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The effectiveness of schema therapy in personality disorders: A systematic review

Merve Karaburun[1], Manolya Çalışır[2]

Keywords
schema therapy, personality disorders, effectiveness, psychotherapy

Abstract
Schema therapy is a psychotherapy method that is increasingly popular in the psychological treatment of personality disorders. This study aimed to examine the academic studies published on the effectiveness of schema therapy in personality disorders and to evaluate the examined studies within the framework of specific criteria. In this systematic review, eleven (11) research articles, selected following the research criteria, were examined. The findings obtained from the studies are presented under the titles of "Study ID, Type of Analysis, Personality Disorder Type, Assessment Tools, Findings, and Conclusions". Studies conducted between 2011-2022 were included in the review. The sample of the studies included in the study consisted of cluster A, B, and C personality disorders. Many studies show that schema therapy is effective in treating clusters B and C personality disorders and reducing symptoms. However, in literature, the treatment of personality disorders is extremely limited. A large part of the studies is aimed at researching borderline personality disorder. For this reason, future studies need to contribute to the literature on the effectiveness of schema therapy by considering other personality disorders besides borderline personality disorders in a larger clinical sample.

Anahtar kelimeler
şema terapi, kişilik bozuklukları, etkililik çalışması, psikoterapi

Öz
Şema terapinin kişilik bozukluklarında etkililiği: Sistematik bir derleme çalışması
Şema terapi, kişilik bozukluklarının psikolojik sağaltımında yaygınlığı giderek artan bir psikoterapi yöntemidir. Bu araştırmada şema terapinin kişilik bozukluklarındaki etkililiği konusu ile ilgili yayımlanan akademik çalışmaları incelemek ve incelenen çalışmaları belirli kriterler çerçevesinde değerlendirmek amaçlanmıştır. Bu sistematik derlemede araştırma kriterlerine göre seçilmiş on bir (11) araştırma makalesi incelenmiştir. Çalışmalardan elde edilen bulgular "Yazarlar ve Yıl, Çalışmanın Metodolojisi, Katılımcı Sayısı, Tanı, Ölçme Aracı, Bulgular ve Sonuç başlıkları altında sunulmuştur. Derlemeye 2011-2022 yılları arasında yapılan araştırmalar dahil edilmiştir. İncelemeye alınan çalışmaların örneklemini A, B ve C kümesi Kişilik Bozuklukları oluşturmuştur. Şema terapinin yaşamın geneline yayılmış ve yerleşik psikolojik sıkıntıları olan bireyleri tedavi etmedeki yeterliliği dolayısıyla, kişilik bozukluklarının tedavisi için bütünleştirici bir yaklaşım olduğu düşünülmektedir. Ancak kişilik bozukluklarının tedavisine yönelik yürütülen araştırmalar alanyazında oldukça sınırlıdır. Yapılan çalışmaların çok büyük bir kısmı da sınırda kişilik bozukluğunu araştırmaya yöneliktir. Bu sebeple gelecek çalışmaların boylamsal nitelikte olması ve daha büyük bir klinik örneklemde sınırda kişilik bozukluğunun dışında diğer kişilik bozukluklarını da ele alarak şema terapinin etkililiği konusunda alanyazına katkıda bulunulması önemlidir.

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Merve Karaburun · merve.karaburun@btu.edu.tr | [1]Asst. Prof., Bursa Technical University, Department of Psychology, Bursa, Türkiye; [2]Asst. Prof., Cyprus International University, Department of Psychology, Nicosia, Cyprus.
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Personality is the individual's characteristic thought, emotion, and behavior patterns and the psychological mechanisms behind these patterns (Funder, 2006). Personality disorders (PD) are defined as long-term, chronic, and difficult-to-treat psychological problems (Öztürk & Uluşahin, 2014). According to the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5);

> *"It [PD] is an ongoing pattern of internal experience and behavior that deviates markedly from the expectations of the culture in which a person lives. This pattern manifests itself in at least two of the domains of cognition, affect, interpersonal functionality, and impulse control. Persistent and long-lasting, its onset at least in adolescence and early childhood. It is also among the diagnostic criteria of PD that it extends into adulthood. In addition, it is required that this pattern is not because of another psychological disorder, health status or substance" (American Psychiatric Association [APA], 2013).*

These features are common to all personality disorders. These core features combine in various ways to form the ten specific personality disorders identified in the DSM-5 (APA, 2013). Each disorder lists entities of criteria that reflect observable features associated with that disorder. To be diagnosed with a particular PD, a person must meet the minimum number of criteria established for that disorder. In addition, symptoms must cause functional impairment and/or subjective distress to meet the diagnostic requirements of a psychiatric disorder. This means that the symptoms are distressing for the person with the disorder and/or the symptoms make it difficult to function well in society.

