

## **Efficacy of dual focus schema therapy in the treatment of people with substance use disorders comorbid with personality disorders**

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### **Abstract**

The rate of personality disorders among drug users is estimated to be up to 50%. The co-occurrence of personality disorders among drug users can potentially lead to increased symptom severity, resistance to treatment, and increased risk of relapse. Using the systematic review method, in the present study, the efficacy of the dual focus schema therapy (DFST) in the treatment of substance use disorders with personality disorders was investigated. Using two databases, namely ScienceDirect and noormags, five eligible articles were reviewed that evaluated the efficacy of dual focus schema therapy (DFST) using case study and randomized controlled trial (RCT). The results showed that despite the positive and promising therapeutic results in the two case studies, three RCT studies showed the least useful results for the efficacy of the dual focus schema therapy (DFST) and that the dual focus schema therapy (DFST) is not a more effective option compared to the other forms of intervention, and more accurate evaluation requires further RCTs.

**Keywords:** comorbidity, dual focus schema therapy, efficacy, systematic review.

### **Introduction**

Substance use disorders (SUDs) in adults are a public health issue that have significant costs for the individual and society (Kazemi et al., 2017). In recent years, drug use has been increasing worldwide, both in terms of the total number and proportion of drug users. According to the World Drug Report (United Nations Office on Drugs and Crime, 2020), in 2018, it was estimated that 5.4% of the global population between the ages of 15 and 64, or 269 million people, used drugs at least once in the past year, of which about 35.6 million people were suffering from SUDs and need treatment. Cannabis, narcotics,

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amphetamines and prescription stimulants, ecstasy and cocaine are the most abused ones, respectively. There are currently various therapeutic methods for treating SUDs that, depending on their theoretical basis, focus on changes in biological, psychological, social and spiritual dimensions and have different efficacy and effectiveness. Regardless of this diversity, one of the common challenges of all treatments for SUDs is the high frequency of lapse and subsequent relapse (Menon & Kandasamy, 2018). Among the variables related to relapse into substance abuse, such as the family history of substance dependence, age of onset of substance, duration of use, and coping behavior (Sureshkumar et al., 2017), the comorbidity of SUDs with other mental disorders is a very important factor in relapse and failure in addiction treatment (Prodromou, Kyritsi, & Koukia, 2014). Many people addicted to other mental disorders also have SUDs, and many people with mental disorders are diagnosed with SUDs. About half of the people who experience a mental illness also develop an SUD at some point in their lives and vice versa (National Institute on Drug Abuse, 2018, 2020). In clinical situations, SUDs are often associated with other mental disorders (Hartwell, Tolliver, & Brady, 2013) and are considered a challenge for clinicians (Basu, Sarkar, Mattoo, 2013). Research findings showed that SUDs have a high rate of comorbidity with anxiety disorders such as panic disorder, social anxiety disorder, post-traumatic stress disorder, attention deficit hyperactivity disorder, and personality disorders (Wai et al., 2021). Meanwhile, personality disorders are found in 50% of alcohol and other psychotropic substance users (European Monitoring Center for Drugs and Drug Addiction, 2015). Among personality disorders, antisocial personality disorders and borderline personality disorders are the most common ones among drug users (Walter, 2015). Personality disorders can be a significant risk factor for persistent substance use. Co-occurrence of personality disorders with SUDs can potentially lead to increased symptom severity, resistance to treatment, and increased risk of recurrence (Fraser, Isaif, Teles, & Laporte, 2021). In SUDs, treatment of comorbid disorders is essential (Spencer et al., 2021) and failure to pay attention to them can lead to non-treatment of substance use disorders.

There are currently three psychotherapies for the treatment of people with personality disorders and SUDs: Behavioral Dialectical Therapy (DBT), Dynamic Structural Psychotherapy (DDP), and Dual

Focus Schema Therapy (DFST). DFST, unlike DBT and DDP, is not limited to a few personality disorders and can be applied to all serious personality disorders associated with SUDs; although there are conflicting evidence of its efficacy (Lee, Cameron, & Jenner, 2015; Walter, 2015). DFST (Ball, 1998; Ball & Young, 2000) is a manual-guided individual cognitive-behavioral therapy that incorporates the schema therapy approach (Young, Klosco, & Weishaar, 2003) and relapse prevention skills (Marlatt & Gordon, 1985) with the aim of treating the symptoms associated with substance abuse and personality disorders.

Except the researches in the field who studied the comorbidity of personality disorders with SUDs (for example, see Rumi et al., 2009; Sepehrmanesh et al., 2008) and conduction studies to determine the effectiveness of various psychotherapies in the treatment of comorbid personality disorders with SUDs (for example, see Agha Yousefi, Tarkhan & Ghorbani, 2015; Agha Yousefi et al., 2016; Naseri, Sohrabi, Borjali, & Filsafinejad, 2015), few studies have examined the efficacy of these treatments (for example, see Lee et al., 2015). In this article, with a systematic review of the research literature, the basic hypotheses, treatment guidelines, and efficacy of DFST are examined.

