IJBMC
International Journal of Body, Mind and Culture

Volume 13, Issue 4, pp 190-199
DOI: 10.61838/ijbmc.v13i4.680

Article type:
Original Article

The Effectiveness of Schema Therapy on Emotional Self-Regulation Styles and Psychological Capital in At-Risk Girls Referred to the Social Emergency Center

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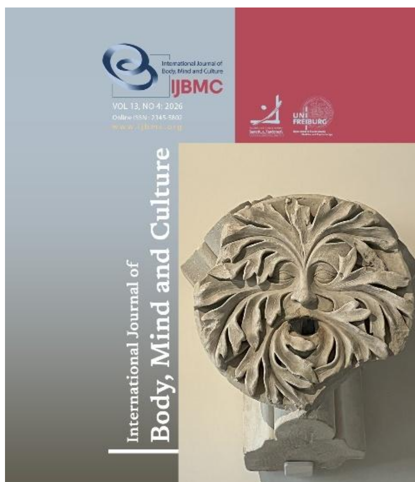

ABSTRACT

Objective: This study aimed to examine the effectiveness of schema therapy on emotional self-regulation and psychological capital among at-risk girls referred to the Social Emergency Center of Amol.

Methods and Materials: A quasi-experimental pretest–posttest control-group design was used. The population included at-risk girls aged 13–20 years referred to the 123 Social Emergency Center of Amol in 2025. Thirty participants were selected through purposive sampling and randomly assigned to an experimental group (n = 15) and a control group (n = 15). The experimental group received eight sessions of schema therapy, while the control group received no intervention. Data were collected using the Emotional Self-Regulation Styles Questionnaire and the Psychological Capital Questionnaire. ANCOVA was performed in SPSS version 26.

Findings: After controlling for pretest scores, ANCOVA showed a significant effect of schema therapy on emotional self-regulation, $F = 18.45$, $p = .001$, $\eta^2 = .42$. The experimental group improved from 52.40 ± 6.10 to 68.90 ± 5.20, while the control group changed slightly from 51.80 ± 6.35 to 53.10 ± 6.20. Schema therapy also had a significant effect on psychological capital, $F = 16.30$, $p = .001$, $\eta^2 = .39$. The experimental group increased from 78.20 ± 7.50 to 94.60 ± 6.80, whereas the control group changed from 77.90 ± 7.40 to 78.80 ± 7.60.

Conclusion: Schema therapy significantly improved emotional self-regulation and psychological capital among at-risk girls and may be useful in social emergency settings.

Keywords: Schema Therapy, Emotional Self-Regulation, Psychological Capital, At-Risk Girls, Social Emergency Center.

Article history:

Received 12 Oct 2025
Revised 28 Dec 2025
Accepted 29 Jan 2026
Published online 01 Apr 2026

How to cite this article:
Zahedyan, N., & Rahnamazadeh, M. (2026). The Effectiveness of Schema Therapy on Emotional Self-Regulation Styles and Psychological Capital in At-Risk Girls Referred to the Social Emergency Center. International Journal of Body, Mind and Culture, 13(4), 190-199.

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Introduction

In recent decades, the emergence of at-risk girls in the Social Emergency Centers of Amol County has been recognized as one of the complex and multidimensional challenges in the fields of mental health, sociology, and clinical psychology. This vulnerable group, often exposed to traumatic experiences such as sexual abuse, domestic violence, homelessness, or escape from unsafe living environments, suffers from profound psychological consequences that not only weaken their quality of life but also disrupt the course of their healthy emotional and social development and significantly increase the likelihood of engagement in high-risk behaviors, substance abuse, and suicide (Cao et al., 2022). Statistics reported by support centers in Mazandaran Province indicate that, due to its specific geographical location, migrant population, and growing socioeconomic pressures, Amol County has witnessed a considerable increase in the number of young girls referred to social emergency centers. Many of these cases involve traumatic histories and require immediate and effective therapeutic interventions. In this context, inability to manage negative emotions and lack of internal psychological resilience are two key factors in the persistence of post-traumatic symptoms, which, if not addressed in time, may become stabilized as chronic and maladaptive behavioral patterns in adulthood and impose a heavy economic and social burden on support systems (Haddadpour et al., 2021).

