ARTICLE

Cognitive–behavioural therapy as a comprehensive treatment for personality disorders

Diogo Carreiras ⓘ, **Paula Castilho** ⓘ, **Daniel Rijo** ⓘ, **Maria do Céu Salvador** ⓘ & **Carlos Carona** ⓘ

Diogo Carreiras, PhD, is a researcher in clinical psychology in the Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC), University of Coimbra, Coimbra, Portugal. His research focuses on self-relation and the assessment and development of borderline personality disorder in adolescence. **Paula Castilho**, PhD, is an Assistant Professor at the University of Coimbra, Coimbra, Portugal. She has extensive clinical practice and conducts research in the CINEICC, mostly focusing on evolutionary psychopathology and compassion-focused therapy. **Daniel Rijo**, PhD, is an Associate Professor at the University of Coimbra, Coimbra, Portugal, a researcher in the CINEICC and a schema therapist. His research focuses on personality disorders, antisocial behaviour and the changeability of psychopathic traits in young offenders using compassion-focused approaches. **Maria do Céu Salvador**, PhD, is an Assistant Professor at the University of Coimbra and a researcher in the CINEICC, Coimbra, Portugal. She has wide experience in delivering cognitive–behavioural therapy (CBT) for children and adolescents. Her research interests include CBT models and interventions for adolescents and adults. **Carlos Carona**, PhD, is an academic researcher in the CINEICC, Coimbra, Portugal. He is also a clinical psychologist with an advanced specialty in psychotherapy and a lecturer in the fields of psychotherapy, cognitive–behavioural interventions and scientific methodology. His main clinical and research interests include: CBT, developmental psychopathology, philosophy of science and clinical communication. **Correspondence** Diogo Carreiras. Email: diogocarreiras1@gmail.com

SUMMARY

Personality disorders are a group of psychological disorders characterised by a developmental nature, long-lasting impairment and emotional suffering. Personality disorders have an estimated prevalence rate of approximately 8% in community settings, but in in-patient settings the rate might be as high as 76%. Cognitive–behavioural therapies (CBTs) include psychotherapies that emphasise the identification and modification of maladaptive thought patterns and behaviours that contribute to the maintenance of psychological disorders. CBTs have demonstrated their effectiveness in treating various types of personality disorder. This article focuses on the nature of personality disorders and their categorial and dimensional assessment and neurobiology. We present three influential CBT models used in personality disorders: schema therapy, cognitive interpersonal therapy and dialectical behaviour therapy. For each one, we outline the rationale, intervention strategies and therapeutic techniques, with practical examples and summary tables to illustrate their application.

LEARNING OBJECTIVES

After reading this article you will be able to:

- describe the diagnostic features of the three clusters of personality disorder
- outline the key features of CBTs in the treatment of personality disorders
- differentiate the core therapeutic strategies and skills in schema therapy, cognitive interpersonal therapy and dialectical behaviour therapy for personality disorders.

KEYWORDS

Cognitive–behavioural therapy; personality disorders; schema therapy; cognitive interpersonal therapy; dialectical behaviour therapy.

Personality disorders are a group of mental conditions that involve long-term dysfunctional cognitive, affective, behavioural and interpersonal patterns that cause emotional suffering and impairment in several life domains, including relationships, work and self-relation. Personality disorders affect not only the individual but also their family, friends and relationships in general (American Psychiatric Association 2022).

A meta-analysis reported a prevalence of 12.2% for personality disorders in the general population of Western countries (Volkert 2018). Another review indicated a worldwide pooled prevalence of any personality disorder of 7.8% in the community (Winsper 2020). In psychiatric out-patients, this prevalence increases, and in psychiatric in-patients it may reach 76% (Kovanicova 2020).

People with personality disorders have a shorter life expectancy than people without, living on average 18.3 years less (Fok 2012). Evidence shows that as many as 57% of suicide victims had a personality disorder diagnosis, especially young adults (Lesage 1994). Suicide attempts are particularly prevalent in cluster B personality disorders (i.e. borderline, antisocial, histrionic and narcissistic) (Ansell 2015). Personality disorders are often associated with other factors related to early death, such as accidental injury (e.g. car accidents) (Räisänen 2019), criminal behaviour (Fakhrzadegan 2017) and substance use (including alcohol, cannabis and nicotine) (Hasin 2011; Fakhrzadegan 2017), and also with poor functioning in the workplace (Sansone 2010). Taken altogether, people with personality disorders face multiple disease burdens that imply negative social impacts. A study conducted in The Netherlands estimated that the economic burden of personality disorders on society was €11 000 per patient per year, due to direct (e.g. mental health service use, psychopharmacological treatments and hospital admissions) and indirect (e.g. lower work productivity) costs (Soeteman 2008).

Classification of personality disorders

The DSM and ICD are the most widely used classification systems for mental disorders. DSM-5-TR (American Psychiatric Association 2022) maintains

a categorical approach to diagnosis, but includes the dimensional Alternative Model for Personality Disorders. ICD-11 (World Health Organization 2019/2021), on the other hand, uses a new model focusing on severity of disorder (mild, moderate or severe), based on distress or impairment in various life domains. This article will cover both the categorical and dimensional perspectives; thus, we will mostly use the DSM-5-TR approach.

The ten (plus two) personality disorders

The diagnosis of a personality disorder first requires meeting a general criterion of an enduring pattern of inner experience and behaviour that deviates markedly from the expectations within the individual's culture. This pattern is manifested in two (or more) of the following areas: cognition (i.e. ways of perceiving and interpreting one's self, other people and events), affectivity (i.e. the range, intensity, lability and appropriateness of emotional response), interpersonal functioning (i.e. social relationships) and impulse control. The pattern is also inflexible and pervasive across a broad range of personal and social situations and it tends to be stable and long-lasting (chronic course). Its onset can usually be traced back at least to adolescence or early adulthood, ultimately leading to clinically significant distress or impairment in social, occupational or other important areas of functioning (American Psychiatric Association 2022).

DSM-5-TR (American Psychiatric Association 2022) classifies ten personality disorders, divided into three clusters (A, B and C) based on similar characteristics among personality disorders within each cluster. Cluster A comprises paranoid personality disorder, schizoid personality disorder and schizotypal personality disorder. These disorders are related to odd and/or eccentric behaviour. Individuals with these disorders tend to experience interpersonal difficulties due to behaviour socially perceived as peculiar, suspicious or detached. Cluster B comprises antisocial personality disorder, borderline personality disorder, histrionic personality disorder and narcissistic personality disorder. These are characterised by dramatic or erratic behaviour, intense emotions and impulsive, theatrical, promiscuous or transgressive behaviours. Lastly, cluster C encompasses avoidant personality disorder, dependent personality disorder and obsessive–compulsive personality disorder, which are marked by anxiety and/or fearfulness. These ten personality disorders are summarised in Table 1.

