

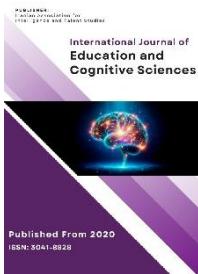


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## Comparison of the Effectiveness of Intensive Short-Term Dynamic Psychotherapy and Schema Therapy on Alexithymia in Patients with Chronic Kidney Disease

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### ABSTRACT

**Purpose:** The present study aimed to compare the effectiveness of Young's Schema Therapy and Intensive Short-Term Dynamic Psychotherapy on alexithymia in patients with chronic kidney disease.

**Methods and Materials:** The study employed an experimental design with pretest–posttest and a three-month follow-up, including a control group. The statistical population consisted of patients with chronic kidney disease in the city of Mashhad in 2023. A total of 45 participants were selected through convenience sampling and randomly assigned to three groups of 15 participants each (two experimental groups and one control group). The first experimental group received Young's Schema Therapy over eight sessions, while the second experimental group underwent Intensive Short-Term Dynamic Psychotherapy over fifteen sessions, whereas the control group received no intervention. The research instrument was the Toronto Alexithymia Scale (TAS-20) (Bagby, Parker, & Taylor, 1994). The data were analyzed using repeated-measures analysis of variance.

**Findings:** The results indicated that both therapeutic approaches were significantly more effective than the control group in reducing alexithymia among patients with chronic kidney disease, and these effects remained stable at the three-month follow-up. However, comparison of the two interventions showed that Schema Therapy demonstrated significantly greater effectiveness than Intensive Short-Term Dynamic Psychotherapy at the follow-up stage ( $p < .001$ ).

**Conclusion:** The findings suggest that both therapeutic approaches are beneficial and durable for patients with chronic kidney disease, with Schema Therapy exhibiting a statistically significant superiority.

**Keywords:** Chronic kidney disease patients; Schema Therapy; Alexithymia; Intensive Short-Term Dynamic Psychotherapy.

## 1. Introduction

Chronic medical illnesses impose not only physiological burdens on patients but also profound psychological challenges that significantly influence disease progression, treatment adherence, and quality of life. Among these psychological difficulties, alexithymia—defined as a deficit in identifying, describing, and processing emotions—has received increasing attention due to its strong association with psychosomatic vulnerability, impaired interpersonal functioning, and poor emotional regulation outcomes (Jafari & Joharifard, 2023; Pilkington et al., 2024). Individuals with chronic conditions frequently demonstrate elevated levels of alexithymia, which in turn exacerbate stress reactivity, compromise immune functioning, and interfere with effective coping processes (Amani et al., 2021; Hosseini & Al-Yasin, 2025). Consequently, addressing emotional processing deficits has become a central objective in psychological interventions for medically ill populations.

Alexithymia is not a unitary construct but rather a multidimensional personality trait characterized by difficulties in identifying feelings, difficulties in describing feelings, and a cognitively oriented thinking style that minimizes emotional experience (Pilkington et al., 2024). A growing body of research demonstrates that alexithymia is strongly linked to early maladaptive schemas, emotion dysregulation, insecure attachment patterns, and dysfunctional coping mechanisms (Alizadeh et al., 2024; Pilkington et al., 2024). Meta-analytic evidence further indicates that alexithymia significantly mediates the relationship between early adverse experiences and later psychological distress, making it a critical therapeutic target in both psychiatric and psychosomatic populations (Pilkington et al., 2024).

In medical contexts, the clinical implications of alexithymia are especially severe. Patients with chronic illnesses frequently struggle with emotional awareness, which contributes to somatization, depressive symptoms, anxiety disorders, and treatment noncompliance (Amani et al., 2020; Bakhshi Bajestani et al., 2021). Research on diverse clinical populations—including individuals with irritable bowel syndrome, rheumatoid arthritis, diabetes, functional gastrointestinal disorders, and dissociative disorders—consistently reveals elevated alexithymia levels and significant symptom improvement when emotional processing is therapeutically targeted (Amani et al., 2021; Donyavi & Mohtashami, 2024; Hosseini & Al-Yasin, 2025; Jafari & Joharifard, 2023). These findings underscore the

necessity of integrating emotion-focused psychotherapeutic interventions into chronic disease management.

