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RESEARCH ARTICLE

Evaluating a culturally adapted schema therapy VS Tf-CBT for reducing EMS and schema modes in complex trauma: A Malaysian intervention

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ABSTRACT

Research indicates that chronic and repeated interpersonal trauma is prevalent in Asia, leading to elevated early maladaptive schemas (EMS) and schema modes, which negatively impact well-being. While trauma-focused interventions are needed to address these, the Western origins of most psychotherapies raise concerns about their direct applicability in the Asian cultural context, marked by emotional reserve and shame associated with familial conflict. To address this, the current study developed a culturally adapted Schema Therapy tailored to the social and environmental realities of Asia. A pilot intervention in Malaysia compared this adapted Schema Therapy with Trauma-Focused Cognitive Behavioral Therapy (Tf-CBT) in reducing EMS and schema modes among individuals with chronic and repeated trauma. Thirty participants were randomly assigned to 16 sessions of either therapy. Quantitative analysis revealed that Schema Therapy demonstrated superior short-term and long-term reductions in both EMS and schema modes compared to Tf-CBT. These findings suggest the potential of Schema Therapy as an effective intervention for trauma-related distress in this population. The culturally adapted approach also proved effective within the Malaysian context by addressing culturally conservative and emotionally reserved tendencies.

Keywords: culture; interpersonal trauma; EMS; schema modes; Asia

1. Introduction

1.1. Trauma and trauma-focused interventions

Distressing experiences that exceed an individual's capacity to cope are classified as trauma [1]. Such events can profoundly influence emotional states and psychological health. A frequently observed outcome of trauma is Post-Traumatic Stress Disorder (PTSD), an anxiety disorder marked by intense fear, feelings of helplessness, or horror triggered by life-threatening or traumatic incidents [2]. Trauma-focused cognitive behavioral therapy (Tf-CBT) is widely acknowledged and empirically supported as a primary therapeutic intervention for trauma and PTSD. This modality is regarded as a standard recognised psychotherapeutic

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approach, recommended for both adult and child populations experiencing PTSD[3].

However, emerging research indicates the potential of schema therapy as a beneficial psychotherapeutic model for trauma survivors. Cockram et al.[4] documented significant reductions in PTSD symptoms among war veterans following schema therapy, with these improvements sustained throughout a three-month follow-up. This study suggested a comparatively greater efficacy of schema therapy relative to Tf-CBT. Likewise, Lian et al.[5], utilizing both quantitative and qualitative methods, demonstrated that schema therapy yielded superior short-term and long-term outcomes in mitigating PTSD symptoms among individuals with chronic and repeated trauma when compared to Tf-CBT.

Schema therapy, an integrated psychotherapeutic approach, synthesizes elements from cognitive-behavioral, experiential, interpersonal, and psychoanalytic models[6, 7] highlighted several distinctive characteristics that position schema therapy as a potentially effective alternative to trauma-focused psychotherapies:

1. Centrality of the Therapeutic Alliance: Schema therapy prioritizes the therapeutic relationship, a point of divergence from Tf-CBT[6].
2. Utilization of Experiential Methods: Schema therapy employs experiential techniques, which have been suggested as potentially more efficacious and ethically sound compared to exposure-based methods, particularly in addressing trauma[8].
3. Robust Theoretical Framework: Schema therapy, as articulated by Young et al.[6], posits that psychological disorders originate from EMS and schema modes. Reviews have substantiated the significant associations between EMS, schema modes, and traumatic experiences[7].

1.2. Schema therapy in Asia

Despite its promising findings, the application of schema therapy as a trauma-focused intervention in Asia may encounter limitations. Originating from a Western theoretical framework and primarily validated with Western populations[6], the cross-cultural utility and effectiveness of schema therapy, particularly within the Asia context, remain uncertain. For example, Martin et al.[9] raised concerns regarding the suitability of certain schema therapy techniques for Asian populations. A notable challenge lies in the confrontational nature of some techniques, such as requiring traumatized individuals to directly address their abusers. This approach may be emotionally overwhelming for clients from more conservative and non-confrontational cultural backgrounds, such as those prevalent in Asian societies[9].