PDs are destructive to patients and the people around them. Beck et al. (2004) state that the problems of individuals with personality disorders stem from the unawareness of their personality aspects. These individuals tend to view personality problems as part of "themselves" and often believe that their interpersonal problems are unrelated to their behavior and attitudes. PD is more common in individuals with low education, who live alone, have marital problems, are unemployed, have any addiction, prone to violence, and being convicted of any crime (Watson & Sinha, 1998). This situation reveals the importance of environmental factors in the etiology of personality disorders. It has been reported that childhood abuse and other traumatic experiences and biological factors also play a role in the etiology of personality disorders (New et al., 2008). The prevalence of personality disorders in categories A, B, and C is 3.6%, 1.5%, and 2.7%, respectively (APA, 2013).

Cluster A personality disorders has been classified as Schizotypal Personality Disorder (STPD), Paranoid Personality Disorder (PPD), and Schizoid Personality Disorder (SPD). Since these three disorders are characterized by features of psychotic disorders, they are grouped in Cluster A (APA, 2013). Paranoid Personality Disorder is a psychiatric disorder characterized by a consistent and unwarranted inclination towards doubt and suspicion towards others, lacking sufficient justification for such suspicions. Individuals diagnosed with PPD exhibit a persistent state of hypervigilance, characterized by a pervasive belief that others are perpetually engaged in endeavors to belittle, inflict harm against, or pose a threat to them (APA, 2013). The prevalence of PPD in the general population is estimated to be approximately 1.5% (Torgerson & Bell-Syer, 2001). In the outpatient clinical population, this rate can reach up to 25% (Triebwasser et al., 2013). It is diagnosed more frequently in males and individuals with cultural minority status (Iacovino et al., 2014). Schizoid Personality Disorder is a psychiatric disorder characterized by a persistent and persistent pattern of isolation from and apathy towards interpersonal connections. Individuals diagnosed with SPD exhibit a restricted spectrum of emotions during interpersonal interactions (APA, 2013). SPD is seen in less than 1% of the general population. Schizotypal Personality Disorder is a psychiatric disorder characterized by a persistent and pronounced aversion to intimate relationships and social interactions. Individuals diagnosed with STPD exhibit perceptual distortions, harbor superstitious beliefs and engage in atypical actions. The presence of symptoms often serves as an impediment to their interpersonal relationships (APA, 2013). STPD is more common in males than females (Handest & Parnas, 2005). The lifetime prevalence of STPD is 4%.

Cluster B personality disorders have been classified as borderline personality disorder (BPD), narcissistic personality disorder (NPD), histrionic personality disorder (HPD), and antisocial personality disorder (APD). These four disorders share problems with emotion control and emotion regulation (APA, 2013). In the case of APD, the pervasive personality pattern is characterized by disregard for and violation of the rights of others. Individuals with APD often act in an irresponsible, reckless, deceptive, and exploitative way (APA, 2013). APD is seen at a rate of 3% in men and 1% in women (Ogloff, 2006). BPD is a chronic PD characterized by affective instability, self-image disorders, indecisiveness in interpersonal relationships, marked impulsivity, and suicidal behavior (suicidal ideation and attempt), causing significant disruption and distress in an individual's life (Lieb et al., 2004). In both the DSM-5 and ICD-10, emotional instability has been identified as a key criterion for BPD. The lifetime prevalence of BPD is 5.9%. According to DSM-5, HPD is defined as a common pattern of excessive emotionality and attention-seeking that begins in early adulthood and emerges in different contexts (APA, 2013). People with HPD want to be the center of attention, otherwise they feel that they are not cared for. They may have inappropriate sexual intercourse with most people they meet (Lilienfeld et al., 1986).

They may display rapidly changing and superficial emotions that may be perceived as insincere by others. They pay great attention to their physical appearance and prefer brightly colored clothes (Lilienfeld et al., 1986). Individuals with HPD exhibit flirty, seductive, attractive, manipulative, and impulsive behaviors. The prevalence of HPD in the general population is approximately 2% to 3%. This figure is four times higher in women than in men (Novais et al., 2015). NPD is described as "a pervasive pattern of grandiosity, need for admiration, and lack of empathy" (APA, 2013). It has been shown that individuals with NPD show interpersonal control and hostility, have strong intense responses to both perceived threats to self-esteem, criticism, and defeat, and have long-lasting manifestations of passive aggression, and covert indirect aggression, interpersonal vulnerability, and competitiveness. In addition, these individuals have difficulties in regulating their emotions (Russ et al., 2008). The clinical prevalence of NPD ranges from 1% to 17% (Hilsenroth et al., 1996).