### **Research Method**

In this study, a systematic review method was used to answer the main question of the research, seeking to investigate the efficacy of DFST in the treatment of people with substance use disorders comorbid with personality disorders. All stages of systematic review of research literature, comparison and combination of goals, methods, and results of quality research were performed by the researcher and according to the model of Lee et al.(2015) (Figure 1). The databases used in this study were ScienceDirect and noormags (in Persian), and the keyword of treatment efficacy was examined in the center. The four keywords of Substance Abuse Disorders (SUDs), Personality Disorders, Dual Focus Schema Therapy (DFST), and Efficacy were searched in these databases, and 211 records were found in ScienceDirect, and 4,096 records in noormags. After removing duplicate and irrelevant items (4261) (especially documents collected from noormags), at the first stage of screening, all the documents that were not eligible and related to the keyword of efficacy were screened (26) and then, these documents were examined according to the criteria of Inclusions,

including any evidence that included data in the outcomes of a DFST for SUDs associated with personality disorders; In English and Persian; In the period from 2000 to 2021; And obtained from any research project, especially randomized controlled trials (RCT). At the second stage of screening, all the remaining documents (20) were studied according to the researcher-made competency criteria, and finally, five articles remained for the final analysis (Table 1).

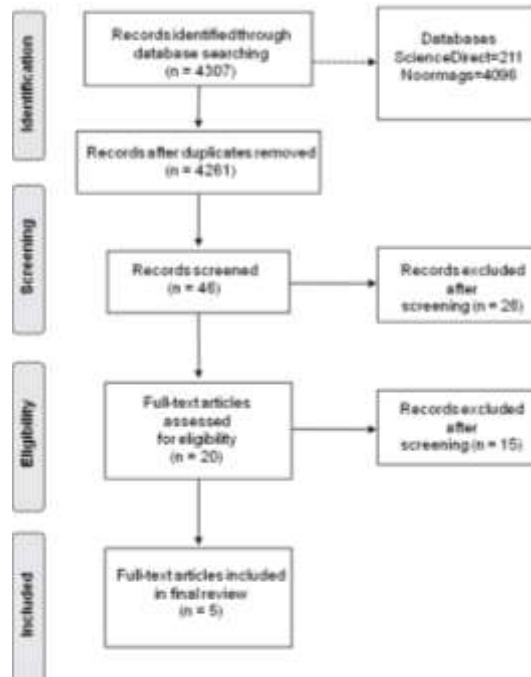


Figure 1. The systematic review flow diagram.

Table 1. Summary of the included studies

<i>Authors</i>	<i>Year</i>	<i>Target</i>	<i>Group Design</i>	<i>Outcome</i>
Ball and Young	2000	Substance abuse and at least one Personality disorders	Case study, N = 10 Duration: 24 sessions	Reduction of substance abuse, psychiatric symptoms, and negative affect
Ball, Cobb - Richardson, Connolly, Bujosa and O' Neall	2005	Substance abuse in homeless people with Personality disorders	RCT, N = 52 DFST compared with standard group counseling Duration: 24 sessions	DFST dominant on almost all outcome measures However, more severe personality problems profit more from counseling
Ball	2007	Substance abuse With personality disorders	RCT, N = 30 DFST compared with standard group counseling Duration: 24 sessions	Faster reduction of substance abuse in DFST condition Faster reduction in the degree of dysphoria in group counseling Stronger therapeutic alliance in DFST.
Ball, Maccarelli, LaPaglia and Ostrowski	2011	Substance abuse With personality disorders	RCT, N = 105 DFST compared with individual group counseling	Equal symptom reduction in both conditions, individual drug counseling resulted in more sustained reduction in several symptoms.
Naseri, Sohrabi, Borjali, and Falsafinejad (in Persian)	2014	Substance abuse With antisocial personality disorders	Case study, N = 3 Duration: 24 sessions	DFST significantly reduces psychological dependence, substance use, high-risk behaviors, and improves physical and psychological health and individual and social functioning.

#### Introduction of the Dual Focus Schema Therapy (DFST):

In this intervention method, cognitive-behavioral coping skills of substance use and targeted interventions for early maladaptive schemas, emotional reactions, communication problems, and maladaptive coping styles were integrated. An important and distinct assumption of DFST, compared to other cognitive-behavioral models for personality disorders, is that an integrated treatment method can be

used instead of separate methods for each group of personality disorders. The manual for DFST was developed by Ball and Young (1998, 2000), and then its efficacy was evaluated in different sample groups. In this intervention method, in the first two months of treatment, coping skills were integrated by identifying and training personality, schemas, relationships and coping styles. In the remaining four months, cognitive, empirical, behavioral, and relationship change strategies (Young, Clossco, & Vishar, 2003) were considered opportunities to practice skills for using in-program therapy events (Ball, Maccarelli, LaPaglia, & Ostrowski, 2011).

**The Treatment Constructs and Model:** DFST is based on the basic assumption that two broad cognitive and behavioral structures interact with each other and form the core of the pathology observed in people with personality disorders. These two structures (early maladaptive schemas and maladaptive coping styles) are the main objectives for designing a series of interventions to reduce the severity of the schemas and to develop more adaptive coping strategies. The main purpose of DFST is to help people achieve behavioral control and meet their basic human needs. Various psychological, educational, cognitive, experimental, behavioral, and relational techniques are used to achieve these goals by reducing the symptoms of personality disorders and SUDs (Ball, 2004, 2007).