Among contemporary psychotherapeutic approaches, Intensive Short-Term Dynamic Psychotherapy (ISTDP) and Schema Therapy have demonstrated strong empirical support for improving emotional processing and reducing alexithymia. ISTDP is an affect-focused psychodynamic treatment designed to rapidly identify and dismantle maladaptive defense mechanisms while facilitating direct emotional experiencing and restructuring unconscious conflict (Abbass et al., 2018). Multiple systematic reviews and clinical trials indicate that ISTDP yields robust and durable improvements across a wide range of psychological and psychosomatic conditions (Abbass et al., 2018; Bagheri Sheikhanghafshe et al., 2020). Specifically, ISTDP has been shown to significantly reduce alexithymia in patients with irritable bowel syndrome, rheumatoid arthritis, anxiety disorders, depression, and individuals seeking divorce (Amani et al., 2021; Donyavi & Mohtashami, 2024; Jafari & Joharifard, 2023; Mami et al., 2021).

Parallel to ISTDP, Schema Therapy offers a comprehensive integrative framework that targets deep-rooted cognitive-emotional patterns originating from early life experiences. According to Young's model, early maladaptive schemas develop when core emotional needs remain unmet, leading to chronic psychological vulnerability and dysfunctional coping styles (Young et al., 2003). These schemas strongly predict emotional dysregulation, interpersonal conflict, and alexithymia (Alizadeh et al., 2024; Pilkington et al., 2024). Empirical studies demonstrate that Schema Therapy significantly improves emotion regulation, self-worth, cognitive flexibility, interpersonal functioning, sexual intimacy, and alexithymia in both clinical and non-clinical populations (Abbady, 2023; Ebrahimi Javidi, 2024; Khamarniya et al., 2024; Malekimajd et al., 2024).

The theoretical convergence between ISTDP and Schema Therapy is particularly notable in their shared emphasis on emotional awareness and restructuring of maladaptive patterns. While ISTDP achieves this through rapid affect mobilization and defense deactivation (Abbass et al., 2018), Schema Therapy addresses emotional dysfunction through experiential, cognitive, and behavioral techniques that modify underlying schemas and schema modes (Young et al., 2003). Both approaches directly confront emotional avoidance and facilitate corrective emotional experiences, which are essential for reducing alexithymia (Alizadeh et al., 2024; Pilkington et al., 2024).

Recent studies further highlight the effectiveness of these interventions in diverse psychological contexts. For instance, ISTDP has demonstrated efficacy in reducing alexithymia, defense rigidity, and ego weakness in gastrointestinal patients (Jafari & Joharifard, 2023), improving distress tolerance and resilience in diabetic patients (Hosseini & Al-Yasin, 2025), alleviating depression in individuals with dissociative disorders (Donyavi & Mohtashami, 2024), and reducing anxiety and emotional suppression (Amani et al., 2020). Similarly, Schema Therapy has shown substantial benefits in enhancing cognitive flexibility and self-worth among women with eating disorders (Khamarniya et al., 2024), reducing alexithymia and dysfunctional relationship beliefs in women with persistent depressive disorder (Malekimajd et al., 2024), improving emotional regulation and decreasing neurotic perfectionism among university students (Abbady, 2023), and promoting mental health among mothers of children with ADHD (Ebrahimi Javidi, 2024).