Furthermore, Martin et al.[9] also observed that prevalent traumatic experiences in Asia are often interpersonal and family-centric, frequently involving parental figures. In many Asian societies, the prevalence of family-based trauma, often perpetrated by parents, is deeply intertwined with the collectivist cultural values. The emphasis on familial harmony and hierarchical structures within collectivist cultures can inadvertently create environments where abuse or neglect within the family unit may be concealed or normalized to maintain social cohesion and avoid bringing ‘shame’ upon the family. The profound sense of shame associated with familial conflict further compounds the issue of family-based trauma in many Asian societies. Confronting parents or other family members about traumatic experiences can be perceived not only as a violation of filial piety and respect for elders, core tenets in collectivist cultures, but also as a significant source of familial dishonor. This fear of bringing shame upon the family unit often outweighs the individual's need for validation and healing. Consequently, even when individuals recognize the harm they have endured, the prospect of confronting their family can trigger deep-seated feelings of guilt and anxiety. They may internalize blame, believing they are somehow responsible for the family's dysfunction or the

potential social repercussions of disclosure. Martin et al.[9] supported this phenomenon, where it reported that many Asian clients in Hong Kong and Singapore found it difficult to confront or express their feelings towards abusers, especially when the trauma was interpersonal and the perpetrators were close relatives like parents. These clients reported intense feelings of guilt during their intervention[9].

Furthermore, deeply entrenched stigmas in Asia surrounding mental health issues and experiences of trauma can discourage open disclosure and help-seeking behaviors, particularly when the perpetrators are family members[9]. This reluctance to address familial trauma directly can perpetuate cycles of abuse and hinder access to appropriate support and intervention for affected individuals within these cultural contexts[9]. With this, successful implementation of schema therapy in Asia necessitates a strong emphasis on cultural sensitivity and adaptation of its techniques.

Lian and Bono[10] developed a culturally adapted schema therapy specifically for Asian populations and trauma survivors. A novel feature of this culturally adapted schema therapy manual is the addition of a continuum of experiential techniques, ranging from gentle to intensive: (a) Level 1: Art Therapy, (b) Level 2: Dream Work, (c) Level 3: Supportive Approach, (d) Level 4: Interpretation and Confrontation, and (e) Level 5: Imagery Rescripting and Chair Work. This continuum allows for a tailored approach, enabling therapists to select techniques based on client sensitivity, emotional readiness, and therapeutic goals.

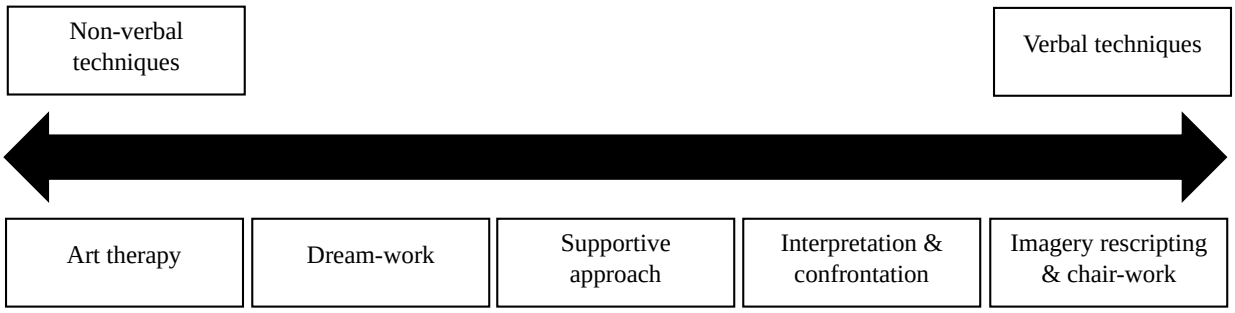

Figure 1. The continuum of experiential techniques.

The newly adapted schema therapy offers two key advancements over traditional schema therapy and other trauma interventions. Firstly, the innovative continuum of experiential techniques empowers therapists to tailor treatment to the specific needs, preferences, and circumstances of each client, fostering personalized intervention plans. Secondly, by providing a range of therapeutic approaches, clients can actively participate in selecting techniques that resonate with their emotional readiness and preferences. This is particularly beneficial for trauma survivors who may be emotionally sensitive or overwhelmed, as the continuum offers a gradual progression from gentle to more intensive interventions. Considering the culturally conservative and emotionally reserved tendencies within Asian societies, coupled with the high prevalence of intrafamilial interpersonal trauma where direct confrontation may elicit significant guilt, the current adaptation of schema therapy presents a more suitable approach for Asian populations by offering a less confrontational and more culturally attuned methodology[9].

1.3. Early maladaptive schemas and schema modes

EMS are deeply ingrained negative beliefs or themes about oneself, relationships, and the world. They often develop as a result of traumatic experiences, such as abuse or neglect, from significant figures in one's life. While often unconscious, EMS can distort an individual's perception of events, leading to negative thoughts, feelings, and behaviours. For instance, an individual who has experienced abuse may develop the EMS of mistrust/abuse, believing they will always be harmed by others. This can manifest in hypervigilance,

avoidance, and other negative behaviours in future relationships. In the systematic review conducted by Lian et al.[11], they synthesised 23 studies that investigated EMS in the population who has been traumatised or experienced PTSD symptoms. The review reported that EMS is significantly correlated with PTSD symptoms and traumatic experiences.