Alongside the focus on reducing clinical symptoms, contemporary mental health approaches emphasize the necessity of strengthening positive psychological resources, introducing psychological capital as a key multidimensional construct. This concept, developed by Luthans and colleagues, consists of four components: hope, self-efficacy, resilience, and optimism, and functions as an internal resource for coping with severe stressors. In the population of at-risk girls, low levels of psychological capital are not only predictive of the severity of psychological and emotional problems, but are also associated with reduced motivation for participation in the treatment process and an increased likelihood of dropping out of sessions. Conversely, strengthening this capital may, through creating effective beliefs about personal abilities, reinforcing goal-directed strategies for overcoming obstacles, increasing the capacity to return to balance after failure, and shaping positive interpretations of difficult experiences, play a fundamental protective role against the consequences of traumatic experiences. Longitudinal studies have shown that girls who maintain or rebuild higher levels of psychological capital after traumatic experiences perform better in education, social relationships, and planning for the future. These findings highlight the importance of interventions that, in addition to targeting negative symptoms, simultaneously focus on positive psychological structures and activate individuals' inherent capacities for growth after trauma (Akbari & Maki, 2022).

In this context, brief strategic psychotherapy, which is rooted in systemic-interactional and cognitive-behavioral traditions, has attracted attention as an effective intervention for vulnerable populations. This approach, developed by Giorgio Nardone, is based on three principles: first, present-focused and solution-oriented intervention rather than deep exploration of the past; second, the use of strategic techniques such as emotional prescription, reinforcement of resistance, and positive reframing to disrupt destructive behavioral patterns; and third, time-limited sessions (usually between 5 and 10 sessions), which makes it especially suitable for emergency settings and populations with low treatment adherence (Safari et al., 2025).

In the treatment of at-risk girls, brief strategic psychotherapy may directly target maladaptive emotional self-regulation styles such as avoidance or suppression through techniques such as the deliberate prescription of emotion (for example, asking the individual to intentionally experience fear under controlled conditions) or the systemic reframing of fear (transforming fear from a sign of weakness into a sign of self-protection). These interventions may alter emotion regulation mechanisms and guide the individual toward more adaptive styles. At the same time, this treatment may strengthen the components of psychological capital, especially through creating small success experiences in each session, which enhance self-efficacy, or through strategic reframing to change the interpretation of traumatic experiences into opportunities for growth, thereby laying the groundwork for increased psychological capital. Preliminary empirical evidence on the application of brief strategic psychotherapy in vulnerable populations suggests that this method is not

only effective in the rapid reduction of anxiety and distress, but also, because of its emphasis on empowerment and focus on internal resources, increases the durability of therapeutic effects in long-term follow-up (Khosravi et al., 2023).

Despite the high potential of brief strategic psychotherapy, there remains a considerable research gap regarding its use with at-risk girls who have traumatic experiences in Iranian emergency settings, particularly in counties such as Amol, with their distinct cultural and economic characteristics. Most previous studies in this field have either focused on adult populations or used long-term therapeutic approaches such as acceptance and commitment therapy or stress-reduction psychotherapy, which have limited practical application in emergency contexts with constraints in time and resources. Only a limited number of studies have simultaneously examined the effects of a single intervention on two important domains—emotional self-regulation styles and psychological capital—although investigation of the relationship between these two variables is necessary for designing more comprehensive interventions (Haddadpour et al., 2021).

The present study seeks to fill this gap by examining the effect of brief strategic psychotherapy on emotional self-regulation styles and psychological capital in at-risk girls referred to the Social Emergency Centers of Amol. The findings of this study may not only contribute to the design of brief and effective treatment protocols for emergency centers across the country, but also, by emphasizing the strengthening of positive psychological resources alongside the reduction of psychological and emotional difficulties, offer a model for shifting the paradigm of mental health from "treating illness" to "promoting growth"—a shift that may have lasting effects on the mental health of society, particularly among vulnerable young populations.

In this context, girls' ability to manage and regulate their emotions plays a very important role in reducing the psychological consequences of the crises they have experienced. Emotional self-regulation refers to individuals' ability to identify, evaluate, and manage emotions, especially negative and threatening emotions. Research has shown that inability to regulate emotions may facilitate the development of psychological and emotional problems, and this issue is especially evident among at-risk girls (Khayatan & Golparvar, 2025). Managing negative emotions, controlling irritability, and having skills to cope with psychological pressures are among the abilities that may play a protective role against the consequences of social harm.