Despite this expanding evidence base, few studies have directly compared ISTDP and Schema Therapy with respect to their relative effectiveness in reducing alexithymia, particularly in populations coping with chronic physical illness. Given the strong association between alexithymia and poor medical outcomes, identifying the most effective therapeutic approach carries substantial clinical significance (Amani et al., 2021; Hosseini & Al-Yasin, 2025). Moreover, the emotional challenges faced by medically ill patients often require interventions that simultaneously address unconscious emotional conflict, maladaptive cognitive structures, and behavioral avoidance—an integrative demand that both ISTDP and Schema Therapy claim to fulfill (Abbass et al., 2018; Young et al., 2003).

Additionally, recent meta-analytic evidence emphasizes that the co-occurrence of early maladaptive schemas, emotion regulation difficulties, and alexithymia constitutes a transdiagnostic vulnerability factor across a wide range of psychological disorders (Pilkington et al., 2024). This finding further strengthens the rationale for comparing ISTDP and Schema Therapy, as each approach targets these mechanisms through distinct yet overlapping therapeutic pathways.

The present study seeks to address this empirical gap by directly comparing the effectiveness of Intensive Short-Term Dynamic Psychotherapy and Schema Therapy on alexithymia among patients with chronic kidney disease. Given the high psychological burden associated with renal illness and the documented vulnerability of these patients to

emotional dysregulation, alexithymia, depression, and anxiety (Amani et al., 2021; Hosseini & Al-Yasin, 2025), identifying the most effective psychotherapeutic intervention holds critical implications for integrative medical care and long-term patient outcomes.

The aim of the present study is to compare the effectiveness of Intensive Short-Term Dynamic Psychotherapy and Schema Therapy in reducing alexithymia among patients with chronic kidney disease.

## 2. Methods and Materials

### 2.1. Study Design and Participants

In this study, in order to compare the effects of Schema Therapy and Intensive Short-Term Dynamic Psychotherapy, an experimental design with pretest–posttest and a three-month follow-up with a control group was employed.

The statistical population of this study consisted of patients with chronic kidney disease in the city of Mashhad in 2023. The sample size for this part of the study, considering the nature of the research design, was 45 participants; therefore, 45 individuals were selected as the research sample. Given that the study included three groups (two experimental groups and one control group), 15 participants were assigned to each group. Sampling was conducted using the convenience method, and participants were randomly assigned to the groups.

The inclusion and exclusion criteria were defined as follows: participants were required to have non-psychotic levels of depression, be between 25 and 40 years of age, possess at least a high school diploma, have no severe personality disorder, not be receiving other psychological treatments, and provide informed consent for participation. Exclusion criteria included absence from more than two sessions, unwillingness to continue participation in the study, and withdrawal of consent.

### 2.2. Measures

The Toronto Alexithymia Scale (TAS-20) is a 20-item self-report measure consisting of three subscales: Difficulty Identifying Feelings, Difficulty Describing Feelings, and Externally Oriented Thinking. The questionnaire is scored on a five-point Likert scale ranging from strongly disagree to strongly agree. The components of the Toronto Alexithymia Scale are as follows: the Difficulty Identifying Feelings (DIF) subscale assesses the participant's ability to recognize emotions and distinguish them from bodily

sensations and includes items 1, 3, 6, 7, 9, 13, and 14; the Difficulty Describing Feelings (DDF) subscale measures the individual's capacity to express emotions verbally and includes items 2, 4, 11, 12, and 17; and the Externally Oriented Thinking (EOT) subscale evaluates the degree of introspection and emotional awareness of one's own and others' internal experiences and includes items 5, 8, 10, 15, 16, 18, 19, and 20. The questionnaire is scored using the Likert method, with responses of strongly disagree assigned a score of 1 and strongly agree a score of 5. Items 4, 5, 10, 18, and 19 are reverse-scored, such that strongly disagree receives a score of 5 and strongly agree a score of 1. Total scores range from 20 to 100, with scores of 20–40 indicating low levels of difficulty in identifying and describing emotions, scores of 41–60 indicating moderate difficulty, and scores above 60 indicating high difficulty in emotional awareness and expression. The psychometric properties of the Toronto Alexithymia Scale have been examined and confirmed in numerous studies. In the Persian version of the scale, Cronbach's alpha coefficients were reported as .85 for the total scale, .82 for Difficulty Identifying Feelings, .75 for Difficulty Describing Feelings, and .72 for Externally Oriented Thinking, indicating good internal consistency. Concurrent validity of the alexithymia scale was also supported through significant correlations with measures of emotional intelligence, psychological well-being, and psychological distress. In the present study, the calculated Cronbach's alpha coefficient for this questionnaire was .767.