EMS might sometimes precipitate distinct emotional and behavioural patterns known as schema modes. These modes represent the immediate affective and behavioural responses of an individual, drawing parallels with psychoanalytic constructs such as defence mechanisms[6]. The triggering of an EMS can produce intense emotional responses and the utilization of coping strategies, such as avoidance, overcompensation, and surrender[12]. Often, individuals remain unaware of their schema mode activation or transitions[6].

For instance, an individual with mistrust/abuse EMS may encounter heightened feelings of sorrow and inadequacy upon its activation. This EMS could trigger a coping style, characterized by succumbing to painful emotions. This state is recognized as the vulnerable child schema mode[13]. Therefore, EMS and schema modes can be understood as interrelated cognitive, behavioral, and emotional patterns stemming from traumatic experiences. Notably, a narrative review has indicated a substantial relationship between schema modes and the presence of post-traumatic stress disorder (PTSD) symptoms, as well as experiences of trauma[14].

These findings underscore the importance of trauma-focused interventions addressing not only PTSD symptoms but also the enduring impact of traumatic experiences on EMS and schema modes. Research has demonstrated that EMS and schema modes can contribute to significant and persistent negative outcomes, including heightened vulnerability to physical illness[15], impaired occupational performance[15], challenges in establishing healthy interpersonal relationships[16], and increased susceptibility to mental health disorders[17], Consequently, trauma-focused interventions should actively target EMS and schema modes, incorporating their measurement as a key indicator of treatment efficacy.

Furthermore, this study specifically focuses on individuals with chronic and repeated trauma, recognizing its distinct and profound impact compared to single-event trauma. The cumulative effect of prolonged and repeated traumatic experiences can overwhelm coping resources, resulting in more severe emotional and psychological distress[15]. This study, therefore, prioritizes this population, given the established prevalence of elevated EMS and schema modes following chronic and repeated trauma, as supported by research[11,14]. Prolonged exposure to traumatic events is hypothesized to exacerbate EMS and schema modes, intensifying negative cognitive, affective, and behavioral patterns.

Despite extensive research examining the efficacy of psychological interventions like Tf-CBT and schema therapy in reducing PTSD symptoms among traumatized populations[4,5], there is a notable gap in studies specifically investigating the reduction of EMS and schema modes within these populations, despite their recognized prevalence.

1.4. Research objectives and hypotheses

Thus, the current study aimed to utilize EMS and schema modes as an outcome measurement to access the effectiveness of trauma-focused psychotherapy, which was not common in clinical practices previously. An interventional study was conducted to investigate the effectiveness of the culturally adapted schema therapy in reducing EMS and schema modes as compared with Tf-CBT, among individuals with chronic and repeated interpersonal trauma. It was predicted that both interventions would demonstrate significant reductions of EMS and schema modes from pre-intervention to post-intervention and at a 3-month follow-up. However, it was hypothesized that schema therapy would yield a greater magnitude of reduction in both EMS and schema modes across these time points compared to Tf-CBT.

2. Methodology

2.1. Research design

The study employed a single-blind, interventional pilot study with a pre-post design to compare the effectiveness of the culturally adapted schema therapy and Tf-CBT in reducing EMS and schema modes. The study participants were young adult Malaysian women (18-35) who had experienced chronic and repeated interpersonal trauma. Participants were assessed on these measures at pre-intervention, post-intervention, and a 3-month follow-up. They were assigned to either schema therapy or Tf-CBT groups.

This research aims to focus on female young adults due to their heightened vulnerability to persistent and recurrent trauma within the Malaysian context. Statistical data from the Royal Malaysia Police reveals a disproportionately higher incidence of domestic violence cases involving female victims compared to male victims in 2021[18]. Furthermore, research conducted by Kadir Shahar et al.[18] highlights elevated rates of intimate partner violence specifically among young adult females aged 26-35.

Treatment fidelity was rigorously maintained through several measures. Two experienced psychotherapists, carefully matched for age, gender, clinical experience, and therapeutic modality, were selected and underwent intensive training in their respective interventions, utilizing detailed, manualized protocols. To further ensure adherence, an independent, experienced supervisor, with expertise in both Schema Therapy and TF-CBT, conducted regular monitoring sessions, provided structured feedback, and implemented a protocol adherence checklist to document and address any deviations from the established treatment procedures. Notably, no deviations from the protocol were reported throughout the study, and all checklist items were successfully met, confirming consistent adherence to the treatment protocols.

For TF-CBT, therapists adhered to the treatment protocol outlined by Leahy et al.[19]. This involved: (a) Assessment: A comprehensive evaluation of trauma history and PTSD symptoms; (b) Skills Training: Psychoeducation on affect regulation and relaxation techniques; (c) Exposure Therapy: Graded exposure to trauma-related stimuli, both imaginal and in vivo; (d) Cognitive Restructuring: Identification, challenge, and modification of maladaptive thoughts; and (e) Homework Assignments: Practice of learned skills, exposure exercises, and cognitive restructuring outside of therapy sessions. Homework was reviewed at the beginning of each session.