**The Early Maladaptive Schemas:** Incompatible or Maladaptive schemas are persistent, absolute, and negative beliefs about oneself, others, and the environment that organize one's experiences and behaviors. These schemas are very broad and pervasive themes that are learned early in life and then reinforced in adulthood, find foliage, and persist. Over time, these mental structures become dramatically dysfunctional and highly resistant to change in people with personality disorders. Eighteen main schemas are described, one or more of which are present in people with personality disorders. Early maladaptive schemas fall into five broad areas: Disconnection and rejection (abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, social isolation/alienation); Impaired autonomy and performance (dependence/incompetence, vulnerability to danger, enmeshment/undeveloped self, failure to achieve); Impaired limits (entitlement/domination, insufficient self-control/selfdiscipline); Other directedness (subjugation, self-sacrifice, approval-seeking); Overvigilance and inhibition (vulnerability to error/negativity,

overcontrol/emotional inhibition, unrelenting standards, punitiveness (Young, Clossco, & Vishar, 2003).

The Maladaptive Coping Styles: Because the thoughts, feelings, motivations, and memories associated with early maladaptive designs are distressing to the individual or others, one usually develops strategies for coping with them. Long-standing, over-learned cognitive, emotional, interpersonal, and behavioral responses triggered by a schema that are often unknown are called maladaptive coping styles. Although these behaviors may effectively reduce the negative impact associated with schema activation, they themselves are fragile and do not respond to the basic needs and the change process. The three basic coping styles are schema submission, schema avoidance, and schema compensation (Young, Clossco, & Vishar, 2003).

DFST considers active addiction as the primary disorder, but also introduces schema activation and maladaptive avoidance as factors for increasing the risk of recurrence among individuals with prominent personality disorder. In this model, it is hypothesized that substance use occurs as a direct behavioral manifestation of the activation of disruptive constraint schemas (entitlement, insufficient restraint). Substance use also occurs when one of the other orientation schemes (obedience, self-sacrifice, and acceptance) is activated as a result of a relationship between substance use or any other defective relationship. Another risk factor for relapse is the patient's over-reliance on avoidance coping style as an incompatible tool to deal with the passivity or conflict resulting from the activation of schemas (and related memories) around the cut-off and rejection issues. Violence, distrust/abuse, emotional deprivation, disability, social isolation) or impaired self-governance and functioning (dependency/inadequacy, vulnerability to risk, engagement, failure to achieve) (Ball, 2004, 2007).

The DFST Model and Mits annual: DFST is a 24-week manual-guided individual therapy that includes a set of core topics and specific content, which is performed after assessing and conceptualizing the initial maladaptive schemas and coping styles in the individual (Table 2 and 3). This intervention method includes symptom-focused relapse prevention coping skills techniques for interpersonal, emotional, and craving experiences (Marlat & Gordon, 1985) and schema-based techniques for maladaptive schemas and

coping styles (Young, Closo, & Vishar, 2003). Cognitive-behavioral therapy seems to be an excellent choice for creating an integrated treatment strategy that has a dual focus on substance abuse and personality disorders (Ball, 2004).

Table 2. The Core Topics for the DFST Manual (Ball & Young, 2000)

Topic A: IDENTIFICATION AND ANALYSIS OF CURRENT PROBLEMS	Methods
Goals	1. Role Play
1. Brief Overview of Treatment	2. Point-Counterpoint Dialogue Between Schema and Healthy Side
2. Introduce Ongoing Focus on Substance Abuse	3. Empty Chair Technique for Internal Dialogue
3. Identify Current Life Situations as Problems	4. Beginning Use of Traditional Cognitive Disputes
4. Develop Rapport and Working Alliance	Topic K: FLASHCARDS
Methods	Goal
1. Develop List of Behavioral Targets for Change	1. Construct One Flashcard for Each Core Schema or Triggering Event Identified
2. Begin Focused Life History	Method
3. Rapport Building	1. Create Flashcards Using Template and Information from Schema Conceptualization and Schema Disputes
4. Give Young Schema Questionnaire and Self-Monitoring Journal	Topic L: CONFRONTING PAST/PARENTS THROUGH IMAGERY
Topic B: UNDERSTANDING HISTORICAL PATTERNS	Goals
Goals	1. Review Use of Flashcards
1. Begin Linking Current Problems to Past Problems	2. Confront Origins of Schema in Parental Behavior
2. Pattern Identification	3. Express Anger Over Unmet Needs and Not Providing Good Care
3. Examination of Previous Efforts to Change	Methods
4. Obtain Personal History of Important Events	1. Imagery of Self as Child, then Adult with Parent
5. Collect Complete Young Schema Questionnaire	2. Assertive Communication of Unmet Needs and Anger
Methods	Topic M: SCHEMA REATTRIBUTION THROUGH IMAGERY
1. Timeline Interview	Goals
2. Give Young Parent Inventory (YPI)	1. Decreased Self-Blame for Problems and Schemas
Topic C: DEFINING PERSONALITY, SCHEMAS, AND COPING	-9. Increased Recognition of Parental/Significant Other Problems and Limitations
Goals	3. Express Wish that Past Were Different, Effect on Present, and
1. Define Personality Disorders in Schema and Coping Terms	
2. Strengthen Therapeutic Alliance through Sensitive Discussion of Diagnosis	
Methods	
1. Discussion of Personality, Schemas, Coping, and Disorder	
2. Chapter 1 of "Reinventing Your Life"	
Topic D: SCHEMA EDUCATION	
Goals	
1. Review Young Schema Questionnaire Results	
2. Educate about Schemas ("deeper beliefs")	
Methods	