Cluster C personality disorders is characterized by fear of criticism, avoidance of professional activities, lack of communication, and stiffness in close relationships. It has been classified as Avoidant Personality Disorder (AVPD), Dependent Personality Disorder (DPD), and Obsessive-Compulsive Personality Disorder (OCPD). The hallmarks of Avoidant Personality Disorder are a pervasive pattern of social withdrawal, inadequacy, and intense negative emotions. Accordingly, people with AVPD show marked avoidance of social interactions, perceiving themselves as undesirable and isolated from others. These symptoms are associated with significant disruptions in daily life (APA, 2013). Its prevalence in the community is 0.5-3% (Cox et al., 2009). Dependent Personality Disorder is a disorder in which the person requires constant and excessive care, leading to submissive, dependent behavior and fear of separation. This condition is considered a disorder when it negatively affects the social, interpersonal, and professional life of the individual. The prevalence of DPD is between 1% and 5% (Dimaggio et al., 2007). Women are diagnosed with DPD more frequently than men (Bornstein, 1996). Obsessive-Compulsive Personality Disorder is defined as orderliness, perfectionism, and preoccupation with mental and interpersonal control. Lifetime prevalence rates range from 2.1% to 7.9% (APA, 2013). It may be the most common personality disorder in the general population (Volkert et al., 2018).

Several psychotherapeutic approaches have been developed over the past decade to deal with the problems associated with personality disorders. One of the most frequently used approaches in the treatment of personality disorders is schema therapy (ST) (Young et al., 2003). ST focuses on psychological needs (connection, autonomy, reasonable expectations, realistic boundaries, worthiness) that are not met by parents and significant others during childhood. The effectiveness studies of ST have proven that it is effective in the treatment of personality disorders despite individual differences (Jacob & Arntz, 2013). According to the ST model, stable and persistent early maladaptive schemas are the core elements of personality disorders. The schema model states that the origins of pathology in personality disorders are the result of the link between unsatisfied developmental needs and repeated negative experiences (Specht et al., 2009). These negative experiences can lead to early maladaptive schemas, that is, schema modes, which are defined as the pervasive negative perception of oneself and the environment, and which are defined as the individual's established patterns of thought and emotion (Arntz et al., 2005). Changes in personality disorder symptoms depend on the weakening of early maladaptive schemas and schema modes (Young et al., 2003).

Cognitive therapy is based on schemas defined as generalized cognitive models due to early experiences (Beck, 1970). However, the effectiveness of cognitive therapy was found to be limited in the treatment of patients with personality disorders (Young et al., 2003). Young et al. (2003) reported that it is necessary to extend the duration of treatment, spend much more time exploring patients' childhood experiences, and put more emphasis on the nature and strength of the therapeutic relationship. Based on these limitations, different therapy models have emerged, which have been expanded from the cognitive behavioral approach. ST is one of these approaches. ST aims to reduce the impact of early maladaptive schemas and replace negative coping reactions and schema modes with healthier ones to help patients meet their basic emotional needs (Rafaeli et al., 2011). In ST, experiential techniques have a central place in addition to cognitive behavioral therapy (CBT) techniques. It is thought that experiential techniques are more important than cognitive techniques in obtaining changes in early maladaptive schemas (Edwards & Arntz, 2012).

Efforts to categorize and code maladaptive childhood themes have brought Young's ideas closer to those of some psychodynamic therapists, particularly object relations and attachment theorists (Ainsworth & Bowlby, 1991). Finally, to greatly increase the power of therapeutic interventions, Young combined a range of techniques from Gestalt and emotion-focused therapies (Greenberg et al., 1989). He especially used imagery exercises and empty chair dialogues (Kellogg, 2004) and to a lesser extent mindfulness exercises (Stevens, 1971). Case studies have suggested that the use of ST alone and in combination with other therapy orientations is significantly effective in reducing symptoms of comorbid cases, alleviating early maladaptive schemas and modes, and increasing levels of functioning (Ball & Young, 2000; Seavey & Moore, 2012). However, review studies that deal with the theoretical assumptions of ST defined for personality

disorders together with empirical studies seem to be limited in our country. This article is a systematic review study that deals with the theoretical and treatment part of the ST model within the framework of PD to fill the gap in literature.

METHODS

In this study, a systematic review model was preferred to examine the academic studies published on the effectiveness of the ST approach in personality disorders and to evaluate the examined studies within the framework of certain criteria. With systematic review, all the studies in the databases determined about the research were brought together, and related studies were included in the research in line with the selection criteria and critically evaluated. The data source of the research consists of eleven studies in English about personality disorders and ST in the databases of PsycINFO, MEDLINE, PubMed, and Scopus.

The inclusion criterion for potential studies required the research to be in English, to be an article or a thesis, and to have the studies published between 2011-2022. Initially, 319 studies were reached. The first elimination was made by examining the titles and abstracts of the recorded studies according to the selection criteria. Studies with similar names that are not in open access were not included in the study. At the same time, attention was paid to the fact that the therapy school was ST, and even if it mentioned this skill in its content, if the study was not related to ST, it was not included in the study. All the texts of the remaining studies were examined and the studies to be included in the compilation were determined. The research was prepared following the systematic review preparation methodology.