### 2.3. Interventions

The Schema Therapy intervention was implemented based on Young's model (Young, 2003) and was conducted across eight structured therapeutic sessions. The protocol began with an orientation session introducing participants to the therapeutic framework, rules, and objectives of schema therapy. Subsequent sessions focused on psychoeducation regarding maladaptive coping styles, their functional mechanisms, and their relationship with core emotional experiences such as early loneliness. Participants were then introduced to schema modes and their typology, with particular emphasis on identifying dysfunctional modes and understanding their emotional underpinnings. Middle sessions emphasized emotional validation of core unmet needs and the experiential restructuring of maladaptive schemas through techniques such as cognitive reattribution, schema-focused flashcards, imagery rescripting, and empathic confrontation. In later sessions, participants were

trained to recognize and strengthen healthy schema modes, specifically the Healthy Adult and the Happy Child modes, and to replace maladaptive behavioral patterns with adaptive goal-directed behaviors. The final session consolidated therapeutic gains by reinforcing the use of schema flashcards, identifying target healthy behaviors, and facilitating long-term self-regulation strategies.

The Intensive Short-Term Dynamic Psychotherapy intervention followed a structured fifteen-session format grounded in psychodynamic principles. The first session established therapeutic boundaries and procedures and included an extended dynamic assessment using an experimental therapy sequence to evaluate patients' core emotional conflicts and defense patterns. From the second session onward, treatment was individualized based on each patient's dominant defensive mechanisms, and targeted interventions were applied to challenge and deactivate maladaptive defenses. Successive sessions systematically addressed specific tactical defenses including vague and encapsulated speech, intellectualization, indirect communication, pathological rumination, rationalization, overgeneralization, distraction, forgetting, denial, externalization, obsessive doubt, somatization, regressive defenses, emotional avoidance through excessive verbalization, and nonverbal compliance behaviors. Throughout treatment, therapists employed sustained pressure, clarification, challenge, and emotional unlocking techniques to facilitate direct emotional experiencing and restructuring of unconscious conflict. The final two sessions were devoted to consolidation of therapeutic progress, formulation of follow-up plans, scheduling of posttest assessment, and structured termination of therapy.

### 2.4. Data Analysis

The statistical method used in this study was repeated-measures analysis of variance (ANOVA), conducted using SPSS software (Version 25). In this analysis, the effects of the control and posttest variables on the dependent variables were examined, and the groups were subsequently compared.

## 3. Findings and Results

The results of the descriptive statistics for the demographic variables indicated that the mean age of participants in the Intensive Short-Term Dynamic Psychotherapy group, the Schema Therapy group, and the control group was 36.67, 36.80, and 35.93 years,

respectively. A one-way analysis of variance revealed no statistically significant difference in mean age among the groups. With respect to gender, the majority of participants were female, such that overall 75.55% of the sample were women and 24.44% were men, and the gender distribution across the three groups was relatively similar. Examination of educational level indicated that the highest frequency belonged to individuals with education below diploma and associate degree, whereas the lowest frequency

corresponded to individuals with a bachelor's degree and higher. Overall, the distribution of educational attainment did not differ substantially across the three study groups, suggesting relative homogeneity of the groups with respect to demographic variables.

Table 1 presents the central tendency indices, including the mean and standard deviation of alexithymia in patients with chronic kidney disease.