For schema therapy, therapists adhered to the culturally adapted schema therapy manual by Lian & Bono[10]. This manual comprises three phases: (a) Psychoeducation: Psychoeducation, resource building, and rapport development; (b) Experiential Phase: Exploration, validation, and processing of schema modes and EMS; and (c) Cognitive-Behavioral Phase: Modification of maladaptive beliefs and behaviors.

2.2. Research variables

There were two independent variables and two dependent variables. The independent variables in this study were the type of intervention (schema therapy or TF-CBT) and the time point of measurement (pre-intervention, post-intervention, and follow-up). Participants' early maladaptive schemas (EMS) and schema mode scores were assessed at each of these time points to evaluate the effectiveness of the interventions. The dependent variables in this study were EMS and schema modes, as measured by the Young Schema Questionnaire (YSQ) and the Schema Modes Inventory (SMI), respectively.

2.3. Participants

Participants for this study were recruited based on the following inclusion criteria: (i) being Malaysian female young adults, and (ii) aged between 18 and 35 years. Eligible participants were also required to have experienced chronic and repeated interpersonal trauma. Conversely, the exclusion criteria

encompassed individuals who were (i) currently receiving psychiatric or psychological treatment, or (ii) unable to provide informed consent due to special needs or cognitive disabilities.

Purposive sampling was used to recruit participants from the target population. The study advertised on various mental health, psychology, and counselling-related online social platforms in Malaysia to reach individuals who had experienced trauma. Specific inclusion and exclusion criteria were applied to select eligible participants.

The G power software was employed to conduct power analysis. The power analysis employed a small effect size (d = 0.33) from the study by Cockram et al.[4], with a power of 80% and α error probability of 5%. To achieve a power of 0.80, it was estimated that the present study required 18 participants. With consideration of the potential dropout, this study utilized a sample size of 30 participants. Both intervention groups had a total of 15 participants.

2.4. Research instruments

Below are the research instruments that were employed in this study:

2.4.1. Young schema questionnaire (YSQ)

Early maladaptive schemas (EMS) were assessed using the YSQ, a self-administered questionnaire. This instrument features 90 items, distributed across 18 subscales (5 items per subscale), and utilizes a 6-point Likert scale. Elevated scores on the YSQ indicate a greater presence of EMS. The YSQ's psychometric properties have been established across diverse populations, including Asian and Caucasian samples[20]. The instrument has demonstrated strong internal consistency (α = .97) and acceptable test-retest reliability (r = .65). Furthermore, its applicability within Malaysian populations using English versions has been substantiated by prior research[21,22]. Seyed[22] reported a high internal consistency of α = .95.

2.4.2. Schema modes inventory (SMI)

Schema modes were evaluated using the SMI, a self-report measure comprising 124 items, divided into 14 subscales (4 to 10 items per subscale), and employing a 6-point Likert scale. Higher scores on the SMI reflect a more pronounced presence of schema modes. The SMI's psychometric properties have been rigorously examined in Western populations, revealing satisfactory internal consistency (α ranging from .79 to .96), test-retest reliability (r ranging from .65 to .92), and construct validity (.70)[13]. The SMI has also demonstrated utility in Asian research, as shown by Asadollahinia and Ghahari[23], who employed it in a large-scale study to investigate the relationship between obsessive-compulsive disorder (OCD) symptoms and schema modes.

2.5. Procedure

The study consisted of two phases: screening and intervention.

Phase 1: Screening

A 10-minute online questionnaire served as the initial phase, collecting demographic information (age, gender, etc.) and assessing participant eligibility. Participants were also asked to report their traumatic experiences to determine if they met the criteria for chronic and repeated trauma. Participants received immediate notification regarding their eligibility. Those who met the inclusion criteria proceeded to Phase 2. Additionally, YSQ and SMI were administered at this stage to measure baseline EMS and schema mode scores.

Phase 2: Intervention

Eligible participants were randomly assigned to either schema therapy or Tf-CBT using a single-blind design. Participants were unaware of their assigned intervention group to minimize bias. Both treatments involved 15 participants and 16 weekly sessions (approximately four months).

Following the intervention (post-intervention, T2), participants again completed the YSQ and SMI to assess changes in EMS and schema mode scores. Three months later (follow-up, T3), participants completed these measures once more.