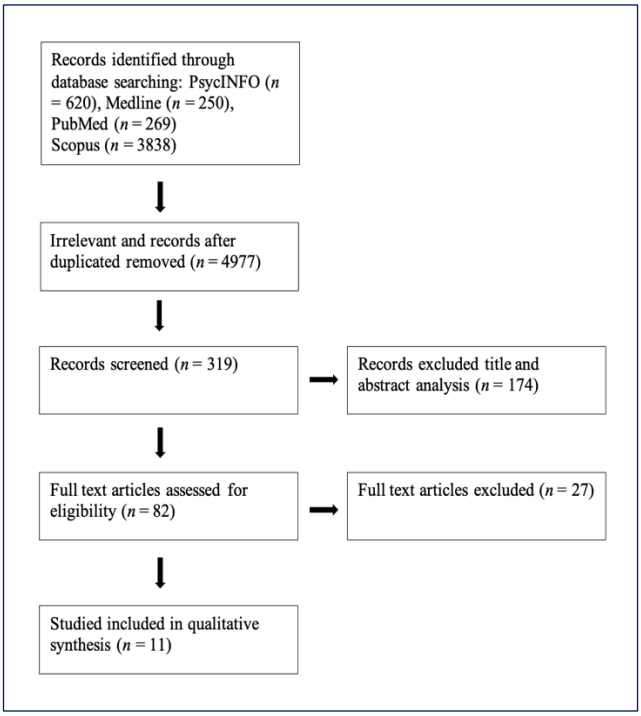

Figure 1. Flow Diagram of Selected Studies

RESULTS

Studies conducted between 2011 and 2022 were included in the review. The sample of the studies included in the study consisted of Cluster A, B, and C personality disorders. It is seen that the sample number is at least 1 and at most 323. In the studies conducted, the Avoidant Personality Disorder Severity Index (AVPDSI) (Balje et al., 2016), Personality Disorder Beliefs Questionnaire (PDBQ) (Arntz et al., 2004), Schema Mode Inventory (SMI) (Young, Arntz & Atkinson, 2007), Young Schema Questionnaire (YSQ) (Young & Brown, 1994), Rosenberg Self-Esteem Scale (Rosenberg, 1965), EuroQol EQ-5D-5L (Herdman et al., 2011), Brief Symptom Inventory (BSI) (Derogatis & Melisaratos, 1983), Young Positive Schema Questionnaire (Louis et al., 2018), SCID-5 (First et al., 2016), The Symptom Checklist 90-Revised (SCL-90-R) (Derogatis & Unger, 2010), Utrecht Coping List (Turner et al., 2012), SCID II (First & Gibbon, 2004), SCID I (First & Gibbon, 2004), The Novaco Anger Scale (Mills et al., 1998), Schema Mode Inventory (Young et al., 2007), Schema Coping Questionnaire (van Wijk-Herbrink, 2018) and other instruments were used (Table 1).

Renner et al.'s (2013) study (n = 26) noted the impact of a group schema CBT intervention on overall symptomatic distress in young adults exhibiting personality disorders or symptoms of personality disorders. A total of twenty-six individuals, with an average age of 22.5 years and a range of 18-29 years, who were diagnosed with a major DSM-IV Cluster-B or Cluster-C PD or exhibited PD characteristics, were included in the study. These participants engaged in a 20-session procedure known as SCBT-g. There was a significant decrease in global symptomatic distress from the pre-treatment phase to the post-treatment phase, with a large effect size (Cohen's d = 0.81). The study found that there were substantial reductions in maladaptive schemas, schema modes, and dysfunctional coping responses. The effect sizes for these reductions were medium to large, with d values of 0.56 and 0.98, respectively. However, it is important to note that the drop in maladaptive schemas was not statistically significant when adjusting for symptomatic distress. The study saw a modest rise (Cohen's d = 0.40) in adaptive schema modes during the treatment. The initial levels of maladaptive schemas were found to be significant predictors of symptomatic distress both at the beginning of therapy and during the middle of treatment. However, these baseline levels did not have a significant predictive effect on symptomatic distress at the end of treatment. The results of the study offer initial indications that SCBT-g could potentially serve as a viable intervention for young adults exhibiting personality disorders or traits associated with personality disorders. This treatment shows promise in terms of ameliorating overall symptomatic discomfort and addressing the underlying vulnerabilities associated with these

conditions.