**Table 1**

*Means and Standard Deviations of Alexithymia by Study Groups (Pretest, Posttest, Follow-up)*

Test Stage	Group	Mean	SD
Pretest	Intensive Short-Term Dynamic Psychotherapy	66.20	5.91
	Schema Therapy	67.13	4.98
	Control	64.60	5.93
	Total	65.98	5.59
Posttest	Intensive Short-Term Dynamic Psychotherapy	56.67	5.71
	Schema Therapy	57.33	5.04
	Control	64.87	5.51
	Total	59.62	6.50
Follow-up	Intensive Short-Term Dynamic Psychotherapy	57.80	6.08
	Schema Therapy	47.67	4.84
	Control	64.73	5.17
	Total	63.33	6.68

Table 1 displays the mean and standard deviation of alexithymia in patients with chronic kidney disease across the pretest, posttest, and follow-up stages for each study group.

To ensure that the necessary assumptions for conducting mixed analysis of variance were met, the assumptions of normality of data distribution, homogeneity of variances, and equality of error covariance matrices were examined. First, the Shapiro-Wilk test was employed to assess the normality of the distributions. Considering the number of variables and to control for variance inflation, a significance level of .01 was adopted. The results of the Shapiro-Wilk test indicated that the significance values for all variables at the pretest, posttest, and follow-up stages across all three study groups were greater than .01; therefore, the assumption of normality was satisfied for all variables and groups.

Next, Levene's test was used to evaluate the assumption of homogeneity of variances among the study groups. The results of this test for the alexithymia variable at the pretest, posttest, and follow-up stages were not statistically significant ( $p > .01$ ), indicating equality of variances among

the three groups and confirming that this assumption was met.

Finally, the assumption of equality of error covariance matrices in repeated measures was examined using Mauchly's test of sphericity. The results of Mauchly's test for the alexithymia variable indicated that this assumption was violated. Therefore, to prevent inflation of Type I error, the Greenhouse-Geisser epsilon correction was applied to adjust the degrees of freedom. Overall, given that the other assumptions were satisfied and the appropriate correction was implemented, the statistical conditions for conducting the mixed analysis of variance were considered adequate.

There is a difference between the effectiveness of Intensive Short-Term Dynamic Psychotherapy and Schema Therapy on alexithymia in patients with chronic kidney disease.

Table 2 presents the results of the repeated-measures analysis of variance for examining the main effects of group, time, and the interaction effect of time and group on alexithymia in patients with chronic kidney disease.

**Table 2**

*Results of Repeated-Measures Analysis of Variance for Main and Interaction Effects on Alexithymia*

Source of Variation	SS	df	MS	F	p	Effect Size
Group Effect	525.38	2	262.70	3.04	.058	.13
Time Effect	917.38	2	458.69	235.45	< .001	.85
Group × Time	890.98	4	222.74	114.34	< .001	.84

Table 2 shows that the main effect of time was statistically significant ( $p < .001$ ), and the interaction effect of time and group was also statistically significant ( $p < .001$ ), whereas the main effect of group was not statistically significant ( $p = .058$ ). The significant time effect indicates that there were statistically significant differences among the pretest, posttest, and follow-up stages. The effect size for the main effect of group indicates that 13% of the variance in alexithymia among patients with chronic kidney disease is attributable to group membership. Moreover, the effect size

for time indicates that 85% of the variance in alexithymia is attributable to changes over time, and the effect size for the interaction of time and group indicates that 84% of the variance in alexithymia is attributable to time-related changes in at least one of the group levels.

To examine pairwise differences in the mean alexithymia scores of patients with chronic kidney disease across the three assessment stages, the Bonferroni post hoc test was conducted, as shown in Table 3.