Two further personality disorder diagnoses exist for individuals who meet the general criteria for personality disorder and have significant life impairment, but do not meet the criteria for any of the specific personality disorders. If the clinician diagnoses personality disorder but has a reason for not identifying one of the ten specific disorders, the assigned diagnosis would be 'other specified personality disorder', with a note added to the diagnosis explaining the reason (e.g. the person displays mixed personality traits). If the clinician cannot identify specific reasons for the displayed personality functioning, the diagnosis would be 'unspecified personality disorder'. These two might be the most prevalent personality disorder diagnoses (American Psychiatric Association 2022).

Diagnosis

The categorical approach

The categorical approach to diagnosis of personality disorders has a long history, following the traditional medical view of classifying pathologies as present or absent. According to this approach, a person has a particular disorder if they meet a certain number of associated criteria (American Psychiatric Association 2022). The categorical approach suggests that personality disorders are qualitatively distinct and constitute discrete clinical syndromes. Although this diagnostic approach might be too simplistic for the documented complexity of personality functioning (e.g. comorbidities), some authors state that this approach simplifies the assessment and clinical decision-making processes and facilitates communication and case conceptualisation (e.g. Trull 2005).

The dimensional approach

In section III of DSM-5-TR the American Psychiatric Association (APA) proposes its Alternative Model for Personality Disorders, which endorses a dimensional approach to clinical diagnosis (American Psychiatric Association 2022). This perspective has been gaining relevance in recent years, considering the evolving manifestations of personality disorders, their frequent comorbidity with other disorders (e.g. configurations of two or more personality disorders; co-occurrence with emotional disorders) and the high prevalence of cases that do not meet criteria for any specific personality disorder but the symptoms lead to impairment (Brown 2005).

The APA's dimensional approach asserts that personality disorders reflect degrees of dysfunction of personality traits that vary on a continuum from healthy to unhealthy. This perspective recognises the heterogeneity of symptoms and the difficulty in establishing clear limits between discrete nosological diagnoses. The dimensional model requires the evaluation of impairment of personality functioning related to the self (e.g. identity and self-direction) and others (e.g. empathy and intimacy). A person

TABLE 1 Personality disorders adapted from DSM-5-TR

Personality disorder	Brief description	View of self	View of others	Pathological traits
Cluster A				
Paranoid	Suspiciousness about others, seeing them as mean or spiteful. Often assuming people will harm or deceive, and not trusting others or becoming close to them.	Innocent, noble, vulnerable	Abusive, malicious, mean	Suspiciousness and guardedness; hostility
Schizoid	Being detached from social relationships and under-expression of emotions. Not seeking close relationships, choosing to be alone and apparently not caring about others' praise or criticism.	Self-sufficient, solitary	Intrusive, malicious, mischievous	Tendency to sacrifice intimacy to preserve autonomy; a tendency to establish emotional attachments to objects or animals; withdrawn, reclusive, isolated
Schizotypal	Being very uncomfortable in close relationships, having distorted thinking and eccentric behaviour. Having bizarre beliefs or peculiar behaviour. Social anxiety.	Lonesome, uncomprehended, visionary	Confusing, unreliable, weird, untrustworthy	Cognitive and perceptual dysregulation, unusual beliefs and experiences, eccentricity, restricted affectivity, withdrawal, suspiciousness
Cluster B				
Antisocial	Disregard or violation of others' rights. Not conforming to social norms, repeatedly lying or deceiving others, or acting impulsively.	Loner, autonomous, self-assured, strong	Vulnerable, usable, disposable	Manipulativeness, callousness, deceitfulness, hostility, risk-taking, impulsivity, irresponsibility
Borderline	Instability in personal relationships, intense emotions, poor self-image and impulsivity. Efforts to avoid being abandoned, repeated suicide attempts, display of inappropriate intense anger or ongoing feelings of emptiness.	Unstable, unlovable, empty, helpless	Abandoner	Emotional lability, anxiousness, separation insecurity, depressivity, impulsivity, risk-taking and hostility
Histrionic	Excessive emotion and attention-seeking. Being uncomfortable when not the centre of attention. Use of appearance, shifting or exaggerated emotions to draw attention to themselves.	Glamorous, fascinating	Admirer, seducible, receptive	Excessive/superficial emotionality; sexual/emotional manipulation; craving stimulation
Narcissistic	Need for admiration and lack of empathy for others. A grandiose sense of self-importance, a sense of entitlement, taking advantage of others or lacking empathy.	Grandiose, superior, important, special, unique	Inferior, admirer	Grandiosity, attention-seeking
Cluster C				
Avoidant	Extreme shyness, feelings of inadequacy and sensitivity to criticism. Being unwilling to get involved with people who might not like them. Very worried about being criticised or rejected, seeing themselves as not good enough.	Socially inept, personally unappealing or inferior; shameful	Critical, demanding, superior	Anxiousness, withdrawal, anhedonia, intimacy avoidance
Dependent	Needing people to take care of them, showing submissive or clingy behaviour. Difficulties in making daily decisions without reassurance from others or feeling helpless when alone for feeling unable to take care of themselves.	Weak, needy, helpless, incompetent	Ideal, strong, competent	Difficulty being alone; oversensitivity to criticism; pessimism and lack of self-confidence
Obsessive–compulsive	Being worried about orderliness, perfection and control. Overly focused on details or schedules, may work excessively not allowing time for leisure or friends, or may be inflexible in morality and values.	Responsible, controlled, thrifty	Irresponsible, unpredictable, disorganised, incompetent	Rigid perfectionism, perseveration, intimacy avoidance, restricted affectivity

After American Psychiatric Association (2022).

with healthy personality functioning has a positive sense of self, with regulated affect and a fulfilling social life, whereas impairment of functioning results in a disorganised or unclear sense of self, with dysregulated affect and social difficulties. Moreover, the dimensional model also calls for the assessment of personality traits that are grouped into five polarised domains (negative affectivity versus emotional stability; detachment versus extraversion; antagonism versus agreeableness; disinhibition versus conscientiousness; and psychoticism versus lucidity). These five personality trait domains comprise a total of 25 more specific personality facets (e.g. submissiveness, anxiousness, grandiosity). Although the dimensional approach to personality disorder diagnosis has been gaining relevance, there is still some resistance to adopting this proposal, mostly because of its complexity.

TABLE 2 Pros and cons of the categorical and dimensional approaches to personality disorders

Approach	Pros	Cons
Categorical		

Personality disorders are either totally present or totally absent, as opposed to being present to a certain extent	Makes assessment easier
	  Simplifies communication
	  Facilitates conceptualisation
		Too simplistic for human functioning
		Less space for non-specified problems

Dimensional		
Personality disorders exist on a continuum from healthy to unhealthy and to a certain extent	Allows choosing proper treatments based on the degree and features of the disorder Captures subclinical traits and symptoms Captures a more accurate and complete assessment	Poor diagnostic reliability High diagnostic comorbidity

After American Psychiatric Association (2022).

Table 2 summarises pros and cons of the categorical and dimensional approaches.

Genetics, onset and development

Genetic epidemiological studies have suggested that all personality disorders show some degree of heritability, typically ranging from 21 to 77% (Reichborn-Kjennerud 2010). The only published population-based multivariate twin study that included all personality disorders (Kendler 2008) showed that the three identified genetic risk factors for personality disorders do not mirror the cluster A, B and C typology. Instead, one genetic factor indicates a general susceptibility for personality disorder and/or negative emotions, whereas the other two are more specific and linked to high impulsiveness/low agreeableness and introversion. Interestingly, the clusters grouping is strongly reflected in environmental risk factors, indicating that environmental factors may be behind the co-occurrence of cluster A, B and C personality disorders.