2.6. Data analysis

Quantitative data analyses were conducted to investigate the research hypotheses. To examine the effectiveness of Schema Therapy and Tf-CBT in reducing EMS and schema modes across different time points, repeated measures within-subject ANOVAs were employed. In the event that the data violated the assumptions of ANOVA, non-parametric alternatives such as the Friedman test and Wilcoxon signed-rank tests would be utilized. To compare the effectiveness of Schema Therapy and Tf-CBT between groups over time, repeated measures within-between subjects ANOVA was planned. Should the data violate the assumptions of this ANOVA, the non-parametric Mann-Whitney U test would be employed for between-group comparisons at each time point.

3. Results

3.1. Descriptive analyses

The Tf-CBT group began with 15 individuals; however, one participant withdrew during the intervention. Consequently, the final analysis included data from 14 participants in the Tf-CBT group. A preliminary power analysis confirmed that a sample size of 18 would provide adequate statistical power to detect significant effects. This finding suggests that the single dropout did not substantially diminish the study's statistical power.

The average age of participants was similar across both treatment groups. The Schema Therapy group had a mean age of 24.60 years (SD = 3.46), while the Tf-CBT group's mean age was 25.00 years (SD = 3.88). The combined mean age for all participants was 24.79 years (SD = 3.61). The majority of the study participants identified as Chinese (55.2%), Christian (27.6%), and single (79.3%). All participants possessed a higher education degree. A significant portion of the sample (69%) were new to psychotherapy, with the remaining 31% reporting prior experience in therapy.

3.2. Inferential analysis

The initial statistical plan involved the use of within-subjects and within-between interaction ANOVAs. However, due to observed violations of the assumptions of normality and homogeneity of variance, non-parametric tests were deemed more appropriate. Specifically, the Friedman test and the Mann-Whitney U test were employed to analyze the data. **Table 1** shows the mean, standard deviation, and mean differences of both the schema therapy group and Tf-CBT group across the three time points.

Table 1. EMS and schema modes scores between Schema Therapy and Tf-CBT groups across the three time points.

Pre-test	Group	Mean	Standard Deviation
EMS scores	Tf-ST	157.53	29.582
	Tf-CBT	161.00	28.360
Schema modes scores	Tf-ST	138.00	31.501

Pre-test	**Group**	**Mean**	**Standard Deviation**
	Tf-CBT	140.50	30.646
Post-test	**Group**	**Mean**	**Standard Deviation**
EMS scores	Tf-ST	74.53	16.102
	Tf-CBT	128.36	40.791
Schema modes scores	Tf-ST	62.07	9.743
	Tf-CBT	107.43	40.587
Follow-up test	**Group**	**Mean**	**Standard Deviation**
EMS scores	Tf-ST	78.27	19.980
	Tf-CBT	144.07	32.052
Schema modes scores	Tf-ST	69.07	20.655
	Tf-CBT	121.21	23.298

Table 1. (*Continued*)

3.2.1. Schema therapy and EMS

A Friedman test indicated a statistically significant reduction in EMS scores from pre-intervention to post-intervention and at the 3-month follow-up within the Schema Therapy group, $\chi2(2) = 22.533$, $p < .001$. Post-hoc Wilcoxon signed-rank tests, with Bonferroni correction, revealed significant decreases in EMS scores from pre-intervention (Median = 162.00) to post-intervention (Median = 74.00), Z = 1.53, $p < .001$, and from pre-intervention to follow-up (Median = 76.00), Z = 1.47, $p < .001$. However, no significant differences were found between post-intervention and follow-up (Z = -.067, $p = 1.00$).

3.2.2. Schema therapy and schema Modes

Similarly, a Friedman test demonstrated a significant reduction in schema mode scores across the three time points, $\chi2(2) = 18.931$, $p < .001$. Wilcoxon signed-rank post-hoc tests showed significant reductions from pre-intervention (Median = 139.00) to post-intervention (Median = 65.00), Z = 1.40, $p < .001$, and from pre-intervention to follow-up (Median = 67.00), Z = 1.30, $p = .001$. There was no significant change between post-intervention and follow-up (Z = -.100, $p = 1.00$).

3.2.3. Tf-CBT and EMS

The Friedman test revealed a statistically significant reduction in EMS scores across the three time points in the Tf-CBT group, $\chi2(2) = 7.309$, $p = .026$. Wilcoxon signed-rank post-hoc tests indicated a significant decrease from pre-intervention (Median = 164.50) to post-intervention (Median = 123.50), Z = .964, $p = .032$. However, no significant differences were observed between pre-intervention to follow-up (Z = .750, $p = .142$) or between post-intervention and follow-up (Z = -.214, $p = 1.00$).

3.2.4. Tf-CBT and schema modes

While a reduction in schema modes was observed, the Friedman test did not indicate a statistically significant change across the three time points, $\chi2(2) = 5.444$, $p = .066$. However, Wilcoxon signed-rank tests showed a significant reduction in schema modes from pre-intervention (Median = 139.50) to post-intervention (Median = 95.30), Z = -2.668, $p = .008$. No significant differences were found between pre-intervention and follow-up (Z = -1.922, $p = .055$) or between post-intervention and follow-up (Z = 1.22, $p = .221$).