In the study by Dickhaut & Arntz (2014) two cohorts consisting of 8 and 10 patients diagnosed with BPD were included. These cohorts received a treatment regimen that involved a combination of weekly group-based ST and individual ST for 2 years. Additionally, patients who required further treatment were provided with an additional 6 months of individual ST. The therapists possessed expertise in individual short-term therapy but lacked proficiency in group short-term therapy. The specialists provided training in group ST (group-ST) to the second cohort of therapists. This enabled the investigation of the training effects. Evaluations of BPD symptoms and supplementary measures were conducted at regular intervals of six months, spanning a duration of up to two and a half years. The analysis of temporal changes and variations among different cohorts was conducted using mixed regression. The rate of dropout from therapy in year 1 was 33.3%, which decreased to 5.6% in year 2, with no discernible variation between cohorts. The indications of BPD exhibited a significant reduction, as evidenced by large effect sizes, and a noteworthy 77% recovery rate observed at the 30-month mark. Significant enhancements were observed in various domains, including general psychopathological symptoms, schema (mode) assessments, quality of life, and happiness. Cohort 2 had a comparatively accelerated rate of improvement, while no discernible disparities were observed between cohorts in the long term. The utilization of a combined group-individual therapeutic approach has demonstrated efficacy as a therapy method. However, it is worth noting that the dropout rate associated with this approach may be higher compared to that of individual therapeutic interventions. The inclusion of an ST program appears to enhance the rate of recovery when compared to an individual ST alone.

Reiss et al. (2014) evaluated the outcomes of an intense inpatient ST treatment program in naturalistic clinical settings. The findings of three uncontrolled, independent pilot investigations involving 92 BPD patients are presented in this article. The programs include individual and group modalities and, in theory, are compatible with BPD patients' use of the ST model. With effect values ranging from Cohen's d = 2.84 to .43, the findings demonstrate that inpatient ST can dramatically lessen symptoms of severe BPD and the overall severity of psychopathology. The length of treatment, the number of group psychotherapists, and their level of expertise may all have an impact on the differences in effect sizes between the three pilot studies. The presented pilot studies have limitations, including differences in the samples, treatment settings, treatment variations, and use of various measures, which may have affected outcomes, but they serve as a starting point for describing and evaluating inpatient treatment for BPD in realistic settings.

Videler et al. (2018) tested the effectiveness of ST for personality problems in older adults for the first time. The study employed a multiple-baseline approach, with a sample of eight individuals diagnosed with cluster C personality disorders. The participants had an average age of 69 years. Following an initial phase of variable duration, schema treatment was administered over the initial year, with further follow-up sessions conducted over six months. The participants provided weekly assessments of the credibility of dysfunctional core beliefs. Symptoms of distress, early maladaptive schemas, quality of life, and target complaints were evaluated at six-month intervals, while the diagnosis of PD was examined before the commencement of the study and after the follow-up period. The data underwent analysis using mixed regression analyses. The findings indicated the presence of statistically significant linear trends in the treatment phases, but no such trends were observed in the baseline and follow-up periods. The scores observed over the follow-up period exhibited stability and were shown to be considerably lower in comparison to the baseline measurements, demonstrating substantial effect sizes. A total of seven subjects achieved remission from their diagnosis of PD. The efficacy of ST as a treatment modality for cluster C personality disorders in the older population has been seen. The present discovery is characterized by a high degree of novelty, as it represents the inaugural investigation into the efficacy of psychotherapeutic interventions, specifically schema therapy, for the treatment of personality disorders in the older population.

Bamelis et al. (2014) conducted a comparative analysis to assess the efficacy of ST, clarification-oriented psychotherapy, and treatment as usual in individuals diagnosed with cluster C, paranoid, histrionic, or narcissistic PD. A total of 50 therapy sessions were administered to each participant for this study. Between the years 2006 and 2011, a multicenter randomized controlled study was carried out at 12 mental health facilities located in the Netherlands. The experiment followed a single-blind parallel design. A cohort of 323 individuals diagnosed with personality disorders was subjected to a random assignment process, resulting in three groups: schema therapy (n = 147), treatment as usual (n = 135), and clarification-oriented psychotherapy (n = 41). There were two distinct groups of schema therapy therapists, whereby the initial cohort received predominantly lecture-based training, whereas the subsequent cohort primarily engaged in exercise-based training. The principal measure of interest was the attainment of remission from PD within three years after the initiation of therapy, as evaluated by interviewers who were unaware of the treatment conditions. The secondary outcomes assessed in this study included dropout rates, assessments of PD features, depressive and anxiety disorders, general psychological complaints, general and social functioning, self-ideal discrepancy, and quality

of life. The findings indicate that schema therapy yielded a notably higher rate of patient recovery when compared to both treatments as usual and clarification-oriented psychotherapy. The therapists belonging to the second cohort demonstrated superior outcomes compared to their counterparts in the first group. There was no significant difference observed between clarification-oriented psychotherapy and treatment as usual. The results remained consistent across different diagnoses of personality disorders. The rates of dropout were found to be much lower in the groups receiving schema therapy and clarification-oriented psychotherapy. All interventions have shown enhancements in secondary outcomes. The findings of the study indicate that those who underwent schema therapy had a reduction in depressive disorder symptoms and showed improved levels of general and social functioning over the follow-up period. Although interview-based measures revealed notable disparities between treatments, no distinctions were observed when utilizing self-report measures. Furthermore, schema therapy had a higher level of effectiveness compared to treatment as usual in terms of recovery, interview-based outcomes, and dropout rates. In addition, participants who had exercise-based schema therapy training demonstrated higher outcomes compared to those who received lecture-based instruction.

