavior associated with trauma memory, thus it helps to process holistically (ASA)*	
LAK	• seeing adolescent client I use CBT	• *Trauma client CBT cause of*	

	(LAK)	*when I use CBT so client understand how his thought affect his feelings and actions (LAK)* • When they identified their cognitive distortion client feel connected with this (LAK)	
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MIM *Although she is a Counselling psychologist she prefers CBT. Because it is very quick and take less session (6 sessions), and activity based. (MIM)* *It helps working with corporate clients (MIM)*	• *Anxiety, OCD, Depression clients are suitable* for OCD (MIM) • Young adult receive CBT well (MIM) • Young adults want to get quick results so they like using CBT (MIM) • Child and old aged cannot connect CBT. Because emotional part is less in CBT (MIM)	• More structured (MIM) • *Less time consuming(MIM)*	• Elderly people cannot receive CBT properly (MIM) • Client sometimes cannot connect CBT when they are less relaxed (MIM) • Child and old aged cannot connect CBT. Because emotional part is less in CBT (MIM) •
MSU		• The clients whose logical brain is more active those clients accept CBT more. • Thought restructuring model is very helpful for clients. • All kind rational people accept CBT • For OCD CBT is	• Emotional brain activated client cannot connect CBT • Grief is not work with CBT • With Relationship issue CBT works less • Emotional unstable clients cannot accept CBT more.

		helpful	
SAS	• Educated clients accept more • Insight better • Middle aged client cannot accept CBT properly, acceptance less	• Determined client accept well CBT • Working well with educated clients • Maximum benefit can be ensured with CBT •	• Low educated clients cannot take CBT • Clients cannot take homework easily • Client cannot accept the activity easily • Cannot connect physical sensation • Imaginary obstacle • Thought block
MAK	• The clients who affects a lot by other's behavior. • Young adults accept CBT more.	• Cognitive models help to therapy with client.	•

Dimensions TA of according to therapist's practical experiences:

Preference What therapy you prefer to use with depression/trauma client in general among EMDR, TA, CBT? And Why?	Client Context	Strengths	Challenges
TA	• In University settings, adult students prefer TA (AIA)	• TA helps to know the client deeply (AIA) • TA helps me to assess the client and helps to apply the intervention properly (AIA)	• While using TA, sometimes it is difficult to apply when the client is not ready (AIA)
	• TA is helpful to work in relationship issues (AMA)	• TA is very meaningful to highly intellectual clients (MAS) • TA increases awareness and helps clients to change the old unhelpful pattern (MAS)	• TA is not helpful to use with low intellectual clients (MAS)
		• TA helps to Identify clients present conditions through discussion with Ego states. (KAK) • Ta is helpful to make clients understand or realization his/her psychological game in life so that she/ he can identify life's present situation. (KAK) • Helpful for ventilation and awareness (KAK) • Helpful for being relaxed (KAK) • *Helpful for initiate session (KAK)*	•

		• TA focus about client's childhood and helps to work on current relationship (AMA)	
LAK	• seeing adult client I use TA (LAK) •	• Trauma client TA cause of when I use CBT so client understand how his thought affect his feelings and actions (LAK) • When I use TA & share with them Ego State they feel connected (LAK)	
MIM *Prefer using TA when it is about trauma related depression client*	• In relationship issue TA works well • Middle aged, old aged and adolescents receive TA well	• Emotion focused therapy (MIM) • Connect my inner sight more(MIM) • Get aware about inner self and present self-discrepancy and can bring growth (MIM) • In TA psychoeducation is more fruitful (MIM) • Trauma clients blame herself a lot for happening trauma with self. TA does works with inner child and that helps client to recover trauma (MIM)	• Time consuming • TA get awareness it takes time • Sessions are lengthy • Client with less education cannot connect TA (MIM)
MSU	• Elderly clients TA accepts less • Less educated clients receive TA less • Low intelligent clients receive TA less • Early adulthood TA works well	• Assessment tool more useable (Life position, Injunction, Drivers, Game, Ego gram) (MSU) • TA is very helpful for self-exploration (MSU) • TA is mostly effective on relationship issues	• Elderly clients TA accepts less • Less educated clients receive TA less • Low intelligent clients receive TA less

		• Self-esteem related issue • The clients who are curious to learn new things can accept TA more • Parent-child Issues work well with TA	
MAK EMDR is more powerful than TA. EMDR takes more preparation so client accept is more. Client feels happy that EMDR can help him to rescue from EMDR.	• Young adults accept TA more in university setting	• Even complex trauma client participates in EMDR. (MAK) • Psychoeducation is very helpful in TA • Ego states are very helpful for clients • In relationship issue TA helps a lot • Life position is helpful in TA	• Therapist needs to know more to apply (MAK) • Client's will power depends on a lot for success of the therapy. The importance of taking therapy also related with success.