**Table 3**

*Bonferroni Post Hoc Test Results for Alexithymia*

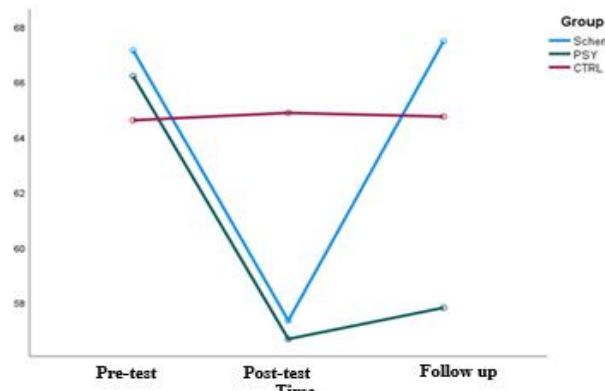
Baseline Stage (Mean)	Comparison Stage (Mean)	Mean Difference	SE	p
Pretest	Posttest	6.36	0.29	< .001
	Follow-up	2.64	0.29	< .001
Posttest	Follow-up	-3.70	0.30	< .001

As shown in Table 3, the difference between the pretest and posttest stages was statistically significant ( $p < .001$ ), indicating a substantial reduction in alexithymia scores at posttest relative to pretest. A statistically significant difference was also observed between the posttest and follow-up stages ( $p < .001$ ), and based on the magnitude of the mean difference, alexithymia scores increased at follow-

up relative to posttest. However, for greater precision and confidence in the results, given that the Bonferroni test computes the combined means of the three groups, it is necessary to examine the plot of the main effects of group and time. Figure 1 illustrates the main effects of group and time.

**Figure 1**

*Graphical representation of path coefficients in the structural model of the main research hypothesis.*



As shown in Figure 1, no substantial difference appears to exist between the alexithymia scores of patients with chronic kidney disease in the two experimental groups at the pretest and posttest stages; however, this difference becomes evident at the follow-up stage. Because the group effect is calculated based on the aggregated scores across the three assessment stages and their overall mean, and considering

that both the main effect of time and the interaction of time and group were statistically significant, a more detailed analysis of differences among the three groups at each assessment stage was conducted using the Bonferroni post hoc test. Table 4 presents the differences in alexithymia scores across the three assessment stages for the three groups.

**Table 4**

*Differences in Mean Alexithymia Scores Between Groups Across Three Assessment Stages*

Stage	Group I	Group J	Mean Difference (I – J)	SE	p
Pretest	Schema Therapy	Intensive Short-Term Dynamic Psychotherapy	0.93	2.05	1.00
	Schema Therapy	Control	2.53	2.05	.672
	Intensive Short-Term Dynamic Psychotherapy	Control	1.60	2.05	1.00
Posttest	Schema Therapy	Intensive Short-Term Dynamic Psychotherapy	0.67	1.98	1.00
	Schema Therapy	Control	-7.53	1.98	< .001
	Intensive Short-Term Dynamic Psychotherapy	Control	-8.20	1.98	< .001
Follow-up	Schema Therapy	Intensive Short-Term Dynamic Psychotherapy	9.67	1.97	< .001
	Schema Therapy	Control	2.73	1.97	.517
	Intensive Short-Term Dynamic Psychotherapy	Control	-6.93	1.97	.003

As shown in Table 4, the results of the Bonferroni post hoc test indicated that at the pretest stage, no statistically significant differences were observed among the study groups (Intensive Short-Term Dynamic Psychotherapy, Schema Therapy, and control) with respect to alexithymia. However, at the posttest and follow-up stages, statistically significant differences were observed between both experimental groups and the control group ( $p < .05$ ). In other words, the level of alexithymia among patients with chronic kidney disease who received treatment in the experimental groups was significantly reduced at posttest compared with the control group. Furthermore, examination of the difference between the two treatment groups at the follow-up stage indicates that although Schema Therapy was effective in reducing alexithymia and this effect remained stable, its effect was more persistent and significantly greater at follow-up than that of Intensive Short-Term Dynamic Psychotherapy.