The study by Schaap et al. (2016) provides an evaluation of the efficacy of group ST as a treatment modality for individuals with personality disorders who have not shown improvement after previous psychotherapy interventions. A total of 42 patients underwent assessment before and after therapy, while 35 patients were subsequently reviewed after a follow-up period of 6 months. The findings indicated a dropout rate of 35%. There were no significant differences seen between individuals who discontinued therapy and those who completed treatment in terms of demographic and clinical factors, save for a decreased occurrence of mood disorders among the former group. Moreover, the intention-to-treat analyses revealed a statistically significant enhancement in maladaptive schemas, schema modes, maladaptive coping styles, mental well-being, and psychological distress after the intervention. Furthermore, these positive changes were sustained during the follow-up period. Conversely, there was no notable alteration observed in the perceived parenting approach as stated by the individuals. The study found that alterations in schemas and schema modes, as observed from before to after treatment, were indicative of future levels of general psychological distress throughout the follow-up period. In summary, the initial findings indicate that group-based inpatient treatment with ST can yield favorable treatment outcomes for individuals who have not shown improvement following prior psychotherapeutic interventions. Furthermore, these findings demonstrate a similarity in treatment outcomes between patients with a nonresponsive treatment history and those without.

In the study by Koppers et al. (2021), a natural design was used to investigate the effects of group ST on individuals diagnosed with PD. Additionally, the study explored the influence of psychological symptoms, early maladaptive schemas (EMS), and schema modes on treatment outcomes. A total of 194 patients underwent assessments at multiple time points, including baseline, during therapy, treatment termination, and three-month follow-up. The Symptom Checklist-General Severity Index (SCL-GSI) was employed to assess the rate of remission in overall psychological distress. This measure was utilized as the dependent variable in a multilevel model, allowing for the execution of both univariate and multivariate analyses. The sample demonstrated a moderate decrease in symptoms (pre-post Cohen's $d = 0.65$, 95% CI [0.39-0.91]), with almost 30% of participants achieving remission after completing 60 sessions. The findings of this study exhibited consistency at the three-month follow-up assessment (pre-follow-up Cohen's $d = 0.61$, 95% CI [0.29-0.94]; 28.9%). The study found that those with higher initial scores on the SCL scale for interpersonal sensitivity, the EMS defectiveness/shame, and all maladaptive schema modes collectively showed greater improvements in overall psychological distress following treatment. The efficacy of a comprehensive and enduring group schema therapy intervention was demonstrated in a diverse cohort of patients diagnosed with personality disorders. The presence of internalizing symptoms appears to be indicative of a positive outcome improvement. Approximately 33.33% of the patients attained a state of remission. Hence, there exists a potential for enhancement, potentially through augmenting the dosage or intensity in conjunction with personalized sessions.

In the study by Videler et al. (2020), the application of the Emotional Awareness and Expression Skills (EAS) concept in schema therapy with older adults was examined. This paper presents a literature analysis and a case study that examines the importance of EAS in ST while working with older persons. Additionally, recommendations are provided for effectively incorporating EAS into schema therapy during later stages of life. Focusing therapeutic attention on the EAS has the potential to enhance the development of the healthy adult mode, while also potentially facilitating a transformation of a bad life review. The utilization of positive schemas can play a crucial role in revitalizing positive elements within patients, strengthening the therapeutic alliance, cultivating a positive therapeutic environment, and aiding the integration of experiential ST procedures. This review posits that positive schemas may serve as significant mechanisms for facilitating therapeutic transformation in the context of working with older individuals. There exists a necessity to validate the Young Positive Schema Questionnaire (YPSQ) in the context of older persons, as well as to investigate the potential positive impact of incorporating EAS into ST for this population, with regard

Table 1. A Brief Presentation of the Effectiveness of Schema Therapy in Personality Disorders