3.2.5. Schema therapy, Tf-CBT and EMS

Mann-Whitney U tests were used to compare the change scores in EMS between the two treatment groups. From pre-intervention to post-intervention, the Schema Therapy group demonstrated a significantly greater reduction in EMS scores (Median = 94.00) compared to the Tf-CBT group (Median = 34.50), U = 183.500, z = 3.427, $p < .001$. From pre-intervention to follow-up, the Schema Therapy group also showed a significantly greater reduction in EMS scores (Median = 76.00) compared to the Tf-CBT group (Median = 21.50), U = 191.000, z = 3.755, $p < .001$. From post-intervention to follow-up, no significant difference in EMS score changes was found between the two groups (U = 120.00, z = .655, $p = .533$).

3.2.6. Schema therapy and Tf-CBT on schema modes

Mann-Whitney U tests were also used to compare change scores in schema modes between the two treatment groups. From pre-intervention to post-intervention, the Schema Therapy group showed a significantly greater reduction in schema mode scores (Median = 79.00) compared to the Tf-CBT group (Median = 38.50), U = 176.500, z = 3.121, $p = .001$. From pre-intervention to follow-up, the Schema Therapy group also demonstrated a significantly greater reduction (Median = 71.00) compared to the Tf-CBT group (Mdn = 22.00), U = 186.000, z = 3.538, $p < .001$. From post-intervention to follow-up, no significant difference in schema mode score changes was found between the two groups (U = 116.500, z = .502, $p = .621$).

4. Discussions

4.1. Schema therapy

The findings demonstrated that schema therapy produced significant reductions in both EMS and schema mode scores from pre-intervention to post-intervention. This suggests that participants experienced a decrease in EMS and schema modes following the therapy. Furthermore, a significant reduction in EMS and schema mode scores was observed between pre-intervention and the 3-month follow-up. Notably, the reduced scores achieved at post-intervention were sustained through the follow-up period. These results collectively indicate the enduring efficacy of schema therapy in mitigating EMS and schema modes.

4.2. Tf-CBT

Analysis of the data revealed that Tf-CBT resulted in a significant decrease in EMS and schema mode scores between pre-intervention and post-intervention. However, no significant differences were found in either EMS or schema mode scores between pre-intervention and the 3-month follow-up. This suggests that while Tf-CBT led to immediate improvements in EMS and schema modes, these gains did not persist over the follow-up period. Consequently, this study indicates that Tf-CBT demonstrates immediate effectiveness in reducing EMS and schema modes, but lacks substantial evidence for sustained long-term impact.

4.3. The Comparison between Schema Therapy and Tf-CBT

Although both psychotherapies are effective towards EMS and schema modes between pre-intervention and post-intervention, the data showed that schema therapy was found to be significantly more effective in reducing EMS and schema modes, in both the short-term period (pre-intervention to post-intervention) and the long-term period (pre-intervention to follow-up test) than Tf-CBT. With this, the current study has supported the advantages of schema therapy over Tf-CBT, where in terms of reducing EMS and schema modes among chronic and repeated traumatised populations, schema therapy showcased stronger effectiveness.

The current study's findings suggest that for individuals with chronic and repeated trauma, advanced psychotherapeutic interventions, such as schema therapy, which specifically target deeply ingrained and complex psychological mechanisms like EMS and schema modes, may be particularly effective[7]. In cases where EMS and schema modes are likely to be present, schema therapy offers a targeted approach to address and resolve these deeply ingrained negative beliefs, emotions, and behaviors[7].

The culturally adapted schema therapy developed by Lian and Bono[10], which introduces an innovative continuum of experiential techniques, has demonstrated effectiveness within the Malaysian context based on the current findings. By specifically addressing the culturally conservative and emotionally reserved tendencies prevalent in Asian societies, as well as the complexities of intrafamilial interpersonal trauma, this adapted therapeutic model offers a more culturally congruent approach for Asian populations[10].

However, Tf-CBT also presents distinct advantages. Previous research indicates that Tf-CBT may be more suitable for individuals with general trauma experiences, particularly those who have experienced a single traumatic event and do not exhibit significant EMS or schema modes[5]. In such instances, a more solution-oriented and pragmatic approach, like Tf-CBT, may be more appropriate. Therefore, it is essential to differentiate the unique methodologies, benefits, and limitations of various psychotherapeutic modalities to ensure optimal treatment matching for specific populations.