It is well-established that personality disorders typically have onset in adolescence or early adulthood. Adolescence seems to be a crucial period for the emergence of personality disorder, possibly because of the cognitive, emotional and social developmental changes typical of this period (e.g. improvement in abstract thinking and reasoning, development of a sense of self, importance of peers and interpersonal relationships outside the family, autonomy from parents, puberty and body changes). Personality traits in childhood and adolescence seem to show continuity into adulthood, despite being dynamic throughout life. Moreover, personality disorders show a significant variability in rates and directions over time, making it difficult to predict consistent trajectories (Wright 2011).

DSM-5-TR (American Psychiatric Association 2022) allows for the assignment of a personality disorder diagnosis to individuals under the age of 18, although many clinicians are hesitant to do so.

Despite evidence of the existence of personality disorders in adolescents and their recognition by most psychologists who work with this population, less than 10% of them diagnose personality disorders in adolescents (Laurenssen 2013). This reluctance may be due to dysfunctional features that overlap with typical adolescent behaviour, as well as the stigmatising effect of labelling an adolescent with a personality disorder diagnosis (Laurenssen 2013). With the exception of antisocial personality disorder, which is preceded by conduct disorder in adolescence, the other personality disorders can be identified at an early age (American Psychiatric Association 2022). A justified diagnosis in adolescence, when features have been present for at least 1 year, can be useful to identify adolescents for appropriate treatment and prevent the evolution of pathological traits into a more severe condition (Laurenssen 2013).

Adverse childhood experiences and neurobiology of personality disorders

Adverse childhood experiences (ACEs) such as physical, sexual or emotional abuse or household dysfunction have been shown to have a negative impact on personality development and to increase the risk for personality disorders (Solmi 2021). Considering that personality disorders have a developmental course, the familial context and interactions can work as models of how to perceive the world, other people and the self. Secure attachment can have a protective effect, promoting positive relational development, self-esteem and clarity of self-concept (Kawamoto 2020). ACEs have been linked to structural and functional changes in the brain, including alterations in the development of brain regions involved in the regulation of emotions, cognition and stress sensitivity (Herzog 2018). These changes may be related to the development of personality disorders, since various and distinct brain regions and neurocircuits are involved and interrelated in these cases.

Evidence has supported the complementarity of brain regions particularly in personality functioning. Briefly, the prefrontal brain regions are important in understanding personality, as they are recruited for the most high-level cognitive tasks (Fuster 2008). Prefrontal brain regions are involved in language, attention, memory, response conflict, novelty processing, temporal ordering, explicit memory, reality monitoring and metamemory. These regions are also connected to the limbic system (MacNamara 2018). In turn, the dorsolateral prefrontal cortex is associated with working memory, behavioural modification to pursue goals, representation of past events, future planning and prediction, and emotion regulation (Corbetta 2008; MacNamara 2018). The ventrolateral prefrontal cortex is implicated in semantic processing, object categorisation, response selection and response inhibition (Corbetta 2008). Moreover, the medial prefrontal cortex is often recruited for emotional tasks and processing (Phan 2004) and the dorsomedial prefrontal cortex is related to self-awareness, perspective-taking and effective social behaviour (Miller 2007). Other brain regions that appear to make important contributions to personality include the cingulate cortex and insular cortex. The cingulate cortex has been associated with the default mode network (e.g. daydreaming, retrieving memories), as well as with emotional valence and autobiographical memory retrieval (Maddock 2003).

Psychological treatments for personality disorders

For a long time, personality disorders were said to be untreatable. Borderline personality disorder, in particular, was a debilitating condition, among the most difficult to treat. However, four therapeutic interventions have shown evidence of efficacy for personality disorders: two are based on the psychodynamic model – mentalisation-based treatment and transference-focused treatment – and two are based on the cognitive–behavioural model – dialectical behaviour therapy and schema therapy (Cristea 2017). Cognitive–behavioural therapy (CBT) has also produced noteworthy outcomes in working with families of individuals with personality disorders, particularly in the cases of antisocial, narcissistic (Wang 2008) and borderline personality disorders (Darrow 2022). Table 3 compares the evidence base for these therapies in the treatment of personality disorders. Cluster B personality disorders have received more attention than the other clusters. Intervention studies for the treatment of cluster A disorders are scarce, perhaps because individuals with these disorders may be less inclined to seek treatment. Overall, studies suggest that more intensive approaches may be helpful for people with cluster A personality disorders (Johnson 2020). The same applies to cluster C personality disorders, although few studies have focused on therapeutic interventions for these patients (Johnson 2020). In this article, we will focus on interventions based on the cognitive–behavioural model.

Cognitive–behavioural therapy for personality disorders

CBT understands human behaviour in terms of the interaction between the person and their multiple/diverse contexts. The way a person thinks, and most of all how information is processed and interpreted, is key to CBT. In CBT, thoughts, emotions and behaviours are considered to be interdependent, with behaviours being based on interpretations of reality and related emotions. Additionally, CBT asserts the importance of the development of cognitive structures throughout life, and especially during early years, and how these cognitive structures influence the way information about the self and the world is processed, resulting in more or less biased perceptions of the world (Beck 2015).

TABLE 3 Evidence base for psychological treatments for personality disorders

Therapy	Evidence base	Outcomes
Mentalisation-based treatment	Randomised controlled trials (RCTs) and systematic reviews have shown efficacy in treating borderline personality disorder and other personality disorders	Reduction in symptom severity and self-harm. Increased emotion regulation, interpersonal functioning and overall quality of life
Transference-focused treatment	RCTs primarily focused on borderline personality disorder	Improvements in personality and psychosocial functioning, personality organisation and quality of life
Dialectical behaviour therapy	Numerous RCTs and meta-analyses have provided strong evidence base for treating borderline personality disorder and associated symptoms	Reduced impulsive behaviours, suicide and self-harm behaviours; enhanced emotional stability and adaptive coping mechanisms
Schema therapy	Growing evidence from RCTs and clinical trials, with potential for treating personality disorders, including borderline, avoidant and narcissistic personality disorders	By targeting underlying patterns, schema therapy can reduce maladaptive coping and improve general symptoms and quality of life
Cognitive–behavioural therapy	Recognised for its versatility and effectiveness across multiple disorders. RCTs have shown its efficacy for personality disorders	Improvements in managing specific symptoms of personality disorder, impulsivity, anxiety and depression, and general distress

Patients with personality disorders tend to require long-term therapy because they present rigid and pervasive patterns of thinking, feeling and behaving that are difficult to counteract and challenge in the clinical setting. They also tend to avoid or block painful emotional experiences, and interpersonal difficulties can be an obstacle when trying to build a fruitful therapeutic relationship (Young 2003). Some heuristic signs that may point to the presence of personality disorders are described in Box 1.