1. Young Schema Questionnaire	Plans for Future
2. Relevant Chapters from "Reinventing Your Life"	Methods
Topic E: SCHEMA ASSESSMENT THROUGH IMAGERY	1. Imagery Confronting Parents/Others with Responsibility
Goals	-9. Assertive Communication of Unmet Needs and Plan to Change
1. Introduce Imagery Techniques to Patient	Topic N: WRITING LETTERS
2. Give Young Rygh Avoidance Inventory (YRAI) and Young Compensation Inventory (YCI)	Goals
Methods	1. Review Self-Monitoring from Prior Week
1. Imagery and Discussion	2. Write Letters to Parent(s) or Significant Others Centrally Involved in Schema Origin
2. If Blocked, Introduce Modes (especially Detached Protector)	Methods
Topic F: EARLY ORIGINS	1. Writing Letters Expressing Feelings About Parental Behavior
Goals	Topic O: CHANGING RELATIONSHIPS
1. Review Young Parenting Inventory (YPI)	Goals
2. Discussion about Origins of Schemas	1. Review Reading of Letter to Self
Methods	-9. Discuss Adult Relationships as Primary Method of Reenacting and Perpetuating Early Maladaptive Schemas
1. Young Parenting Inventory (YPI)	3. Explain Concept of "Chemistry" as a Danger Signal
2. Relevant Tables from "Reinventing Your Life"	4. Develop Plan of Action for Changing Current Relationship Problems
Topic G: MALADAPTIVE BEHAVIORAL AND COPING PATTERNS	Methods
Goals	1. Review Schema-specific Relationship Patterns
1. Review Measures of Schema Avoidance and Compensation	-9. Problem Solving Steps for Relationships
2. Discussion about Three Schema Processes: Maintenance (surrender), Avoidance (escape), and Compensation (counterattack)	Topic P: SKILL BUILDING AND BEHAVIOR CHANGE
3. Identification of Individual's Coping Styles	Goals
Methods	1. Review Assignment from Prior Week
1. Young-Rygh Avoidance Inventory	9. Collaboratively Identify a Coping Skill Limitation
2. Young Compensation Inventory	3. Break Down Limitation into Component Parts
Topic I-I: PROBLEM CONCEPTUALIZATION AND FOCUS	4. Develop Gradual Hierarchy of Tasks to Begin Work
Goals	5. Implement Lowest/Easiest Behavioral Task from Hierarchy
1. Provide Patient with Case Conceptualization and Possible Techniques Used from Detailed Schema Strategies	Methods
2. Review Major/Core Schemas, Modes, Coping Styles, Origins	1. Brief Discussion of Nature of Coping Skills
3. Identify 1-2 Problems, Schemas, Modes, Coping Styles for Therapeutic Change	2. Coping Skills Hierarchy
4. Review Self-Monitoring	
Methods	
1. Review Schema Conceptualization Form	
2. Review Self-Monitoring for 1-2 Problems,	

Schemas, Modes, Coping for Baseline to Measure Subsequent Change Topic I: SCHEMA EVIDENCE AND COPING PROS AND CONS Goals 1. Examine the Past and Current Evidence Supporting and Disconfirming Schemas and Associated Automatic Thoughts 2. Examine Pros and Cons of Maladaptive Coping Styles Methods 1. Evidence for and Against Early Maladaptive Schemas 2. Advantages/Disadvantages Analysis of Maladaptive Coping Topic J: SCHEMA CONFRONTATION AND DISPUTES Goals 1. Continue Process of Cognitive Disputing Validity of Schema and Automatic Thinking 2. Move Schema Dialogue from Dispute Between Therapist and Patient to an Internal Dispute Within Patient	3. Implement First Step of Behavioral Plan Topic Q: TERMINATION AND CONTINUING CHANGE Goals 1. Establish Continued Change Plan for Coping Skills and Relationships 2. Review Relapse Warning Signs 3. Termination Methods 1. Change Plan for Follow-up 2. Relapse Triggers
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Table 3. Elective Topics for the DFST Manual (Ball and Young, 2000)