Study ID	Type of Analysis & N	PD Type	Assessment Tools	Findings	Conclusion
Bachrach and Arntz (2021)	Treatment ST (30 sessions and 4 booster sessions in small groups, with an additional maximum of 300 min. of individual ST) Test-Retest (*N* = 1)	Avoidant PD	Avoidant Personality Disorder Severity Index (AVPDSI) Personality Disorder Beliefs Questionnaire (PDBQ) Schema Mode Inventory (SMI) Young Schema Questionnaire (YSQ) Rosenberg Self-Esteem Scale EuroQol EQ-5D-5L Brief Symptom Inventory (BSI)	The client with avoidant personality disorder showed positive outcomes in overcoming persistent avoidance and controlling coping strategies after receiving group schema therapy. Based on the results, the client's prognosis was good.	Group and individual ST were found to be effective in avoidant personality disorder.
Van Donzel et al. (2021)	Multiple baseline design (*N* = 10)	Cluster C PD	Brief Symptom Inventory Young Schema Questionnaire Young Positive Schema Questionnaire Schema Mode Inventory SCID-5	After applying ST, positive changes in negative schemas and modes were observed.	Although ST has been found to be effective in cluster C personality disorders in the elderly, the findings are not strong enough and more studies are needed.
Koppers et al. (2020)	Treatment ST (mid-treatment -week 10-, at treatment termination -week 20- and at three-month follow-up -week 32-). Univariate and multiple variate analyses (*N* = 225)	PD	The Symptom Checklist 90-Revised (SCL-90-R) Utrecht Coping List Young Schema Questionnaire	As a result of the treatment applied to the participants, psychological symptoms decreased, and maladaptive schemas were arranged.	A short-term form of ST in groups has proven to be an effective approach for a large group of patients with personality disorders. In addition, most patients did not achieve symptom remission.
Videler et al. (2018)	Multiple-baseline design (*N* = 8)	Cluster C PD	SCID II The Symptom Checklist 90-Revised (SCL-90-R) Young Schema Questionnaire	After schema therapy (ST), 7 participants no longer met the diagnostic criteria for a personality disorder.	ST appears to be an effective treatment for cluster C personality disorders in older adults.
Schaap et al. (2016)	Treatment ST Test-retest (*N* = 42 patients were assessed pre-and posttreatment, and 35 patients were evaluated at follow-up 6 months later.)	PD	SCID II	The study evaluated the effectiveness of inpatient group schema therapy (ST) in patients with personality pathology who had not responded to previous psychotherapeutic interventions. After treatment, significant improvements were observed in maladaptive schemas, schema modes, maladaptive coping styles, mental well-being, and psychological distress, and these improvements were maintained at the 6-month follow-up.	It has been observed that positive treatment results can be obtained in patients who do not respond to previous psychotherapeutic interventions.

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Table 1 (continued). A Brief Presentation of the Effectiveness of Schema Therapy in Personality Disorders

Doyle et al. (2016)	Randomized Controlled Trials (*N* = 63)	PD	SCID I, SCID II The Novaco Anger Scale Barratt Impulsiveness Scale The Young Schema Questionnaire	Individuals who received ST and were diagnosed with personality disorder did not show statistically significant improvements in risk, schema, personality, and interpersonal style measurements compared to individuals who received therapy with the other method.	Future randomized controlled trials investigating schema therapy (ST) and related psychotherapies in high-security and forensic settings should incorporate the insights gained from this study.
Bamelis et al. (2014)	Randomized Controlled Trials (schema therapy, *n* = 147; treatment as usual, *n* = 135; clarification -oriented psychotherapy, *n* = 41)	PD	Social and Occupational Functioning Assessment Scale Global Assessment of Functioning Scale	Individuals who underwent schema therapy remained below the diagnostic threshold for personality disorders, while their levels of functioning showed significant improvement.	Schema therapy has demonstrated greater effectiveness compared to other approaches in sustaining treatment engagement and promoting recovery in personality disorders.
Videler et al. (2014)	Randomized Controlled Trials (*N* = 42)	PD	Brief Symptom Inventory Symptom Checklist-90 (SCL-90) Dutch BSI Scales The Young Schema Questionnaire The Schema Mode Inventory	Significant improvements in symptomatic distress were observed following schema therapy.	Schema therapy is effective in reducing early maladaptive schemas (EMS) in older adults, thereby facilitating changes in symptomatic distress.
Reiss et al. (2014)	Three independent uncontrolled pilot studies (*N* = 92)	BPD	Borderline Syndrome Index, Borderline Symptom List, Symptom Checklist-90 - R, Global Assessment of Functioning Scale, SCID I, SCID II	It was found that ST was able to significantly reduce the symptoms of severe BPD and the global severity of the psychopathology.	Schema therapy is an effective treatment for borderline personality disorder (BPD).
Dickhaut and Arntz (2014)	Group ST Individual ST (*N* = 18)	BPD	Two cohorts of BPD patients (*n* = 8, *n* = 10) received a combination of weekly group ST and individual ST for 2 years, with 6 months extra individual ST if indicated.	Individuals who were previously diagnosed did not meet the diagnostic criteria for BPD as a result of the treatment applied.	Schema therapy is an effective treatment for borderline personality disorder (BPD).
Renner et al. (2013)	Pre-Post Study Design (*N* = 26)	Cluster B/C PD	Short-term group schema cognitive-behavioral therapy Symptom Checklist-90 Schema Questionnaire Short Form Schema Mode Inventory Schema Coping Questionnaire	Following schema therapy, symptomatic distress, maladaptive schemas, schema modes, and dysfunctional coping responses were significantly reduced.	ST has been found to be an effective treatment for cluster B and C personality disorders.