Given the challenges that come with treating individuals with personality disorders, guidelines on CBT can be helpful when working with this population. Such guidelines (e.g. Young 2003; Beck 2015) include:

- collaborative case conceptualisation of the individual's functioning, which results in more effective intervention
- the therapist and the patient working in collaboration to achieve goals (some patients present vague and hard-to-define goals)
- establishing a solid therapeutic relationship, which is key to the process: this can be challenging with people with personality disorder, often turning this goal into a primary focus in therapy
- gradually increasing the patient's self-efficacy appraisals
- finding creative ways to encourage patients to do homework assignments
- guiding and teaching patients to be aware of their automatic thoughts and to express and report their feelings, which will be helpful to the therapeutic process
- ensuring that therapists monitor their own cognitions and emotions throughout the therapeutic process.

Several CBTs have proved to be effective in treating people with personality disorders (Beck 2015). Here we will focus on schema therapy, cognitive interpersonal therapy and dialectical behaviour therapy.

Schema therapy

Schema therapy revolves around five schema-related constructs: basic emotional need, early maladaptive schemas, schema domains, schema processes (surrender, avoidance, and overcompensation) and schema modes. For further information, see Young et al (2003).

Needs, early maladaptive schemas and schema domains

Five core emotional needs are postulated as universal and required to be met for psychologically healthy development: safety and nurturance; autonomy and competence; freedom to express needs and emotions; spontaneity and play; and realistic limits and self-control. If any of these needs is not met in a stable and predictable way during childhood, one or more early maladaptive schema may result. Early maladaptive schemas are dysfunctional and extremely stable patterns of cognition, memories and body reactions regarding oneself and others that serve as a guide to interpreting the world in several domains. These schemas are developed at an early age and elaborated across the life course, becoming the core of the individual's self-concept; through distorting relevant information processing, early maladaptive schemas are self-perpetuating and resistant to change.

In total, 18 early maladaptive schemas have been proposed, grouped into five broad schema domains corresponding to the five core emotional needs that may not have been properly met: disconnection

---

BOX 1 Heuristic signs that may point to the presence of personality disorder

- The patient (or a significant other) reports that they 'have always been like this'.
- The patient do not adhere to the therapeutic programme/protocol. Although non-adherence is common in many disorders, persistent non-adherence should be taken as a clue indicating the need for further exploration of personality disorder features.
- Therapy seems to have come to a sudden stop for no apparent reason. A clinician working with a patient with a personality disorder (very often, undiagnosed) can often help them to reduce symptoms of anxiety or depression, but the patient can block further therapeutic work.
- The patient seems entirely unaware of the effect of their behaviour on others. Such individuals report the responses

of others but fail to address any provocation or dysfunctional behaviour on their part.
- The patient agrees with the tasks of therapy by expressing interest and intention to change but fails to follow through on agreed actions. The importance of change is acknowledged, but the patient manages to avoid making any actual changes.
- The patient's personality problems appear to be acceptable and 'natural' for them. The patient sees the problems as a fundamental aspect of 'themselves' and makes statements such as 'This is who I am – this is how I have always been. I cannot imagine being any other way' (egosyntonic behaviours).

(Adapted from Beck, 2015)

TABLE 4 Examples of maladaptive schemas, organised by domain and unmet needs

Unmet need	Schema domain	Early maladaptive schema	Associated perceptions and behaviour
Need for safety and nurturance	Disconnection and rejection (expectation that one's emotional needs will not be met in a predictable manner)	Defectiveness/shame	Perception of being defective, bad, unwanted and inferior, or unlovable to significant others if exposed
		Abandonment	Perception that significant others are unstable or unreliable, and that they will not continue to provide emotional support
Need for autonomy and competence	Impaired autonomy and performance (the perception that one is not able to survive, to function or to perform independently)	Dependence/ incompetence	Perception of being unable to deal with one's own responsibilities in a competent way, without significant the help from others
		Vulnerability to harm and illness	Exaggerated fear that imminent catastrophes will happen and one will not be able to prevent them (e.g. diseases, accidents)
Need for realistic limits and self-control	Impaired limits (difficulties in establishing internal limits, responsibility towards others or goals)	Entitlement/grandiosity	The belief that one is superior to others, entitled of special rights or not bound by the rules of social reciprocity
		Insufficient self-control/ self-discipline	Difficulties in controlling (or refusal to control) one's emotions and impulses, and in tolerating frustration in achieving personal goals
Need for freedom to express needs and emotions	Other-directedness (excessive focus on what others want and feel at the expense of one's own needs)	Self-sacrifice	Excessive voluntary efforts to meet others' needs at the expense of one's own gratification
		Approval-seeking/ recognition-seeking	Excessive focus on having the approval and recognition of others; sense of self-esteem is primarily dependent on others
Need for spontaneity and play	Over-vigilance and inhibition (suppression of one's spontaneous internal experience or living by rigid rules and expectations)	Negativity/pessimism	Excessive emphasis on negative aspects of life (e.g. pain, death, loss, conflict) and minimisation of the positive aspects
		Punitiveness	Belief that people should be punished for making mistakes or for not meeting one's expectations and standards

and rejection; impaired autonomy and performance; impaired limits; other-directedness; and, finally, over-vigilance and inhibition (some examples are given in Table 4; for additional information see Young (2012)). Young et al (2003) proposed that biology and temperament and the interaction with early life experiences play a role in the development of these schemas. For example, a more shy, inhibited and anxious child, raised in an overprotective family that does not encourage independent functioning, has an increased likelihood of developing the belief that they are unable to handle everyday responsibilities competently without the help of other people.

Schema processes: surrendering, avoidance and overcompensation

The three distinct schema processes of surrendering, avoidance and overcompensation allow an understanding of how schemas work and are perpetuated over time. Schema surrendering involves reinforcing an early maladaptive schema through cognitive distortions and self-defeating behaviours (including the maladaptive selection of a partner). Schema avoidance occurs when the schema is activated or about to be activated and the individual avoids schema-related contents to reduce or avoid the arousal of negative emotions and/or experience of schema-related thoughts and memories. Thoughts can be avoided (cognitive avoidance, e.g. blocking memories that trigger the schema), as can emotions (emotional avoidance, e.g. self-harm to numb emotional pain) and behaviours (behavioural avoidance, e.g. social isolation,

quitting a job). Schema overcompensation is observed in cognitive or behavioural styles that appear the far opposite of the early maladaptive schema that is being compensated. For example, people who have a failure schema (belief that they are a failure, will inevitably fail or are less successful than others) might compensate for that by being overdisciplined and overstudying/overworking to achieve the best grades and performance among peers (Young 2003).

The fictitious case vignette in Box 2 describes Sam, a 35-year-old man whose early maladaptive schemas are defectiveness/shame, failure and emotional deprivation.