One of the major consequences of exposure to traumatic experiences and social crises is impairment in emotional self-regulation. Emotional self-regulation refers to the set of skills and processes through which individuals identify, manage, and modulate their emotions. Girls who are at risk are often unable to manage negative and threatening emotions such as anxiety, fear, or anger, and this inability may intensify psychological consequences such as depression (Roshannia et al., 2021). International studies have likewise shown that deficits in emotional self-regulation constitute one of the main pathways leading to post-traumatic symptoms, and that strengthening emotion management skills can play a protective role (Cao et al., 2022). Therefore, examining the condition of emotional self-regulation in at-risk girls and providing targeted interventions is of great importance.

In addition to emotional self-regulation, psychological capital, as a set of internal resources including resilience, hope, optimism, and self-efficacy, is of considerable importance. These resources help girls preserve their mental health despite repeated crises and continue their growth and social adaptation. International studies have shown that psychological capital can be effective in reducing symptoms of anxiety and depression, increasing social adaptation, and reducing the negative effects of traumatic experiences (Young et al., 2006). In at-risk girls, lack of psychological capital is associated with increased vulnerability. Psychological capital consists of a set of personal resources such as resilience, hope, optimism, and self-efficacy that increase the ability to cope with psychological pressures. Studies have shown that psychological capital can reduce the severity of mental disorders and improve social and academic capabilities (Peeters et al., 2022). Because of repeated crisis experiences, at-risk girls often have lower psychological capital, which increases the risk of psychological vulnerability. For this reason, examining and strengthening psychological capital within the context of social emergency services can help reduce psychological harm and increase internal coping resources (Karimi et al., 2022).

The Social Emergency Center, as a specialized institution providing immediate supportive and psychological services, plays a direct role in reducing the harms caused by family and social crises. Operating under the supervision of the State Welfare Organization, this institution provides diverse services including the 123 counseling hotline, mobile teams, emergency interventions, and referral to specialized centers, thus enabling rapid and effective response to emergency cases. Girls exposed to violence, child abuse, or sexual abuse often refer to these centers, and receiving psychological and social support can help reduce the psychological and social consequences of traumatic experiences. The role of social emergency services in counties such as Amol is especially important given the volume of referrals and diversity of crises, because this institution can, in addition to providing immediate interventions, facilitate access to specialized services and psychological empowerment for affected girls. Studies have shown that the supportive interventions of social emergency centers, in addition to reducing the severity of psychological harm, improve social adjustment processes and enhance mental health in harmed children and adolescents (Nazem et al., 2016; Toubaei et al., 2012).

In this context, schema therapy, as a modern psychotherapeutic approach, focuses on identifying and modifying early maladaptive schemas that were formed in childhood and later transformed into destructive emotional and behavioral patterns in adulthood. This treatment can increase the individual's ability to manage negative emotions, improve emotional self-regulation, and strengthen psychological capital, thereby reducing the severity of the consequences of traumatic experiences (Young et al., 2006). Recent studies have shown that schema therapy is effective in adults with anxiety disorders, and its use in traumatized adolescents has yielded promising results (Farokhzadian et al., 2018). Therefore, examining the effectiveness of schema therapy in girls referred to social emergency centers provides an opportunity to develop targeted, scientific, and practical interventions for improving their psychological and social well-being.

In conclusion, the present study, by focusing on at-risk girls referred to the Social Emergency Center of Amol County, seeks to provide a scientific and accurate picture of the psychological and social condition of this group by examining issues related to emotion management, psychological resources, and the consequences of traumatic experiences. The findings of this study may provide the practical and scientific information needed to improve social support programs, promote mental health, and design targeted interventions within the context of social emergency services, while also filling the research gap related to this group. Accordingly, the fundamental question of the present research is as follows: Does schema therapy have a significant effect on emotional self-regulation styles and psychological capital in at-risk girls referred to the Social Emergency Center of Amol County?

Methods and Materials

Study Design

The present study was applied in purpose and quasi-experimental in design, using a pretest-posttest format with a control group, because its aim was to examine the effectiveness of schema therapy on emotional self-regulation styles and psychological capital in at-risk girls referred to the Social Emergency Center of Amol. The statistical population consisted of all at-risk girls aged 13 to 20 years who referred to the 123 Social Emergency Center of Amol in 2025, totaling 785 individuals. Sampling was conducted purposively and based on inclusion and exclusion criteria, so that only those individuals who met the appropriate age requirement, were willing to participate in the study, were able to respond to the questionnaires, and had experienced at least one traumatic event were included in the sample. After the initial selection, participants were assigned randomly by simple randomization to either the experimental or control group. Given the limitations of the study, the final sample size was set at 30 participants, with 15 in the experimental group and 15 in the control group, in order to provide the possibility of examining the effectiveness of the schema therapy intervention on the study variables.