Therefore, in response to the second subsidiary hypothesis, the results indicated that both experimental interventions were effective and durable in reducing alexithymia among patients with chronic kidney disease; however, the effectiveness of Schema Therapy at the follow-

up stage was significantly greater than that of Intensive Short-Term Dynamic Psychotherapy ( $p < .001$ ). Accordingly, the research hypothesis was supported.

#### 4. Discussion and Conclusion

The present study aimed to compare the effectiveness of Intensive Short-Term Dynamic Psychotherapy and Schema Therapy in reducing alexithymia among patients with chronic kidney disease. The findings demonstrated that both therapeutic approaches produced statistically significant reductions in alexithymia compared to the control group, and these improvements were maintained at the three-month follow-up. Moreover, although both interventions were effective, Schema Therapy exhibited significantly greater long-term effectiveness than Intensive Short-Term Dynamic Psychotherapy at the follow-up stage. These results provide strong empirical support for the utility of emotion-focused psychotherapeutic interventions in medically ill populations and highlight the importance of addressing emotional processing deficits in chronic disease management.

The significant main effect of time observed in the present study indicates that participants experienced substantial improvements in alexithymia across the course

of treatment and follow-up. This finding aligns with the extensive literature documenting the capacity of emotion-focused psychotherapies to produce enduring psychological change. Similar reductions in alexithymia following ISTDP have been reported in patients with irritable bowel syndrome (Jafari & Joharifard, 2023), women applying for divorce (Mami et al., 2021), rheumatoid patients (Amani et al., 2021), and individuals with anxiety disorders (Amani et al., 2020). The consistency of these results across clinical contexts suggests that alexithymia is highly responsive to therapeutic interventions that promote emotional awareness and dismantle maladaptive defense mechanisms.

The observed effectiveness of ISTDP in the present study can be theoretically explained by its core mechanisms of action. ISTDP directly targets unconscious emotional conflicts and systematically challenges maladaptive defenses that block emotional experiencing (Abbass et al., 2018). By facilitating rapid emotional access and restructuring defensive patterns, ISTDP enables patients to recognize, tolerate, and express previously avoided emotions. This process is particularly relevant for patients with chronic kidney disease, who often suppress emotional distress and exhibit elevated alexithymia as a consequence of prolonged illness stress and medical trauma (Hosseini & Al-Yasin, 2025). The present findings corroborate prior evidence indicating that ISTDP significantly reduces alexithymia and improves emotional functioning in both psychosomatic and psychiatric populations (Amani et al., 2021; Bagheri Sheikhanghafshe et al., 2020; Jafari & Joharifard, 2023).

However, the results further revealed that Schema Therapy produced superior long-term outcomes in reducing alexithymia at the follow-up stage. This finding is theoretically coherent with the structural depth of Schema Therapy, which targets early maladaptive schemas that underlie chronic emotional dysregulation and interpersonal difficulties (Young et al., 2003). According to schema theory, alexithymia emerges from developmental experiences in which core emotional needs are unmet, leading to persistent emotional suppression and maladaptive coping patterns (Young et al., 2003). By directly modifying these foundational cognitive-emotional structures, Schema Therapy may produce more durable transformation in emotional processing compared to interventions that primarily focus on acute emotional release.

Empirical support for this interpretation is provided by recent studies demonstrating that Schema Therapy significantly improves emotional regulation, cognitive

flexibility, self-worth, and interpersonal functioning while reducing alexithymia and emotional suppression (Abbady, 2023; Ebrahimi Javidi, 2024; Khamarniya et al., 2024; Malekimajd et al., 2024). In particular, Malekimajd et al. (Malekimajd et al., 2024) reported substantial reductions in alexithymia among women with persistent depressive disorder following Schema Therapy, findings that closely mirror the superior follow-up outcomes observed in the present study. Likewise, Khamarniya et al. (Khamarniya et al., 2024) demonstrated that Schema Therapy enhances cognitive flexibility and emotional self-worth, both of which are inversely related to alexithymia.