Schema modes

Given the resistance and challenges encountered when working with patients with more severe, rigid and unstable personality functioning, particularly those with specific cluster B features, schema therapy was enlarged to include schema modes. Schema modes are defined as global styles of functioning in specific contexts that aggregate early maladaptive schemas and schema processes. In other words, schema modes describe an individual's temporary emotional, cognitive and behavioural state at a given moment in time. Four categories of schema mode are proposed: innate child modes (e.g. vulnerable child, angry child, impulsive/undisciplined child and contented child), maladaptive parent modes (e.g. punitive parent, demanding or critical parent), maladaptive coping modes (e.g. compliant

BOX 2 Case vignette: early maladaptive schemas of defectiveness/shame, failure and emotional deprivation

Sam is 35 years old and the second of two male siblings. From an early age, his father has always been very critical and abusive. Sam always tried hard at school to achieve good marks, but his father never recognised his efforts, constantly saying that he 'could do better'. When he did something like breaking a glass or being late, his father would say 'You're a mess! Don't be such a **** idiot! Boy, you're no good', particularly when his father was drunk, which happened often. On these occasions and unpredictably, he would physically beat Sam. He had not wanted another child when his wife became pregnant with Sam, and he would say that Sam was not his son. Besides the frequent criticism, Sam's father often drew comparisons between the siblings: 'You two are so different that you don't seem to be sons of the same father'. He repeatedly said that Sam's brother was a perfect son owing to his academic excellence, popularity among peers and promising achievements in rugby. This continuous comparison, along with the constant criticism and physical aggression, led Sam to feel himself to be unlovable, inferior and unworthy, and he sometimes had thoughts about ending his own life. He constantly strove to meet his father's expectations and gain his approval, which never happened. Sam's mother presented long-term depressive symptoms, and although she was caring and loving, she did not defend Sam from his father's criticism and she was often emotionally unavailable. She was herself a victim of her husband's verbal aggression.

Sam tried very hard to achieve and he was a good student (although highly anxious and perfectionistic) at university. He graduated in economics and today he has a high position in a recognised international firm. He has never married or been in a long-term relationship. He lives for his work and seldom goes out with friends. He believes that something is wrong about him and that no one will like him or love him for who he is (defectiveness/shame schema). Moreover, and regardless of his professional success, he believes that his work is never good enough (failure schema) and that sooner or later people will find out that he is a fraud. In his romantic relationships he believes that his needs will never be met (emotional privation schema). Sam is highly perfectionistic, especially on his work (unrelenting standards schema and schema overcompensation). When he does not meet his self-imposed high standards, he becomes very self-critical and hard on himself (schema surrendering) and he isolates from others, sometimes failing to go to work (schema avoidance). He has never had long and meaningful romantic relationships because he thinks that people will reject him if they really get to know him. His relationships are mostly superficial and he often avoids social interactions (schema avoidance). He lives alone and often feels sad and lonely for not having a partner or children. When he is romantically interested in a woman, he lies about himself to appear more intelligent and confident than he believes he is, trying to impress her

(schema overcompensation). Sam feels happy when women show an interest in him, but he later feels anxious, worrying that they will find out about his true self and be disappointed. Sam sought a therapist because, since he was promoted 7 months ago, he has been increasingly anxious and more perfectionistic than ever. This perfectionism, adherence to rigid rules and order, and reluctance to delegate tasks are now making him fall behind his deadlines. Sometimes he does not go to work and he has already been told off by his superiors. Additionally, he feels lonely and sad most of the time, with recurrent ideas that life lacks value.

In the first psychotherapy sessions, Sam shared superficial details about himself, and predominantly expresses feelings of anxiety and deep sadness. He fills criteria for major depressive disorder (moderate, single episode). He fails to see how his perfectionism and coping strategies are getting in the way, and his understanding is that his problems have to do with being unable to effectively handle all the work and demands of his new position. He criticises himself for being depressed. He says he has no time to come to therapy and worries that it will make him fall even further behind his deadlines. In the therapeutic relationship he seems a bit detached and he states that he does not see how the therapist may help him, as he is 'the one who has to help himself'.

surrender, detached protector and over-compensator) and the healthy adult mode (Young [2003]).

The goal of schema therapy is to help patients learn how to get their core needs met in a healthy way. With this aim, schema therapy seeks to enhance schema flexibility and schema change, blending cognitive, experiential, interpersonal and behavioural therapeutic strategies. In terms of schema modes, the aim of meeting emotional needs in a balanced way with these four therapeutic techniques is achieved, strengthening the healthy adult mode. This mode will then take care of the vulnerable child mode, set limits to the angry and impulsive child modes, and moderate strategies derived

from maladaptive coping and parent modes. Substantial evidence has been gathered for the efficacy of schema therapy delivered individually, in groups or with couples in the treatment of personality disorders (Bakos [2015]).

Therapeutic techniques of schema therapy

The four types of therapeutic technique are briefly described in Table 5, along with examples of techniques to weaken the defectiveness/shame schema of Sam, the patient in our clinical vignette. Interwoven with the four types of technique are two prominent processes concerning the therapeutic

TABLE 5 Psychotherapeutic strategies used in schema-focused therapy to weaken early maladaptive schemas, with reference to the clinical vignette

Strategies	Implementation and objectives	In Sam's case
Cognitive techniques	Their aim is to test the validity of the schema, through a rational/logic perspective. They include: reviewing evidence that supports the schema; developing awareness about the mechanisms that disqualify/ignore/discard schema-incongruent information (e.g. cognitive distortions) and thus maintain the schema; reviewing and integrating information that counteracts the schema and related coping tendencies.	Exploring with Sam other relationships that made him feel valued and loved as he was.
Experiential techniques	These techniques usually involve activation of the schema in the session through the imagery of painful memories, in ways that allow the patient to meet their needs. The therapist can guide the patient in an imaginary dialogue with their parents to express what the patient felt and what they needed.	Inviting Sam to imagine himself at a younger age, talking to his father and expressing how his father's words made him feel bad. Then, introducing 'healthy Sam' in the imagery exercise and helping 'vulnerable Sam' in answering to his father.
Interpersonal techniques	They are based on the patient's interactions with others, in which schemas can interfere. They may include using the therapeutic relationship to counteract the schemas (limited reparenting) or arranging group therapy experiences so that the patient has a comforting environment to help them break negative interpersonal patterns.	Encouraging Sam to be more vulnerable and open with close friends who appreciate him.
Behavioural techniques	They are used to encourage the patient to change long-term schema-driven behaviours and to allow themselves to behave in ways that may contradict their schemas. This usually includes breaking schema surrender, avoidance and overcompensating strategies, and increasing healthy coping responses. It may also include making environmental changes or developing new skills.	Encouraging Sam to cultivate and remain in close relationships with people he fears will reject him if they know him deeply.

relationship and considered distinctive features of schema therapy: limited reparenting and empathic confrontation. Limited reparenting involves shaping the therapeutic relationship (within the boundaries of a professional relationship) in a way that it meets core emotional needs that had not been met in early childhood. Empathic confrontation consists of validating and empathising with the individual's beliefs and, at the same time, confronting them with their distorted and dysfunctional patterns of thinking and behaviour, emphasising the need to change their behavioural patterns to interrupt negative cycles and suffering (Young 2003).