For data analysis, both descriptive and inferential statistical methods were used. In the descriptive section, indices such as mean, standard deviation, and frequency were calculated for the study variables in order to provide an overall picture of the data. In the inferential section, in order to test the hypotheses, analysis of covariance (ANCOVA) or repeated-measures analysis of

variance was used to examine the effect of schema therapy on emotional self-regulation styles and psychological capital. All data were analyzed using SPSS version 26.

Research Instruments

Emotional Self-Regulation Styles Questionnaire

The Emotional Self-Regulation Styles Questionnaire is an instrument developed by Hofmann & Kashdan (2010) and consists of 20 items. The purpose of this questionnaire is to assess three main emotional self-regulation styles, namely concealing, adjusting, and tolerating. Responses are scored on a 5-point Likert scale ranging from "not at all true of me" (1) to "extremely true of me" (5). The items related to each dimension are as follows: adjusting (items 2, 4, 7, 8, 12, 16, and 19), concealing (items 1, 4, 5, 9, 10, 13, and 15), and tolerating (items 5, 6, 11, and 17). To calculate the scores, the sum of the scores for each dimension is obtained and then divided by the number of items in that dimension. A higher score on each dimension indicates that the respective emotion regulation style is more dominant in the individual. The total score of the questionnaire is also obtained by summing the scores of all items. In psychometric evaluation, Karshki (2013) confirmed the validity of this instrument using content validity, principal components analysis, and factor analysis. The results showed that the three factors of adjusting, concealing, and tolerating explained the structure of the questionnaire well. The reliability of the instrument was also reported using Cronbach's alpha for the subscales of concealing (0.70), adjusting (0.75), and tolerating (0.50), indicating acceptable reliability and suitable validity of the questionnaire for assessing emotional self-regulation styles (Hofmann & Kashdan, 2010; Karshki, 2013).

Psychological Capital Questionnaire

The Psychological Capital Questionnaire (PCQ) developed by Luthans et al., (2007) is one of the valid tools for assessing individuals' psychological capital. It consists of 24 items and measures four subscales: self-efficacy, hope, resilience, and optimism, with each subscale including 6 items. Participants respond to each item on a 6-point Likert scale ranging from "strongly disagree" to "strongly agree." Psychological capital is defined as a positive psychological state and a realistic, flexible orientation toward life. Each of its four constructs is considered a positive psychological capacity that is theory- and research-based, measurable with valid scales, and capable of development. This concept goes beyond human capital ("what I know") and social capital ("who I know") and focuses on self-awareness and the understanding of the real self and the possible self, encouraging individuals to gain greater insight into themselves in the process of achieving goals and personal success.

To calculate the psychological capital score, first the score of each subscale is calculated, and then the total score is obtained by summing the four subscale scores. The subscales are arranged as follows: self-efficacy (items 1–6), hope (items 7–12), resilience (items 13–18), and optimism (items 19–24). From a psychometric perspective, the validity of this questionnaire has been confirmed in various studies. Luthans et al., (2007), using factor analysis and structural equation modeling, reported a chi-square ratio of 24.6 and CFI and RMSEA indices of 0.97 and 0.08, respectively, indicating desirable factorial validity. In Iran, the reliability of the questionnaire was confirmed by Bahadori & Hashemi (2012) with a Cronbach's alpha coefficient of 0.85, indicating high stability and reliability of the instrument for measuring psychological capital in Iranian populations. Therefore, its use in clinical and social research is considered fully appropriate.

Young Schema Therapy Protocol (Arntz, 2018; Young et al., 2006)

The schema therapy protocol is usually designed as a set of therapeutic sessions aimed at identifying and changing maladaptive schemas in the client. This protocol is particularly used for the treatment of problems such as personality disorders, anxiety, depression, and interpersonal difficulties. The 8-session schema therapy protocol includes the following stages:

In the first session, therapeutic rapport is established and initial assessment is conducted. The individual's life history, current problems, and the concept of schemas are introduced. In the second session, the concepts of schemas, their formation, and their effects on the individual's life are taught, and the types of maladaptive schemas are reviewed. The third session is devoted to identifying the client's personal schemas, using tools such as the Young Maladaptive Schemas Questionnaire and self-awareness exercises. In the fourth session, the schemas are analyzed and their links with the client's current problems are explored. The fifth session focuses on changing negative patterns and teaching coping skills,

with emphasis on cognitive-behavioral and exposure-based techniques. In the sixth session, communication and conflict-resolution skills are strengthened, including active listening, empathy, and conflict-resolution exercises in family and marital relationships. The seventh session focuses on forgiveness and reducing past emotional suffering, using meditation and relaxation techniques.