AXIS-I RELAPSE Topic 1: INTERNAL AND EXTERNAL TRIGGERS Goals 1. Identification of High-Risk Situations or Triggers 2. Education about Intrapersonal and Interpersonal Relapse Precipitants Methods 1. Self-Monitoring 2. Education about Relapse Precipitants Topic 2: COPING WITH HIGH-RISK SITUATIONS Goals 1. Identifying High-Risk Situations for Focused Intervention 2. Identify Past and Planned Coping Strategies 3. Learn to Resist Social Pressures to Use Methods 1. Review of Self-Monitoring Form 2. Coping Skills Training 3. Assertiveness Role Plays	Methods 1. Imagery Exercise Using Schema Modes 2. Changing Chairs for Disputing Maladaptive Modes Topic 8: COPING WITH THE ANGRY OR IMPULSIVE CHILD Goals 1. Imagery of Angry or Impulsive Child Modes 2. Expressing Strong Anger Toward Maladaptive Parent Methods 1. Imagery Exercise Using Schema Modes 2. Assertiveness Training THERAPY INTERFERENCE Topic 9: THERAPEUTIC RELATIONSHIP Goals 1. Provide Rationale for Here-and-Now Focus on Therapeutic Relationship 2. Provide Schema-Based Interpretation of Patient's In-topic or Extra-topic Behaviors Related to Therapy 3. Use Difficult Topic Material as Opportunities for Limited
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Topic 3: COPING WITH CRAVING	Reparenting
Goals	Methods
1. Define Drug Craving	1. Review Techniques of Interpreting Therapeutic Relationship
2. Review Method of Coping with Cravings	2. Therapist Completion of Schema Questionnaire and Review in Supervision
Method	Topic 10: TRAUMATIC MEMORIES OF ABUSE
1. Education and Coping Skills for Craving	Goals
Topic 4: ACTIVITY PLANNING	1. Recall Traumatic Memories of Abuse
Goals	2. Express Anger and Other Negative Emotions Toward Perpetrators and Those Who Did Not Protect
1. Discuss Importance of Pleasurable Activities and Avoiding Boredom	3. Decrease Self-Blame and Responsibility
2. Identify 1-2 New/Old Activities to Engage In	Methods
Method	1. Historical Recall of Abuse Through Imagery and Open-Eyed Discussion
1. Review of Pleasurable Activity List	2. Emotional Ventilation
MODE WORK	3. Assertive Communication About Wrongs and Lack of Protection
Topic 5: SCHEMA MODES	Topic 11: SELF-INJURY
Goals	Goals
1. Introduce Concept of Schema Modes	1. Ensure Patient Safety for Coming Week
2. Identify Major Modes Patient Uses and Give Names	2. Reestablish Sufficient Safety in Therapeutic Relationship to Resume Schema Work
3. Explore Origins, Functions, and Symptoms of Each Mode	3. Explore Pros and Cons of Suicidal Ideation and Attempts
Method	Methods
1. Discussion of Schema Modes	1. Contracting for Safety
Topic 6: VULNERABLE CHILD AND DETACHED PROTECTOR	2. Establishing Contingencies for Continued Attempts
Goals	3. Advantages/Disadvantages Analysis for Suicide
1. Imagery of Two Major Modes	4. Mobilization of Support System
2. Nurturing the Vulnerable Child and Reassuring the Detached Protector	Topic 12: MANAGING BOUNDARIES AND LIMITS
Method	Goals
1. Imagery Exercise Using Schema Modes	1. Address Patient Acting Out Around Boundaries of Therapeutic Relationship
Topic 7: CONFRONTING THE PUNITIVE PARENT	2. Set Limits and Consequences for Continued Rule Violations
Goals	Methods
1. Imagery of Punitive Parent	1. Review Patient Behavior Inside or Outside of Session
2. Healthy Adult Challenges and Confronts Punitive Parent	2. Explore Schema-Related Meaning and Establish Firm Boundary

**The Assumptions of DFST:** DFST assumes that a wide range of patient problems can be explained by one or more early maladaptive schemas and coping styles. Targeted change in substance use and core schemas can have a significant impact on a wide range of behaviors by disrupting a chain of behavioral and interpersonal events that cause dual adulthood. In DFST, the unrealistic goal of treating a chronic personality disorder is not pursued through a guided therapy within 24 weeks. Realistic goals are very important, including improving self-esteem, interpersonal relationships, work, and symptoms through the means of recovery and exposure to substance abuse treatment that explicitly addresses the personality function of the sufferer. This model assumes that the treatment of personality disorders is ultimately seen as a long-term process of controlling substance use and other comorbid disorders through combined approaches from better psychotherapeutic, psychosocial, pharmacological, and self-help experiences. Another important hypothesis of the two-focus schema therapy is the ability of a therapist to promote cognitive-behavioral change and reduces symptoms of his or her empathetic understanding of the roots and causes of maladaptation and confrontation with addictive and personality problems (schemas, coping styles). And the quality of the therapeutic relationship depends. Therapeutic efforts such as cognitive challenges or rapid behavioral change will be ineffective if therapists fail to address the historical roots of these problems, the causes of some coping styles, and the cause of the self-defeating behavioral cycle at the core of personality pathology and resistance to change. Shape, understand. Once the client has felt that his or her resistance to change is perceived with empathy, he or she can be pressured by the therapist for meaningful behavioral change and improvement (Ball, 2004, 2005, 2008).

**The Stages of DFST:** In the first phase of the DFST, the therapist integrates early relapse prevention work by identifying and learning about early maladaptive schemas and coping styles and their relationship with substance use and other life problems. This training step is important to achieve at least three goals: beginning to avoid or significantly reduce substance use, building a strong therapeutic alliance, and building a precise conceptualization of clients. Creating a strong therapeutic alliance based on the patient's experience of setting therapist constraints and focuses on addictive behaviors as well as the therapist's interest in understanding the patient's personality (mood,

schemas, and coping styles) and its roots (reactions and behaviors of significant others). The first few months of treatment include discussions about the patient's problems and lifestyle, especially those related to substance abuse. Within incompatible schemas, coping styles are measured by completing questionnaires. Responding to homework, meeting behaviors, discussing schemas, visualization exercises, and the nature of relationship therapy provide more information to identify those schemas and coping styles that are important to the patient. The measurement is complex and relies on several different sources of data. Patients feel trust and cooperation through the therapist's interest in obtaining and presenting information and personality feedback and creating a completely individualized conceptualization of their past and present problems. After carefully assessing and creating an empathetic understanding and conceptualization of the history of the current life problems of the clients, the stage of changing the maladaptive schemas and coping styles that play a role in the personality and problems of addiction comes. Case conceptualization leads to the creation of a set of change strategies that are technically eclectic but theoretically integrated to change schemas and coping styles. These change strategies are grouped into four categories: cognitive, behavioral, experimental, and relationship therapy. During the first phase (assessment or training) or the second phase (change) of treatment, other topics of the selected sessions may be used to address the ongoing and interfering use of substance therapy; Severe avoidance; Violation of boundaries and limitation in medical relationships; Working with traumatic memories abuse; Managing suicidal crises and self-harming behaviors; and work with schema modes to be used.