Cognitive interpersonal therapy

CBT for personality disorders is firmly based on intervening in dysfunctional interpersonal processes (Safran 1990). These processes depend on internal cognitive models about how the self should be in relationships with others, and those models usually originate in dysfunctional early relational experiences with significant others. These internal working models are called dysfunctional interpersonal schemas (Safran 1990). Perceptions resulting from the activation of these dysfunctional interpersonal schemas typically lead to maladaptive attitudes and behaviours towards others, which elicit behaviours from others that reinforce the pre-existing interpersonal schema. These maladaptive interpersonal processes have been conceptualised as dysfunctional cognitive interpersonal cycles (Safran 1990).

Cognitive interpersonal cycles

As therapy occurs in an interpersonal context, the therapist may become involved in cognitive interpersonal cycles, elicited by the relational behaviour of the patient. When this occurs, the rigid and/or maladaptive behaviour of the patient triggers specific emotions in the therapist, leading to tendencies to react in a certain manner. If the therapist is not aware of the negative emotions and tendencies to react that are elicited by the patient's interpersonal behaviour, the possibility that the therapist will be controlled by a dysfunctional interpersonal cycle increases and the therapeutic relationship become just another problematic context in the patient's life. For example, people with narcissistic personality features may behave with the therapist in an arrogant manner, criticising the therapy and the therapist. This behaviour usually triggers feelings of anger in the therapist. If they react accordingly, becoming defensive towards the patient, this will reinforce the patient's schema (e.g. that other people are abusive and they must defend themselves) and it will certainly affect in the quality of the therapeutic alliance.

To avoid getting caught in dysfunctional cognitive interpersonal cycles, therapists should cultivate a

self-observant attitude and be trained to identify their own emotional reactions to the patients' behaviours. Acting in a way that is opposite that elicited by the patient's interpersonal cycle will offer the patient the possibility of experiencing new healthy ways of interacting with people that can then be generalised and used outside therapy. In this context, ruptures in the therapeutic relationship may represent an opportunity for metacommunication about what has happened, and the repair of the therapeutic rupture and relationship may provide important disconfirming information (Safran 1990).

The therapeutic process

Cognitive interpersonal therapy revolves around disconfirming the patient's dysfunctional interpersonal schemas by establishing a relationship that offers the patient an experience of new and healthy interpersonal behaviour within a safe relationship. Initially, the therapist should elicit detailed autobiographical episodes, search for links between thoughts, emotions and actions, and collect autobiographical memories to understand the underlying interpersonal schemas. Then, collaboratively with the patient, the therapist forms a hypothesis about the schemas and plans for change. The efficacy of metacognitive interpersonal therapy for personality disorders has been shown in a sample of young adults (Popolo 2018).

Dialectical behaviour therapy

Dialectical behaviour therapy (DBT) was initially proposed by Marsha Linehan to help women with chronic suicidal behaviours who met criteria for borderline personality disorder (Linehan 1993). Nonetheless, DBT skills training may be helpful and effective in several disorders, particularly those with acute emotion dysregulation (Linehan 1993). This approach is included in CBT interventions, extending the clinical focus on cognitive restructuring and behaviour modification to evidence-based transdiagnostic processes such as acceptance, mindfulness, commitment and self-compassion. DBT case conceptualisation is based on biosocial theory, which posits that emotion dysregulation is a product of a reciprocal interaction between biological and environmental factors (Linehan 1993). That is, some people might be more biologically prone to experience heightened emotional reactivity and some environments can exacerbate that tendency. These environments are usually marked by experiences of invalidation in early life, when caregiving adults communicated that the child's emotions and internal experiences were wrong, inadequate, pathological or exaggerated. The interaction between being emotionally sensitive and living in a context that does not understand or does not validate one's emotional states leads to difficulties in tolerating distress, establishing realistic goals and oscillating between emotional inhibition and extreme emotional displays (Linehan 1993).

Dialectics

Generally, 'dialectics' means that an essential idea (thesis) implies an opposite position (antithesis). The process of change happens in the resolution of these opposites into a synthesis. Although people can talk about opposite parts independently, they cannot make sense of the reality without considering the whole, because reality is holistic. A dialectical view of the world defines the theory and underlies the practice of DBT. For example, the characteristic behaviours of borderline personality disorder can be conceptualised in terms of three dialectical dimensions: emotional vulnerability versus self-invalidation; unrelenting crises versus inhibited grieving; and active passivity versus apparent competence. The intense discomfort at the extremes of each dimension leads to a dialectical dilemma, or a persistent vacillation between the extremes, with a concomitant inability to achieve balance or synthesis.

In terms of therapy, a dialectical focus affects therapist–patient interactions at two levels: (a) the therapist is aware of the dialectical tensions and balances that occur in the therapeutic relationship and carefully integrates opposing strategies and therapeutic positions in each therapeutic interaction; (b) the therapist teaches the patient dialectical reasoning and behaviour by questioning the individual in ways that open up new avenues of thinking and acting, by presenting alternatives ways of thinking or by modelling dialectical behaviour. The therapist must use dialectical strategies to lead the patient to attain a balance between both opposites. Such strategies also involve opposites: validation versus problem-solving; acceptance versus change; and irreverence versus reciprocity (Linehan 1993). DBT applies various CBT techniques (e.g. behavioural assessment, exposure, cognitive modification, contingency management) and, at the same time, focuses on dialectical work, radical acceptance of events and situations, change, therapy-interfering behaviours and the therapeutic relationship.

Stages and delivery of DBT

DBT follows a staged model of treatment that prioritises the problems that should be addressed in therapy, considering how they affect the patient's life. In the pretreatment, the therapist and the patient clarify treatment boundaries

TABLE 6 Stages of dialectical behaviour therapy

Stage	Objectives	Examples of target problems
1	Addressing behaviours that are essential to increase immediate life expectancy, behavioural control and ensure sufficient connection to treatment	Self-harm behaviours, suicide behaviours, drug and alcohol misuse and therapy-interfering behaviours
2	Working on difficult emotional experiences and connection to the environment	Trauma, post-traumatic stress disorder symptoms, panic attacks
3	Developing self-respect and an enduring sense of connection, and resolving daily problems	Moving towards a balanced life, trusting oneself and being able to cope with ups and downs
4	Growing a sense of completeness to feel freedom, joy or fulfilment	Pursuing a life that holds value, meaning and is worth living

(e.g. commitment to attend sessions, payment, ethical framework) and agree to collaborate in pursuing essential goals. The objective of the pretreatment is to assure engagement in therapy. The subsequent four stages of DBT treatment are presented in Table 6 (Linehan 1993).

Standard DBT is a multifaceted approach comprising group sessions, individual therapy, telephone coaching in emergency, engagement of family members, and consultation teams for therapists. DBT skills are taught in four modules: emotion regulation, distress tolerance, interpersonal effectiveness and mindfulness. These are the areas identified as the ones in which people with borderline personality disorder usually have most difficulties (Linehan 1993). A description of each skill domain can be found in Table 7. DBT is viewed as a treatment system in which the therapist delivers DBT to the patient, while a supervisor or consultation team delivers DBT to the therapist. Thus, consultation-to-the-therapist and consultation-to-the-patient strategies are considered an integral part of this model. The effectiveness of DBT for borderline personality disorder has been consistently recognised, and some evidence has also been shown for other personality disorders (Feigenbaum 2012).