Finally, in the eighth session, progress is evaluated, learned skills are reviewed, and planning is conducted for continuation of treatment and maintenance of gains. A sample of the schema therapy protocol, together with the goals of each session, is presented below.

Table 1

Schema Therapy Treatment Protocol

Session	Goal	Activities
First	Establishing therapeutic rapport and becoming familiar with the individual's history, problems, and schema therapy	Introduction to therapy, collection of past life information, identification of symptoms and problems, introduction to schemas and basic principles
Second	Teaching the concepts of schemas and their effects on life	Introduction of maladaptive schemas, explanation of their types, review of their childhood origins, and examination of their connection with psychological problems
Third	Identifying personal schemas	Use of questionnaires, examination of behaviors and thoughts related to schemas, and self-awareness exercises for personal experiences
Fourth	Analyzing schemas and linking them to current problems	Examination of behavioral patterns resulting from schemas, identification of emotional and cognitive signs, and analysis of their relationship to present difficulties
Fifth	Changing negative patterns and teaching coping skills	Introduction of cognitive-behavioral techniques, confrontation with anxiety and fears, and exercises for changing behavior and cognition
Sixth	Teaching communication skills and conflict resolution	Teaching effective communication skills, practicing conflict resolution and negotiation, and modifying unhealthy communication patterns
Seventh	Strengthening forgiveness and reducing emotional suffering	Teaching the concept of forgiveness and its effects, practicing emotional suffering reduction exercises, and using meditation and relaxation
Eighth	Evaluating progress and planning continuation of treatment	Assessing changes in schemas and behaviors, reviewing coping strategies, setting new goals, and planning future steps

Findings and Results

In this section, the demographic characteristics of the research sample, including age, educational status, family status, and history of referral to the social emergency center, were examined. The findings showed that the highest frequency of participants was in the 16–18-year-old age group, with 14 individuals (46.7%). In addition, the 13–15-year-old and 19–20-year-old age groups each included 8 participants (26.7%) of the sample.

In terms of educational status, 18 participants (60%) were currently enrolled in school, whereas 12 participants (40%) had dropped out. Regarding family status, 20 participants (66.7%) were living in support centers, while 10 participants (33.3%) were living with their families. Examination of referral history also showed that 17 participants (56.7%) were referred to the social emergency center for the first time, whereas 13 participants (43.3%) had previous referrals.

Table 1

Frequency Distribution of the Demographic Characteristics of the Research Sample

Variable	Group	Frequency	Percentage
Age	13–15 years	8	26.7%
	16–18 years	14	46.7%
	19–20 years	8	26.7%
Educational status	Currently studying	18	60%
	Dropped out	12	40%
Family status	Living with parents	10	33.3%
	Living in support centers	20	66.7%

Referral history	First referral	17	56.7%
	Repeated referral	13	43.3%

Overall, the results indicated that the research sample had appropriate diversity in demographic characteristics and could be considered a suitable representation of the target population.

Table 2

Comparison of the Mean and Standard Deviation of Emotional Self-Regulation Styles

Variable	Group	Stage	Mean	Standard Deviation
Emotional self-regulation	Experimental	Pretest	52.40	6.10
		Posttest	68.90	5.20
	Control	Pretest	51.80	6.35
		Posttest	53.10	6.20

Based on the results presented in Table 2, the mean scores of emotional self-regulation styles in the experimental group increased from 52.40 in the pretest to 68.90 in the posttest, whereas no meaningful change was observed in the control group (51.80 to 53.10). This change indicates that the schema therapy intervention produced a considerable improvement in emotional self-regulation skills in the experimental group. The increase in the posttest mean of the experimental group reflects an enhanced ability in participants to identify, manage, and regulate negative and maladaptive emotions. In contrast, the relative stability of the mean in the control group shows that, without intervention, no significant change occurred in emotion regulation styles. This finding confirms the importance of the therapeutic intervention in improving this skill. Overall, the pattern of changes between the two groups indicates the significant effectiveness of schema therapy in improving emotional self-regulation styles.