Furthermore, this study reinforces the utility of EMS and schema modes as valuable outcome measures in trauma-focused psychotherapies. Firstly, they can facilitate informed clinical decision-making. By assessing the presence and severity of EMS and schema modes, clinicians can more effectively determine the suitability of schema therapy versus Tf-CBT. Secondly, EMS and schema modes offer a comprehensive understanding of deeply ingrained negative cognitive, affective, and behavioral patterns[15]. This in-depth psychological evaluation provides clinicians with richer information than traditional assessments focused solely on traumatic symptoms. Thirdly, EMS and schema modes can serve as a novel outcome measure to evaluate the effectiveness of trauma-focused psychotherapies, given their demonstrated prevalence in traumatized populations. A reduction in EMS and schema modes would signify improvements in negative beliefs, emotions, and behaviors resulting from traumatic experiences[15].

5. Limitations and future research

The present study employed EMS and schema mode scores as outcome measures, which may introduce a potential bias. Both EMS and schema modes were proposed by Young et al.[6], the creator of schema therapy, leading to a potential assumption that schema therapy would inherently outperform TF-CBT in reducing these constructs. However, while EMS and schema modes are schema therapy concepts, they are rooted in CBT theory's cognitive triad, where cognitions, behaviors, and emotions are interconnected[24]. Cognitions can be considered EMS, while behaviors and emotions correspond to schema modes. Therefore, there is some overlap between TF-CBT and the concepts of EMS and schema modes.

Another limitation of the current study is the small sample size (30 participants). Smaller sample sizes can lead to decreased statistical precision and power[25]. Future studies should replicate this interventional study with a larger sample size to enhance the reliability and confidence of the results regarding the effectiveness of schema therapy. Additionally, this study exclusively involved female participants, a decision informed by their higher rates of traumatisation[26], which aligns with the study's primary objectives. While this choice limits the generalizability of the findings to a wider population, it allows for a more in-depth examination of trauma specific to women, offering potential insights for gender-sensitive interventions and future research. Future studies could expand by recruiting a more diverse participant pool.

Furthermore, the present study only compared schema therapy with TF-CBT, as it is more evidence-based and theoretically grounded than other trauma interventions[27]. Future research could explore comparisons between schema therapy and other trauma interventions, such as EMDR. This would provide additional evidence on the effectiveness of various trauma interventions and help determine whether schema therapy is a superior therapeutic option.

6. Conclusion

EMS and schema modes are intricate psychological constructs often deeply rooted in traumatic experiences, and this study underscores the importance of incorporating them as key outcome measures for traumatized populations. Given the cultural nuances prevalent in Asia, where family-based trauma and the avoidance of direct confrontation are significant factors, schema therapy, particularly the culturally adapted version by Lian and Bono[10], presents a promising treatment approach. The current study's positive findings highlight the viability and enhanced suitability of this culturally adapted schema therapy in effectively reducing EMS and schema modes within this context. Notably, its demonstrated superior short-term and long-term effectiveness compared to TF-CBT suggests that culturally sensitive adaptations of schema therapy hold significant potential for addressing trauma-related distress in Asian populations

Ethics Approval

This research adhered to established ethical principles within the field of psychology. Furthermore, ethical clearance was obtained from a recognized Malaysian review board at a local university.

Informed Consent

All participants provided voluntary informed consent prior to their involvement in this study. They also granted consent for the publication of the research findings, with assurances that their identities would remain protected and confidential.

Data Availability Statement

The datasets generated and analyzed during this study are available from the corresponding author upon reasonable request, subject to appropriate permissions.

Conflict of Interest Statement

On behalf of all contributors, the corresponding author declares the absence of any conflicts of interest.

References

1. Forbes, D., Bisson, J. I., Monson, C. M., & Berliner, L. (Eds.). (2020). Effective treatments for PTSD. Guilford Publications.
2. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (DSM-5®): American Psychiatric Pub.
3. Kliethermes, M. D., Drewry, K., & Wamser, R. A. (2025). Trauma-focused cognitive-behavioral therapy. In Evidence-Based Treatments for Trauma-Related Disorders in Children and Adolescents (pp. 219-243). Cham: Springer Nature Switzerland.
4. Cockram, D. M., Drummond, P. D., & Lee, C. W. (2010). Role and treatment of early maladaptive schemas in Vietnam veterans with PTSD. Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice, 17(3), 165-182.
5. Lian, A. E. Z., Chooi, W. T., & Bono, S. A. (2024). THE DEVELOPMENT AND THE EFFECTIVENESS OF SCHEMA THERAPY ON MALAYSIAN FEMALE YOUNG ADULTS WHO EXPERIENCED CONTINUOUS