Discussion and conclusions

People with personality disorders present pervasive and rigid cognitive, affective and behavioural patterns that should be the focus of therapeutic efforts. Working with personality disorders can be highly challenging, and therapists should be aware of the specificities of these disorders and should acquire adequate training and supervision. Clinicians can assess personality disorders according to categorical or dimensional approaches, both of which have pros and cons. The assessment and subsequent identification of personality disorders is essential to refer people to suitable psychotherapeutic treatment. Despite the usefulness of identifying general treatment recommendations across personality disorders, further research on individual personality disorders would be beneficial to enhance the existing body of research.

CBT models focus on cognitions, emotions and dysfunctional behavioural patterns that people have experienced throughout their lives. Among the approaches to personality disorders, three CBT approaches stand out. Schema therapy emphasises unattended emotional needs, early maladaptive schemas and schema modes and involves work on schema processes (surrender, avoidance and

TABLE 7 Dialectical behaviour therapy skills put into practice

Skills module	Objectives	Examples of exercises
Emotion regulation	Reducing vulnerability to negative emotions and building positive emotional experiences	Psychoeducation about primary and secondary emotions, diary cards, opposite action, building positive experiences
Distress tolerance	Helping people get through difficult situations without resorting to ineffective coping mechanisms	Radical acceptance, changing body chemistry (temperature, intense exercise, paced breathing, muscle relaxation)
Interpersonal effectiveness	Helping people get what they need from relationships while being respectful to the self and others; useful in maintaining and fostering healthy relationships	Relationship effectiveness, 'DEAR MAN' (describe, express, assert, reinforce, mindfulness, appear confident, negotiate), self-respect, effectiveness, validation
Mindfulness	Developing non-reactive awareness, distress tolerance and richness of emotional experiences; mindfulness draws the brain's focus to the present moment to slow down life, find inner peace and balance	Wise mind, 'what skills' (observe, describe and participate) and 'how skills' (non-judgementally, one-mindfully and effectively), breathing exercises

TABLE 8 Three cognitive–behavioural models to treat personality disorders

Therapeutic model	Focus	Therapeutic approach	Target population	Goals	Techniques	Time frame	Emphasis
Schema therapy	Identifying and challenging long-lasting patterns of thoughts, feelings and behaviour	Uses a schema-focused approach to target negative patterns and improve self-esteem and quality of life	Individuals with personality disorders and persistent emotional and behavioural problems	Challenge and change negative schemas and improve self-esteem and quality of life	Uses interconnected cognitive, experiential, interpersonal and behavioural techniques and empathic confrontation	Typically requires a long-term commitment, ranging from 1–2 years of weekly therapy	Emphasises change through the identification and challenge of negative patterns of thinking, feeling and behaviour
Cognitive interpersonal therapy	Identifying negative emotional and behavioural patterns in interpersonal relationships	Integrates interpersonal and cognitive processes to understand and change dysfunctional patterns	Individuals with depression, anxiety, relationship issues and personality disorders	Enhance insight and understanding of negative patterns, improve interpersonal relationships and increase well-being	Interpersonal process recall, emotional processing and cognitive restructuring	Typically requires a shorter-term commitment, with treatment lasting between 10–20 sessions	Emphasises the integration of interpersonal and cognitive processes to gain insight and understanding into dysfunctional patterns of thinking, feeling and behaviour
Dialectical behaviour therapy	Emotion regulation and improvement of interpersonal relationships	Combines elements of cognitive-behavioural therapy with mindfulness-based techniques	Individuals with emotion dysregulation, suicidal behaviour and personality disorders, particularly borderline personality disorder	Decrease suicidal and self-harm behaviour and improve emotion regulation and interpersonal relationships	Includes mindfulness, distress tolerance, emotion regulation and interpersonal effectiveness skills	Usually requires long-term commitment, ranging from 1–2 years of weekly or twice-weekly therapy	Balance between acceptance and change by helping individuals learn to accept and regulate their emotions while also promoting change in problematic behaviours

compensation) and the development of the healthy adult mode to enhance schema flexibility. Cognitive interpersonal therapy is focused on disconfirming patients' dysfunctional interpersonal schemas through gradual development of healthy social relationships. DBT is a multifaceted treatment approach committed to teach essential skills for coping with emotion dysregulation and interpersonal difficulties. A summary of these therapies can be found in Table 8.

CBT has proven to be effective in reducing symptoms and improving functioning in various personality disorders. Nevertheless, further research is warranted to ascertain its efficacy for specific disorders or clusters of disorders and to clarify the mechanisms of change involved.

Data availability

Data availability is not applicable to this article as no new data were created or analysed in this study.

Acknowledgements

C.C. is particularly grateful to Professor Dr Cristina Canavarro and Dr Ana Dias da Fonseca for their continuous encouragement and support, and to Professor Dr Ana Paula Matos for her continuing supervision in CBT.

Author contributions

D.C.: conceptualisation, writing (original draft); P.C.: conceptualisation, writing (review and editing), validation, supervision; D.R., M.d.C.S. and C.C.: conceptualisation, writing (review and editing), validation.

Funding

This study was supported by the Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (UIDB/PSI/00730/2020), University of Coimbra.

Declaration of interest

C.C. is a member of the *BJPsych Advances* editorial board but did not take part in the review or decision-making process of this paper.

References

American Psychiatric Association (2022) *Diagnostic and Statistical Manual of Mental Disorders* (5th edn, text revision) (DSM-5-TR). APA.

Ansell EB, Wright AGC, Markowitz JC, et al (2015) Personality disorder risk factors for suicide attempts over 10 years of follow-up. *Personality Disorders: Theory, Research, and Treatment*, **6**: 161–7.

Bakos DS, Gallo AE, Wainer R (2015) Systematic review of the clinical effectiveness of schema therapy. *Contemporary Behavioral Health Care*, **1**: 11–5.

Beck AT, Davis DD, Freeman A (2015) *Cognitive Therapy of Personality Disorders* (3rd edn). Guilford Press.

Brown TA, Barlow DH (2005) Dimensional versus categorical classification of mental disorders in the fifth edition of the diagnostic and statistical manual of mental disorders and beyond: comment on the special section. *Journal of Abnormal Psychology*, **114**: 551–6.

Corbetta M, Patel G, Shulman GL (2008) The reorienting system of the human brain: from environment to theory of mind. *Neuron*, **58**: 306–24.

Cristea IA, Gentili C, Cotet CD, et al (2017) Efficacy of psychotherapies for borderline personality disorder: a systematic review and meta-analysis. *JAMA Psychiatry*, **74**: 319–28.

Darrow SM, Maliken AC, Piatigorsky A, et al (2022) Effectiveness of the family-based model of dialectical behavior therapy for both suicidal adolescents and young adults in an academic medical center. *Journal of Clinical Psychology*, **78**: 1422–35.

Fakhrzadegan S, Gholami-Doon H, Shamloo B, et al (2017) The relationship between personality disorders and the type of crime committed and substance used among prisoners. *Addiction & Health*, **9**: 64–71.