Note. BPD: borderline personality disorder, PD: personality disorder, ST: schema therapy.

to therapeutic outcomes (see Table 1).

DISCUSSION

Although most individuals with personality disorders complain about these symptoms, they do not trust the therapist. They eventually stop therapy, or their symptoms quickly reappear after finishing therapeutic sessions. In addition, some treatment modalities have not been successful because of their long duration, insufficient attention to therapeutic interaction, or more focus on symptom relief rather than in-depth treatment. Based on these reasons, Young et al. (2003) introduced the ST approach and treated these patients by focusing on therapeutic interaction, considering ineffective cognitive foundations, and using various techniques.

ST appears to be effective for treating individuals with cluster C PD and working with these patients' persistent avoidance and controlling coping strategies. Preliminary data from a recent pilot study show that group schema therapy is highly effective for patients with cluster C PD (Jacob & Arntz, 2013). In the study conducted by Bachrach & Arntz (2021), a significant improvement was observed in the functionality level of the individual diagnosed with AVPD during the year following the completion of the group ST program. According to the results, the prognosis of the patient progressed positively. In a study conducted in advanced adults by Van Donzel et al. (2021), ST was found to be effective in cluster C personality disorders.

In studies investigating the effectiveness of individual ST in personality disorders, it was found that global psychological symptoms, the severity of early maladaptive schemas and schema modes improved (Bamelis et al., 2014; Renner et al., 2013; Van Vreeswijk et al., 2014). Koppers et al. (2021) found that remissions for obsessive-compulsive personality disorder were reduced by 50% after 20 sessions.

ST of BPD; temperamental tendencies, insecure attachment in childhood, emotional deprivation explains that it arises from the interactions of the family environment that keeps people alive, punishing and rejecting, and submissive (APA, 2013). Individuals with this disorder show comorbid problems, fluctuating modes and relationships, emotional imbalances, and identities with unclear boundaries (Arntz and Van Genderen, 2020). A single psychotherapeutic approach is not preferred in working with this disorder (Nysæter and Nordahl, 2008). In recent years, it has been stated that an integrated approach is needed in working with the cognitive, emotional, behavioral, and interpersonal areas of this disorder (Rafaeli et al., 2011). In this context, ST offers a holistic treatment approach for BPD (Arntz and Van Genderen, 2020). BPD was found to be more associated with dependency/failure, fault/shame, and abandonment schemas. In a study examining the schemas of individuals with BPD and committing crimes; schema domain scores of rejections, impaired autonomy, damaged boundaries, hypervigilance, and suppression were found to be high (Gilbert and Daffern, 2013).

NPD is one of the most studied personality disorders with ST. Loneliness and exclusion, insufficient boundaries, trauma history, and lack of unconditional acceptance are childhood determinants of narcissism (Young et al., 2003). Most individuals with NPD are in childhood; they are considered as individuals who have experienced loneliness, lack of love, and emotional deprivation. Individuals who have experienced childhood trauma and are paid attention only when they comply with the high standards set by their parents are the childhood determinants of NPD (Young et al., 2003). When NPD is handled within the framework of ST, it is seen that emotional deprivation, imperfection, and righteousness schemas are intense (Young et al., 2003). In a study examining narcissism and early maladaptive schemas, grandiose narcissism with inadequate self-control schema; distrust, vindictiveness, self-sacrifice, and high standards schemas were found to be positively related (Zeigler-Hill et al., 2011).

Despite the parallelism of the findings in the literature, it was seen that the studies in which APD was handled within the framework of schema therapy were less compared to BPD and NPD. In the studies carried out, it is known that APD is associated with impaired boundaries, disconnection, and rejection schemas (Gilbert and Daffern, 2013). In the study conducted by Güler & Tuncay (2021) individuals with APD scored higher than the control group in the areas of failure, emotional deprivation, pessimism, suppression of emotions, insecurity/abuse, abandonment, demanding privilege, insufficient self-control, punishment/imperfection, and submissiveness. In addition, individuals with APD are prone to crime; it is also known that they can lead an unbalanced and irresponsible lifestyle (Rafaeli et al., 2011).

Conclusions

ST is an integrative approach to the treatment of personality disorders due to its efficacy in treating individuals with life-wide and established psychological problems. However, research on the treatment of personality disorders is extremely limited in literature. A large part of the studies is aimed at researching BPD. For this reason, it is important for future studies to be longitudinal and to contribute to the literature on the effectiveness of schema therapy by considering other personality disorders besides borderline personality disorders in a larger clinical sample. Based on all these results, it is necessary to conduct new studies that deal with the dimensional approach in investigating the effectiveness of ST.

DECLARATIONS

Ethics Committee Approval N/A

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Informed Consent N/A

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