Although the focus on initiating or maintaining substance abuse has consistently been integrated into a DFST, therapists may move to focus on preventing relapse if needed. This includes identifying the factors related to intrapersonal and interpersonal returns, training coping skills for high-risk situations, resisting social pressures to consume, communicating boldly, coping with cravings, and engaging in enjoyable activities. During the course of treatment, the relative depth of focus and emphasis (e.g., substance use versus maladaptive schemas and coping) in each treatment session is guided only by clinical judgment, monitoring, and ongoing evaluation of substance use. Other specific problems often occur in the treatment of people

with personality disorders. When stubborn avoidance of occupational therapy occurs, the therapist may shift the focus to schema states. A mood may consist of several related early maladaptive designs that are associated with an influential and dominant coping style and are experienced and expressed as broad (usually non-integrated) components or aspects of a person's personality. In working with schematic states, different aspects or scenarios of the authorities are identified and labeled (isolated guardian, vulnerable child, punishing parents), and their origin and function are examined. And it changes through cognitive challenge techniques, empathetic confrontation, imagery, and empty seats. Working with schema modes seems to be very useful, especially for borderline or highly avoidant people, people with overcompensation or self-criticism, and substance abusers who may be addictive, antisocial, actor, and extroverted. Separating the micro from the improved, vulnerable, emotional identity helps easily understanding the concept of schematic states (Ball, 2004).

## **Results**

### **The Efficacy of DFST for substance abusers with personality disorders: A case study**

Ball and Young (2000) in a behavioral therapy project, aimed at providing a treatment guide for substance abusers with personality disorders, funded by the National Institute on Substance Abuse (NIDA), identified 10 individuals with concomitant disorders Substance use and personality disorders who were chosen for a 24-week treatment session. Inclusion criteria were: (1) diagnosis of opioid dependence based on DSM-IV, (2) receiving a fixed dose of methadone for at least one month, (3) not participating in psychotherapy other than substance abuse counseling. In Methadone Clinic, and (4) that there is no evidence of acute psychosis or suicidality/homicidality. Two patients left treatment after four months, and two others, who were very symptomatic and disturbed at the baseline, left treatment after an appointment. The three patients with the lowest incidence or presence of treatment all had an initial diagnosis of avoidant personality disorder (with a secondary diagnosis of antisocial disorder). The results showed that patients treated with DFST showed reduction in the frequency of substance use and the severity of psychiatric symptoms and their dysphoria. The rating of dysphoria (depression, anxiety, and hostility) decreased around the

fourth month and, at the same time, their positive emotion rating increased (this rating of dysphoria was stable during the research process). In addition, although the nature of these data is subjective, eight patients reported at the end of treatment that they considered the bifocal therapy schema to be one of the most useful therapeutic interventions that they had experienced and were upset that treatment could not continue.

#### **The Efficacy of DFST for homeless people living in the drop-in center**

In this study, psychiatric symptoms, psychosocial problems, and response therapy of 52 homeless substance abusers with personality disorders with two interventions, DFST and standard group counseling for substance abuse (SAC), for 24 weeks in drop-in center were examined and compared (Ball, Cobb -Richardson, Connolly, Bujosa, & O' Neall, 2005). The sample consisted mainly of African American men (94%) (49%, 26% Hispanic, 23% white) with a mean age of 38.3 (SD = 10.4, range 19-57). The majority of the sample had never been married (58%), and only 4% were already married (6% widowed, 33% separated or divorced). The majority of the participants (67%) had a high school education, and 45% of them had a technical education. Only 26% reported being unemployed in the previous three years (49% of them reported doing some full-time or regular part-time work). Inclusion criteria were at least 18 years old, consumption of alcohol or other substances in the last 30 days, diagnosis of personality disorder, ability to read, and satisfaction and willingness to participate in all stages of the study. Half of the sample group consumed alcohol (50%) and the other half consumed other illicit substances (cocaine 23%, heroin 14%, and marijuana 14%). Cluster A personality disorders were diagnosed frequently (88% had at least one diagnosis), and paranoid personality disorder was the most common one (74%). Schizotypal (56%) and schizoid (42%) were also disproportionately more common than the usual examples of substance abuse treatment. Cluster B disorders were more common than those seen in drug-dependent samples (74% had at least one diagnosis), borderline (51%) and antisocial (47%) ones were somewhat more common than narcissism (35%). (23% ). In cluster C (85% had at least one diagnosis), avoidant personality disorder (63%), and especially obsessive-compulsive disorder (61%), were disproportionately higher in most substance abuse treatment samples,

while dependence (12%) was in the normal range. Early maladaptive schemas were self-sacrifice, social isolation, strict standards, entitlement, entitlement, emotional deterrence, distrust/abuse, defect/shame, inadequate restraint, coping/instability, and vulnerability to danger, respectively. And emotional deprivation, failure to achieve, obedience, and dependence/incompetence. Therapy retention (total weeks in treatment) and utilization (number of weeks in which sessions were attended) were derived from the main results. In general, these outcomes support the superiority of DFST over SAC. However, the data showed that clients with severe symptoms of personality disorders use the SAC more. Also, the severity of personality disorders predicted less persistence in DFST than in SAC.