Feigenbaum JD, Fonagy P, Pilling S, et al (2012) A real-world study of the effectiveness of DBT in the UK national health service. *British Journal of Clinical Psychology*, **51**: 121–41.

Fok MLY, Hayes RD, Chang CK, et al (2012) Life expectancy at birth and all-cause mortality among people with personality disorder. *Journal of Psychosomatic Research*, **73**: 104–7.

Fuster JM (2008) *The Prefrontal Cortex* (4th edn). Academic Press.

Hasin D, Fenton MC, Skodol A, et al (2011) Personality disorders and the 3-year course of alcohol, drug, and nicotine use disorders. *Archives of General Psychiatry*, **68**: 1158–67.

Herzog JI, Schmahl C (2018) Adverse childhood experiences and the consequences on neurobiological, psychosocial, and somatic conditions across the lifespan. *Frontiers in Psychiatry*, **9**: 420.

Johnson BN, Clouthier TL, Rosenstein LK, et al (2020) Psychotherapy for personality disorders. In *Encyclopedia of Personality and Individual Differences* (eds V Zeigler-Hill, TK Shackelford): 4216–34. Springer.

Kawamoto T (2020) The moderating role of attachment style on the relationship between self-concept clarity and self-esteem. *Personality and Individual Differences*, **152**: 109604.

Kendler KS, Aggen SH, Czajkowski N, et al (2008) The structure of genetic and environmental risk factors for DSM-IV personality disorders: a multivariate twin study. *Archives of General Psychiatry*, **65**: 1438–46.

Kovanicova M, Kubasovska Z, Pallayova M (2020) Exploring the presence of personality disorders in a sample of psychiatric inpatients. *Journal of Psychiatry and Psychiatric Disorders*, **4**: 118–29.

Laurenssen EMP, Hutsebaut J, Feenstra DJ, et al (2013) Diagnosis of personality disorders in adolescents: a study among psychologists. *Child and Adolescent Psychiatry and Mental Health*, **7**(1): 3.

Lesage AD, Boyer R, Grunberg F, et al (1994) Suicide and mental disorders: a case-control study of young men. *American Journal of Psychiatry*, **151**: 1063–8.

Linehan M (1993) *Cognitive-Behavioral Treatment of Borderline Personality Disorder*. Guilford Press.

MacNamara A, Phan KL (2018) Neurocircuitry of affective, cognitive, and regulatory systems. In *Neurobiology of Personality Disorders* (eds C Schmahl, KL Phan, RO Friedel): 3–38. Oxford University Press.

Maddock RJ, Garrett AS, Buonocore MH (2003) Posterior cingulate cortex activation by emotional words: fMRI evidence from a valence decision task. *Human Brain Mapping*, **18**: 30–41.

Miller BL, Cummings JL (2007) *The Human Frontal Lobes: Functions and Disorders*. Guilford Press.

Phan KL, Wager TD, Taylor SF, et al (2004) Functional neuroimaging studies of human emotions. *CNS Spectrums*, **9**: 258–66.

Popolo R, Macbeth A, Canfora F, et al (2018) Metacognitive interpersonal therapy in group (MIT-G) for young adults with personality disorders: a pilot randomized controlled trial. *Psychology and Psychotherapy: Theory, Research and Practice*, **92**: 342–58.

Räisänen T, Hakko H, Riipinen P, et al (2019) Personality disorders of drivers killed in fatal motor vehicle accidents in Finland during 1990–2011. *Acta Psychiatrica Scandinavica*, **140**: 39–49.

Reichborn-Kjennerud T (2010) The genetic epidemiology of personality disorders. *Dialogues in Clinical Neuroscience*, **12**: 103–14.

Safran JD, Segal ZV (1990) *Interpersonal Process in Cognitive Therapy*. Basic Books.

Sansone RA, Sansone LA (2010) Personality dysfunction and employment dysfunction: double, double, toil and trouble. *Psychiatry (Edgemont)*, **7**(3): 12–6.

Soeteman DI, van Roijen LH, Verheul R, et al (2008) The economic burden of personality disorders in mental health care. *Journal of Clinical Psychiatry*, **69**: 259–65.

Solmi M, Dragioti E, Croatto G, et al (2021) Risk and protective factors for personality disorders: an Umbrella review of published meta-analyses of case-control and cohort studies. *Frontiers in Psychiatry*, **12**: 679379.

Trull TJ, Durrett CA (2005) Categorical and dimensional models of personality disorder. *Annual Review of Clinical Psychology*, **1**: 355–80.

Volkert J, Gablonski TC, Rabung S (2018) Prevalence of personality disorders in the general adult population in Western countries: systematic review and meta-analysis. *British Journal of Psychiatry*, **213**: 709–15.

Wang Y, Zhu M, Huang J, et al (2008) Family behavior therapy for antisocial and narcissistic personality disorders in China: an open study. *German Journal of Psychiatry*, **11**: 91–7.

Winsper C, Bilgin A, Thompson A, et al (2020) The prevalence of personality disorders in the community: a global systematic review and meta-analysis. *British Journal of Psychiatry*, **216**: 69–78.

World Health Organization (2019/2021) *International Statistical Classification of Diseases, 11th Revision (ICD-11)*. WHO (https://icd.who.int/browse11).

Wright AGC, Pincus AL, Lenzenweger MF (2011) Development of personality and the remission and onset of personality pathology. *Journal of Personality and Social Psychology*, **101**: 1351–8.

Young JE, Klosko JS, Weishaar ME (2003) *Schema Therapy: A Practitioner's Guide*. Guilford Press.

Young J (2012) *Early Maladaptive Schemas*. Schema Therapy Institute (www.schematherapy.com/id73.htm).

MCQs
Select the single best option for each question stem

1 Which of the following is not a core advantage of the dimensional approach to diagnosing personality disorders?
a Providing a more accurate assessment of personality functioning
b Facilitating communication between mental health professionals
c Capturing subclinical symptoms
d Informing the design of tailored treatments
e Allowing greater understanding of the severity and range of symptoms.

2 When working with people with personality disorders, the cognitive–behavioural therapist should not:
a cultivate the therapeutic relationship as an active ingredient of treatment
b challenge the function of maladaptive schemas
c define therapeutic goals for the patient
d assign homework
e explore the developmental pathways underlying symptom configuration.

3 Within the schema therapy framework, which of the following is not a classification domain of early maladaptive schemas?
a Disconnection and rejection
b Internalised social put-down
c Impaired autonomy and performance
d Impaired limits
e Other-directedness.

4 According to Young's schema theory, the main schema processes present in people with personality disorders are:
a schema aetiology, surrender and transformation
b schema differentiation, integration and transformation
c schema distortions, avoidance and perpetuation
d schema comparison, dissonance and pervasiveness
e schema surrender, overcompensation and avoidance.

5 Which of the following is not a key feature of CBT for personality disorders?
a The use of cognitive, behavioural and interpersonal techniques
b A focus on modifying maladaptive patterns of thinking and behaviour
c Building a healthy therapeutic relationship
d The identification of defence mechanisms
e Collaborative case conceptualisations.