TRAUMA AND POST-TRAUMATIC STRESS DISORDER. European Journal of Trauma & Dissociation, 100427.
6. Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). Schema therapy: A practitioner's guide: Guilford Press.
7. Boterhoven de Haan, K. L., Fassbinder, E., Hayes, C., & Lee, C. W. (2019). A schema therapy approach to the treatment of posttraumatic stress disorder. Journal of Psychotherapy Integration, 29(1), 54-64.
8. Masley, S. A., Gillanders, D. T., Simpson, S. G., & Taylor, M. A. (2012). A systematic review of the evidence base for schema therapy. Cognitive behaviour therapy, 41(3), 185-202.
9. Martin, I. R., Stewart, S. E., Tchernegovski, P., & Devenish, B. D. (2024). Cultural suitability of schema therapy: a qualitative exploration of clinician views. Australian Journal of Psychology, 76(1), 2412012.
10. Lian, A. E. Z., & Bono, S. A. (2023). Refining the Experiential Component of Schema Therapy for Traumatised Populations: a New Continuum of Experiential Techniques. European Journal of Trauma & Dissociation, 7(4), 100352.
11. Lian, A. E. Z., Chooi, W. T., & Bono, S. A. (2023). A Narrative Review Investigating the Early Maladaptive Schemas (EMS) in Individuals with Trauma Experiences and PTSD. European Journal of Trauma & Dissociation, 100315.
12. Bach, B., Lockwood, G., & Young, J. E. (2018). A new look at the schema therapy model: organization and role of early maladaptive schemas. Cognitive behaviour therapy, 47(4), 328-349.
13. Lobbestael, J., Van Vreeswijk, M., Spinhoven, P., Schouten, E., & Arntz, A. (2010). Reliability and validity of the short Schema Mode Inventory (SMI). Behavioural and cognitive psychotherapy, 38(4), 437-458.
14. Lian, A. E. Z., & Mathialagan, S. (2024). Investigating the Schema Modes in Individuals with Traumatic Experiences Through the Lens of Object Relations Model: A Narrative Review. European Journal of Trauma & Dissociation, 100380.
15. Kaeding, A., Sougleris, C., Reid, C., van Vreeswijk, M. F., Hayes, C., Dorrian, J., & Simpson, S. (2017). Professional burnout, early maladaptive schemas, and physical health in clinical and counselling psychology trainees. Journal of clinical psychology, 73(12), 1782-1796.
16. Janovsky, T., Rock, A. J., Thorsteinsson, E. B., Clark, G. I., & Murray, C. V. (2020). The relationship between early maladaptive schemas and interpersonal problems: A meta-analytic review. Clinical Psychology & Psychotherapy, 27(3), 408-447.
17. Jacob, G. A., & Arntz, A. (2013). Schema therapy for personality disorders—A review. International Journal of Cognitive Therapy, 6(2), 171-185.
18. Kadir Shahar H, Jafri F, Mohd Zulkefli NA, Ahmad N. Prevalence of intimate partner violence in Malaysia and its associated factors: a systematic review. BMC public health. 2020;20:1-9.
19. Leahy, R. L., Holland, S. J., & McGinn, L. K. (2011). Treatment plans and interventions for depression and anxiety disorders. Guilford press.
20. Lee, S. J., Choi, Y. H., Rim, H. D., Won, S. H., & Lee, D. W. (2015). Reliability and validity of the Korean Young Schema Questionnaire-Short Form-3 in medical students. Psychiatry investigation, 12(3), 295.
21. Nooroney, N., Jaafar, W. M. W., Hassan, S. A., & Noah, S. M. (2019). The effect of schema therapy and schema-focused mindfulness therapy on marital communication of Iranian women in Malaysia. Konselor, 8(3).
22. Seyed Ebrahim, M. (2016). The mediating role of early maladaptive schemas and parenting styles on the relationship between insecure attachment and anxiety among adolescent students of international secondary schools in Kelang Valley, Malaysia/Seyed Ebrahim Mousavi (Doctoral dissertation, University of Malaya).
23. Asadollahinia, M., & Ghahari, S. (2018). The role of differentiation of self and schema modes in prediction of rumination and compulsive behaviors in adolescents. Asian journal of psychiatry, 36, 88-89.
24. Howatt, W. A. (2004). Cognitive-Behavioral Models. In Addiction Counseling Review (pp. 361-380). Routledge.
25. Lantz, B. (2013). The large sample size fallacy. Scandinavian journal of caring sciences, 27(2), 487-492.
26. Kimerling, R., Allen, M. C., & Duncan, L. E. (2018). Chromosomes to social contexts: sex and gender differences in PTSD. Current psychiatry reports, 20, 1-9.
27. Mavranezouli, I., Megnin-Viggars, O., Trickey, D., Meiser-Stedman, R., Daly, C., Dias, S., . . . Pilling, S. (2020). Cost-effectiveness of psychological interventions for children and young people with post-traumatic stress disorder. Journal of Child Psychology and Psychiatry, 61(6), 699-710.