**The Comparison of DFST efficacy and 12 Step Facilitation Therapy (12FT)**

In a randomized controlled trial, Ball (2007) treated 30 individuals with substance use disorders in two sessions: DFST and 12FT. The sample group was mainly white people (85%; 13% African American; 2% Hispanic), 46% males and 54% females with a mean age of 37.4 years old ( $SD = 5.9$ ). The sample group was mostly single (46%; 32% were separated or divorced; 22% were married or cohabiting) and had a high school education. Patients met structured interview criteria for personality disorders with a mean score of 3.3; Antisocial personality disorder was present in more than 70% of the cases and borderline and avoidant personality disorders were present in more than half of the cases. Both paranoid and dependent personality disorders were present in more than 10% of the cases, and the rest of the personality disorders were less common. At the time of screening, approximately, one-third of the sample group reported significant symptoms of depression, anxiety, violent behavior, thoughts, or suicide attempts in the past 30 days, and the majority experienced these symptoms during their lifetime. Half of the sample group reported at least one high-risk HIV-related behavior in the past three months, and 15% tested positive for HIV. The majority (85%) reported experiencing emotional abuse as a child, and a significant number reported physical (49%) and sexual abuse (27%) in the past. In relation to addiction, patients had more than 10 years of substance abuse and the multiple substance use was common among them. The duration of the methadone maintenance treatment varied in patients with a mean score of 23.1 per month. Most of the patients had a



history of injecting drug use (71%; intranasal 27%; oral 2%) and 47% of the sample reported using heroin 30 days before evaluation (37% alcohol, 34%). (Cocaine, 27% sedatives, and 6% cannabis). Experience of several addiction treatments as well as psychiatric treatments, arrests for criminal offenses, and prison experience in adulthood have led to these individuals being considered a chronic and difficult-to-treat group of people with comorbid disorders. In the assessment of maladaptive schemas and coping styles, the avoidance style was very common, and the distrust/abuse schema was associated with eight personality disorders and appeared to be present for all personality disorders except cluster C disorders, which are often schematic. Obedience and self-sacrifice were common. Overall, the findings showed significant therapeutic effects on substance use, dysphoria grading, and strength of therapeutic alliance. Patients who received the DFST regimen showed reduction in drug use more rapidly than those who facilitated treatment during the 24-week treatment. Further analysis of the data indicates significant changes in the third month compared to the first month, which is related to the change of treatment from assessment and training to active change. Dysphoria rating analysis showed that patients presenting 12FT compared to patients treated with a DFST showed a continuous decrease in negative mood (as a separate symptom from psychiatric symptoms). However, patients treated with the DFST did not experience a change in Dysphoria. However, it was found that this persistent boredom was not related to returning or abandoning treatment. In fact, the opposite seemed to be true, meaning that the symptoms of substance abuse diminished and the working union was strengthened despite the fact that the negative mood did not change over time. As noted, DFST patients reported an increase from a good therapeutic alliance to a very strong alliance in the following months of treatment, while patients did not show such an increase in 12FT. Consistent with this finding, DFST felt that they had a stronger working union with patients than the facilitators. No treatment-related adverse events were seen, and there was no difference in the patients' stay in the treatment status. The mean duration of the treatment was 13.5 weeks for DFST and 14.7 weeks for 12FT, indicating that any discrepancy in the outcomes was not the result of further exposure to one treatment.

**The comparison of DFST efficacy and IDC in the residential centers**

In another controlled randomized trial study, 105 people who used drugs, most of whom had at least one personality disorder, were randomly assigned to two methods of interventions, DFST and individual addiction counseling (IDC). Randomized sample included 105 people, mostly single (81%), male (79%), who identified themselves as European Americans (53%; 27% African Americans; 15% Hispanics; 5% bisexuals). Their average age was 26.5 years old, the years of study were 10.9, and the longest period of employment was 2.9 years. Because many of them were referred directly from another controlled environment, relatively few (33%) had used the drug a month before admission, and only 29% of them had a substance dependence diagnosis. Both the intervention methods were based on therapeutic guidelines and were performed for six months by experienced psychotherapists who were intensively trained and monitored by independent loyalty measurement. Using the Cox proportional event model, no difference in psychotherapy was observed in the degree of treatment retention (treatment days). The hierarchical linear modeling showed that people with personality disorders started treatment with more psychiatric, interpersonal, and dysphoria symptoms, and both treatments reduced the symptoms of paranoid, antisocial, borderline, and avoidant personality disorders within six months. Contrary to researchers' predictions, individual counseling for addiction resulted in a more sustained reduction in several symptoms for antisocial, borderline, and avoidance personality disorders compared to DFST (Ball, Maccarelli, LaPaglia, & Ostrowski, 2011).