Table 3

Comparison of Psychological Capital in Pretest and Posttest

Variable	Group	Stage	Mean	Standard Deviation
Psychological capital	Experimental	Pretest	78.20	7.50
		Posttest	94.60	6.80
	Control	Pretest	77.90	7.40
		Posttest	78.80	7.60

The results in Table 3 show that the mean score of psychological capital in the experimental group increased from 78.20 in the pretest to 94.60 in the posttest, whereas only a very slight change was observed in the control group. This finding indicates that schema therapy played an effective role in increasing psychological capital. The increase in posttest scores in the experimental group reflects improvement in components such as hope, self-efficacy, resilience, and optimism among the participants. In contrast, the lack of notable change in the control group suggests that the increase observed in the experimental group was due to the intervention rather than external factors or the passage of time. Overall, these results indicate that schema therapy can strengthen positive psychological resources and facilitate improved psychological adjustment in at-risk girls.

Table 4

ANCOVA Results (Effectiveness of the Intervention)

Variable	F	P	Effect Size (η^2)
Emotional self-regulation	18.45	0.001	0.42
Psychological capital	16.30	0.001	0.39

The results of the analysis of covariance (ANCOVA) showed that, after controlling for the pretest effect, there was a significant difference between the experimental and control groups in the dependent variables. For the variable of emotional self-regulation styles, the F value was 18.45, with a significance level of 0.001, indicating the significant effect of schema therapy on improving this variable. In addition, the effect size (η^2 = 0.42) indicates that approximately 42% of the changes in emotional self-regulation were attributable to the therapeutic intervention, which may be considered a large effect.

For the variable of psychological capital, the F value was 16.30, with a significance level of 0.001, indicating that the observed difference between the groups was statistically significant. The effect size of 0.39 also reflects the relatively strong and substantial effectiveness of schema therapy in increasing psychological capital. Overall, the results of these analyses show that schema therapy plays an effective role not only in reducing emotional difficulties but also in strengthening positive psychological resources, and it may therefore be used as an efficient intervention for at-risk populations.

Discussion and Conclusion

The present study was conducted to examine the effectiveness of schema therapy on emotional self-regulation styles and psychological capital in at-risk girls referred to the Social Emergency Center of Amol. In terms of purpose, this study was applied, and in terms of method, it was quasi-experimental, using a pretest-posttest design with a control group, in which the effect of a structured psychological intervention on two important psycho-emotional variables was investigated. In this regard, after selecting the sample and randomly assigning participants to the experimental and control groups, the experimental group received schema therapy, whereas the control group received no intervention. The data collected at the pretest and posttest stages were analyzed using analysis of covariance in order to determine the effect of the intervention while controlling for pretest scores. The results showed that schema therapy had a significant effect on improving both of the variables under study; specifically, a considerable increase was observed in the experimental group in both emotional self-regulation styles and psychological capital, while no significant change occurred in the control group. These findings indicate that schema therapy can be used as an effective intervention for improving emotion regulation abilities and strengthening positive psychological resources in at-risk girls.

The findings of this study are consistent with the results of recent domestic and international studies. In the study by Khayatan & Golparvar (2025), it was found that schema therapy and similar approaches could increase psychological capital in harmed individuals. Likewise, Hatami et al., (2024) reported that schema therapy was more effective than some other treatments in improving emotion regulation. The study by Hori et al., (2024) also showed that schema therapy can be effective in improving psychological mechanisms and reducing emotional vulnerabilities. On the other hand, van den End et al., (2024) emphasized the role of psychotherapeutic interventions in improving emotional problems, although their results indicated that no significant difference existed among some therapeutic approaches. At the domestic level, the findings have also been consistent with the results of the present study, showing that strengthening psychological capital and emotional regulation can play an important role in reducing psychological vulnerability. Overall, the findings of this study are in agreement with most domestic and international studies conducted over the past five years and confirm the effective role of schema therapy.

The findings of the present study can be explained precisely from the perspective of Young's schema therapy theory. According to this viewpoint, many emotional problems, maladaptive behavioral patterns, and reduced psychological resources in at-risk individuals are rooted in the development of early maladaptive schemas; schemas that are formed during childhood as a result of dysfunctional environmental experiences and are activated in stressful or challenging situations. Activation of these schemas usually leads to severe, irrational, or maladaptive emotional reactions that ultimately reduce the individual's ability to regulate emotions and cope effectively with psychological pressures.