The superiority of Schema Therapy at follow-up may also be understood in light of recent meta-analytic findings demonstrating that early maladaptive schemas, emotion regulation difficulties, and alexithymia form a tightly interwoven network of psychological vulnerability (Pilkington et al., 2024). Schema Therapy directly addresses all three components of this network, thereby producing more comprehensive and enduring psychological change. While ISTDP effectively mobilizes emotional experiencing and weakens maladaptive defenses, Schema Therapy restructures the cognitive-emotional architecture that perpetuates emotional suppression over the lifespan (Pilkington et al., 2024; Young et al., 2003).

Importantly, the significant interaction effect between time and group in the present study indicates that the trajectory of improvement differed across interventions. Although both treatment groups exhibited comparable reductions in alexithymia at posttest, the Schema Therapy group continued to improve or maintain gains more robustly at follow-up. This pattern is consistent with the findings of Donyavi and Mohtashami (Donyavi & Mohtashami, 2024), who reported that while ISTDP produces rapid symptom reduction, the consolidation of emotional and cognitive change may require additional structural modification, which Schema Therapy is particularly well-equipped to provide.

Furthermore, the emotional difficulties observed in patients with chronic kidney disease closely resemble those documented in other chronic medical populations, including diabetes (Hosseini & Al-Yasin, 2025), gastrointestinal disorders (Bakhshi Bajestani et al., 2021), and rheumatoid disease (Amani et al., 2021). In all of these contexts, interventions that directly address emotional processing deficits and maladaptive coping patterns yield substantial improvements in psychological well-being. The present findings therefore extend existing knowledge by

demonstrating that both ISTDP and Schema Therapy are not only effective but also clinically meaningful for renal patients, a population that has received comparatively little attention in psychotherapeutic research.

Collectively, the results underscore the critical role of emotional awareness and schema restructuring in the treatment of alexithymia. The superior durability of Schema Therapy suggests that addressing the deep developmental origins of emotional suppression may offer particular benefit for patients facing long-term medical adversity. At the same time, the strong immediate effects of ISTDP highlight the value of rapid emotional mobilization and defense deactivation in reducing acute psychological distress.

Several limitations should be considered when interpreting the findings of the present study. The sample size was relatively small and drawn from a single geographical region, which may limit the generalizability of the results. In addition, reliance on self-report measures may have introduced response biases. The follow-up period was limited to three months, and longer follow-up assessments would be necessary to evaluate the long-term stability of treatment effects. Finally, the absence of physiological or behavioral outcome measures restricted the scope of conclusions regarding functional improvement.

Future studies should employ larger and more diverse samples to enhance the external validity of findings. Longitudinal research designs with extended follow-up periods are recommended to examine the durability of treatment effects over time. Comparative studies incorporating additional therapeutic modalities may further clarify the relative mechanisms of change. Integrating objective physiological and behavioral indicators of emotional functioning would also provide a more comprehensive understanding of therapeutic outcomes.

Mental health professionals working with patients suffering from chronic medical conditions should prioritize interventions that directly target emotional processing deficits. Both Schema Therapy and Intensive Short-Term Dynamic Psychotherapy may be incorporated into integrative healthcare settings. Clinicians are encouraged to consider the unique emotional needs and developmental histories of patients when selecting treatment approaches and to emphasize long-term emotional restructuring for sustained psychological well-being.

## Authors' Contributions

All authors significantly contributed to this study.

## Declaration

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

## Transparency Statement

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

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## Declaration of Interest

The authors report no conflict of interest.

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## Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent. This study was approved by the Research Ethics Committee of Islamic Azad University, Neyshabur Branch, and received the ethical approval code IR.IAU.NEYSHABUR.REC.2024.039.

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