**The efficacy of DFST in drug-addicted men with antisocial personality disorder**

The aim of this study was to identify early maladaptive schemas and coping styles and to evaluate the efficacy of DFST in the treatment of drug-addicted men with antisocial personality disorder. To answer the questions of this research, a mixed research design was used which is a combination of qualitative and quantitative methods. First, a qualitative case study method was used to identify early maladaptive schemas and coping styles. Also, in a single case-based multiple baseline experimental design, three male heroin addicts with antisocial personality disorder were selected based on the Millon Multi-Axis Questionnaire and structured clinical interview for Axis

Two disorders by employing purposive sampling. Therapeutic intervention was used in 28 sessions at 24 weeks, and the follow-up phase was followed three months after the end of the treatment. Subjects completed the Dependence Severity Scale, the Maudsley Addiction Profile, and the short form of the Young Schematic Questionnaire, and the data were analyzed using the Stable Change Index and Recovery Percentage. The results showed that the subjects of this study had early maladaptive schemas and relatively similar coping styles and that dual-focus schematic therapy significantly reduced psychological dependence, substance use, high-risk behaviors and improved physical and psychological health and individual action, and became social (Naseri, Sohrabi, Borjali, & Falsafinejad, 2014).

### **Discussion and Conclusion**

Studies that have examined a variety of psycho-therapeutic models for patients with personality disorders and SUDs are limited (Fraser, Isaif, Teles, & Laporte, 2021). There are currently three psychotherapies for the treatment of people with personality disorders and SUDs: Behavioral Dialectical Therapy (DBT), Dynamic Structural Psychotherapy (DDP), and Dual Focus Schema Therapy (DFST). In this study, with a systematic review, the efficacy of DFST in the treatment of individuals with substance use disorders comorbid with personality disorders was investigated. DFST combines relapse prevention for substance abuse with the targeted work on early maladaptive schemas (persistent negative beliefs about self, others, and events) and coping styles (Ball, 2004, 2007). A total of five studies have been performed to evaluate the efficacy of DFST for the treatment of substance abuse disorders associated with personality disorders, two of which are case studies and three of which are randomized controlled trial (RCT). In the first case study (Ball & Young, 2000), DFST reduced the frequency of substance use, the severity of psychiatric symptoms, and boring mood and were associated with the desired satisfaction of treatment participants. In another case study (Naseri, Sohrabi, Borjali, & Falsafinejad, 2014), it was found that the three participants in the treatment had early maladaptive schemas and relatively similar coping styles, and the DFST significantly reduced psychological dependence, substance use, high-risk behaviors, and improved physical and psychological health

and individual and social functioning. Although in both case studies, DFST was associated with positive treatment outcomes, treatment efficacy did not result from them. In case studies, the effectiveness of treatments can be evaluated. Clinicians and policymakers often distinguish between the effectiveness and efficacy of an intervention. Efficacy studies (experimental trials) determine whether an intervention in a controlled trial produces the expected result, while effectiveness studies (practical trials) determine the degree of beneficial effects of the intervention in clinical situations. They measure the real thing. The results of the randomized controlled trials (RCTs) are the gold standard for evaluating the efficacy of treatments (Gartlehner et al., 2006). In three RCT studies, the efficacy of DFST was evaluated. In the first study (Bal et al., 2005), psychiatric syndrome, psychosocial problems, and response therapy of 52 homeless people abusing substance abuse disorders with two therapies: DFST and standard group counseling for abuse. Materials (SAC) were examined and compared for 24 weeks in Drop centers. The results supported the relative superiority of the DFST in terms of duration and usefulness of the treatment compared to SAC, although people with severe symptoms of personality disorders benefited more from SAC. In the second study (Ball, 2007), 30 people using substances with personality disorders were treated and compared in two sessions with two methods of schema, dual-focus therapy and 12-stage facilitation. Overall, the findings showed significant therapeutic effects on substance use, boredom, and the power of therapeutic alliance in both forms of intervention. Individuals receiving dual-focus schema therapy intervention reduced substance use more rapidly and reported a much stronger therapeutic alliance compared to the 12-stage treatment facilitation, although 12-stage facilitation therapy had a negative mood. The more persistent form was reduced and the DFST did not show a change in the boring mood, and no difference was observed in the significance and utilization of the treatment between the two forms of intervention. In the third study (Ball, Maccarelli, LaPaglia, & Ostrowski, 2011), 105 people consumed substances with four personality disorders: four personality disorders: paranoid, antisocial, borderline, and avoidant, with two methods of DFST and individual addiction counseling (IDC) were treated and compared during the first six months in a residential community. Participants showed a significant reduction in symptoms in both treatment

conditions at six months. While the results of the DFST had no therapeutic superiority, IDC showed a more sustained reduction in the psychiatric and emotional symptoms of the four personality disorders. The purity of the substances of most of the participants during the admission and the controlled living environment made the consumption of the substances a variable unrelated to the therapeutic results. Finally, although the two case studies revealed promising results about the efficacy of DFST in the treatment of individuals with personality disorders, the three RCT studies about the efficacy of DFST showed the least useful results (Lee, Cameron, & Jenner, 2015) and given the current evidence, DFST did not appear to be a more effective option than the other forms of intervention, and the value of adding the two-focus therapies for personality disorders with substance dependence in residential rehabilitation environments was not sufficiently support (Ball, Maccarelli, LaPaglia, & Ostrowski, 2011) and requires further RCT studies in the future.

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