Within this framework, schema therapy, by aiming to identify, reconstruct, and modify these maladaptive patterns, helps individuals gain a deeper understanding

of their emotional and cognitive roots and gradually replace them with healthier and more adaptive patterns. Through cognitive, emotional, and experiential techniques, this therapeutic process enables individuals to identify their negative emotions more effectively, modulate them, and show more flexible emotional responses when confronting stressful situations. As a result, the level of emotional self-regulation improves.

On the other hand, schema therapy does not focus solely on reducing maladaptive patterns; rather, by strengthening positive beliefs about the self and the world, increasing the sense of internal control, and creating gradual experiences of success during the therapeutic process, it also provides the groundwork for the growth of positive psychological resources. These factors directly enhance the components of psychological capital, including hope, self-efficacy, resilience, and optimism. Strengthening these components helps individuals adopt a more constructive attitude when facing difficult conditions and increases their ability to maintain psychological stability and continue their life path.

Therefore, the simultaneous improvement in emotional self-regulation and psychological capital observed in this study is understandable, because these two constructs are closely interrelated, and strengthening one may indirectly enhance the other. In fact, when individuals gain greater ability to manage their emotions, their psychological capacity for experiencing hope, optimism, and resilience also increases; conversely, greater psychological capital creates a better foundation for more effective emotional regulation.

Like other studies, the present research had several limitations. First, the sample size was relatively small (30 participants), which may reduce the generalizability of the findings. Second, the use of purposive sampling may have limited the representativeness of the statistical population. Third, the data were collected using self-report measures, which increases the possibility of response bias. In addition, the follow-up period after the intervention was limited, and therefore the long-term effects of schema therapy could not be examined. Finally, the specific environmental and social conditions of Amol County may also have influenced the findings.

Acknowledgments

The author thanks the participating students, school administrations, and educational authorities for facilitating data collection.

Declaration of Interest

The author declares no conflict of interest.

Ethical Considerations

The study was conducted with attention to voluntary participation, confidentiality, parental consent, and student assent. The exact ethics committee name, approval number, and approval date were not available in the source manuscript and should be added before final submission.

Transparency of Data

The revised statistical results were recalculated from the aggregate values reported in the submitted manuscript. Raw item-level data were not available in the source file.

Funding

This research received no external funding.

Authors' Contributions

Murtadha Hameed Shalaga was responsible for the conception, design, data collection, analysis, and writing of the manuscript.

References

Akbari, Z. S., & Maki, M. (2022). Emotional Competencies As An Adolescent’s Psychological Capital: Toward To Developing Enhancement Program. *Journal Of Assessment And Research In Applied Counseling Учредители: Kman Publication Incorporation*, *4*(2), 66-86. https://doi.org/10.61838/kman.jarac.4.2.5

Arntz, A. (2018). Schema Therapy. *Science And Practice In Cognitive Therapy: Foundations, Mechanisms, And Applications*, 65-86. https://psycnet.apa.org/buy/PI

Bahadori, K. J., & Hashemi, N. T. (2012). The Relationship Between Hopefulness And Resiliency With Psychological Well-Being: A Study In The University Students. https://sid.ir/paper/172218/en

Cao, S., Zhu, Y., Li, P., Zhang, W., Ding, C., & Yang, D. (2022). Age difference in roles of perceived social support and psychological capital on mental health during COVID-19.

Frontiers in psychology, *13*, 801241. https://doi.org/10.3389/fpsyg.2022.801241

Farokhzadian, A. A., Rezaei, F., & Sadeghi, M. (2018). The effectiveness of combined metacognitive therapy with childhood traumas-based emotional Schema Therapy on generalized anxiety disorder. *Journal of Psychological Studies*, *14*(3), 81-96. 10.22051/psy.2018.20825.1665

Haddadpour, H., Mehri, N. S. A., Roshan, C. R., & Sotoodeh, A. N. (2021). Social Interest and Psychological Capital in Adolescents: the Mediating Role of Motivational Beliefs. *Journal name*, *2*(1), 196-205. https://doi.org/10.61838/kman.jayps.2.1.18

Hatami, H., Mohammadi, N., Hadianfard, H., & Aflakseir, A. (2024). Investigating the effectiveness of schema therapy (ST) and intensive short-term dynamic psychotherapy (ISTDP) for improving emotion regulation in Complex PTSD (CPTSD). *Journal of Research in Psychological Health*, *18*(3). 20.1001.1.20080166.1403.18.3.8.3

Hofmann, S. G., & Kashdan, T. B. (2010). The affective style questionnaire: development and psychometric properties. *Journal of psychopathology and behavioral assessment*, *32*(2), 255-263. https://doi.org/10.1007/s10862-009-9142-4

Hori, A., Murakami, M., Oshima, F., & van der Wijngaart, R. (2024). Feasibility of schema therapy for recurrent depression in a disaster relief worker with prior post-traumatic stress disorder treatment using prolonged exposure therapy. *Behavioral Sciences*, *14*(12), 1156. https://doi.org/10.3390/bs14121156

Karimi, S., Mottaghi, S., & Moradi, A. (2022). The effectiveness of mindfulness-based therapy in improving resilience and reducing the clinical symptoms of adolescents with post-traumatic stress disorder due to sexual harassment: A single-subject study. *Clinical Psychology Studies*, *13*(46), 93-130. 10.22054/jcps.2022.62332.2606

Karshki, H. (2013). Assessing the factor structure of the Emotional Styles Scale in students. *Journal of Behavioral Science Research*, *11*(13), 185-195. 20.1001.1.17352029.1392.11.3.5.0

Khayatan, F., & Golparvar, M. (2025). Comparing effectiveness of emotional schema therapy, forgiveness-based compassion therapy and cognitive-behavioral therapy on affective capital in women of victim of domestic violence. *The Journal of Tolooebehdasht*. 10.18502/tbj.v23i6.18195

Khosravi, Z., Zohrevand, M., & Sabahi, P. (2023). The Effectiveness of Group Schema Therapy on Self-Concept and Impulsivity in People With Post-Traumatic Stress Disorder. *Clinical Psychology Achievements*, *8*(4), 219-231. https://doi.org/10.22055/jacp.2024.45216.1324

Luthans, F., Avolio, B. J., & Avey, J. B. (2007). Psychological capital questionnaire. *New York: Mind Garden Inc*. https://doi.org/10.1037/t06483-000

Nazem, H., Ahmadi, M., Kiani, M., & Fomani, R. S. (2016). Check out the correlation between structural social determinants of health and quality of life of women have experienced domestic violence in Tehran referred to social emergency in 2015. *Biosciences Biotechnology Research Asia*, *13*(4), 2187-2193. https://doi.org/10.13005/bbra/2382

Peeters, N., van Passel, B., & Krans, J. (2022). The effectiveness of schema therapy for patients with anxiety disorders, OCD, or PTSD: A systematic review and research agenda. *British Journal of Clinical Psychology*, *61*(3), 579-597. https://doi.org/10.1111/bjc.12324

Roshannia, S., Rezaei, F., & Dosti, L. (2021). Role of Meta-cognitive Beliefs and Emotional Schemes in Predicting the Symptoms of Post Traumatic Stress Disorder in People Referring to Legal Medicine. *Journal of Shahid Sadoughi University of Medical Sciences*. https://doi.org/10.18502/ssu.v29i7.7265

Safari, M., Khorramabadi, R., & Moradi, A. (2025). The association between family environment and problematic internet use in adolescents: The mediating role of self-control and psychological capital, and the moderating role of gender. *Acta Psychologica*, *261*, 105683. https://doi.org/10.1016/j.actpsy.2025.105683

Toubaei, S., Nateghi, G., Dehbozorgi, G. R., & Esfahani, H. S. (2012). Demographic, personality and psychopathology characteristics of the runaway girls in social emergency and rehabilitation centre of Shiraz, Iran. *Iranian journal of psychiatry and behavioral sciences*, *6*(1), 33. https://brieflands.com/journals/ijpbs/articles/3027

van den End, A., Beekman, A. T., Dekker, J., Aarts, I., Snoek, A., Blankers, M., Vriend, C., van den Heuvel, O. A., & Thomaes, K. (2024). Trauma-focused and personality disorder treatment for posttraumatic stress disorder and comorbid cluster C personality disorder: a randomized clinical trial. *European Journal of Psychotraumatology*, *15*(1), 2382652. https://doi.org/10.1080/20008066.2024.2382652

Young, J. E., Klosko, J. S., & Weishaar, M. E. (2006). *Schema therapy: A practitioner's guide*. guilford press. https://www.guilford.com/books/Schema-Therapy/Young-Klosko-Weishaar/9781593853723?srsltid=AfmBOorhm5Qsvl2HVumx2dTQ1MJsAdOsjfAnn6yKIfajVEFGRd6l38vX