CHAPTER 1

Overview of Cognitive-Behavioral Therapy of Personality Disorders

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"Normal" human personality is composed of several personality traits. Indeed, each individual has a personal profile consisting of few central traits, several principal traits, and many secondary traits (see Hogan, Johnson, & Briggs, 1997; John, Robinson, & Pervin, 2010; Matthews, Deary, & Whiteman, 2003).

If we evaluate the personality traits in terms of performance (e.g., How well does the individual's response measure up to particular standards?), then we talk about aptitudes (e.g., intelligence, creativity). If we evaluate the personality traits in terms of social values, then we talk about characterological traits (e.g., generosity, aggressiveness). Finally, if we evaluate the personality traits in terms of dynamism and energy, then we talk about temperamental traits (e.g., explosiveness/impulsivity, inhibition; see Hogan et al., 1997; John et al., 2010).

There are many models of human personality. We do not review them here, as this is not the aim of the chapter (for a comprehensive review, see Hogan et al., 1997; John et al., 2010). We only mention here that one of the most comprehensive and empirically supported models of human personality is the "Big Five" model (see Costa & McCrae, 1992). According to this model, human personality is composed of five factors: (1) openness, (2) conscientiousness, (3) extraversion, (4) agreeableness, and (5) neuroticism. Each factor includes a variety of more specific personality traits.

For example, the extraversion factor includes such personality traits like positive feelings, assertiveness, dynamism, and so on (see Matthews et al., 2003).

There are many psychological models of personality disorders (for a review, see Millon, Millon, Meagher, Grossman, & Ramnath, 2004). Probably the first organized models were based on a psychoanalytical approach, later and further developed as a dynamic–psychoanalytical paradigm. The humanistic–existential–experiential paradigm also proposed various models of disorders of personality. Obviously, the cognitive-behavioral paradigm has its own models of personality disorders. However, while the first two paradigms—the dynamic–psychoanalytic and the humanistic–existential–experiential models—are not explicitly related to the mainstream psychopathology as concerning personality disorders (e.g., the DSM system), the cognitive-behavioral paradigm is consistent with (although not necessary dependent on) the mainstream models of psychopathology regarding personality disorders. For example, the cognitive therapy model of personality disorder (A. Beck, Chapter 2, this volume) views personality disorder based on the DSM system and as a hypertrophy of traits that originate in an adaptive context but become exaggerated and prepotent over the course of development.

THE COGNITIVE-BEHAVIORAL APPROACH TO PERSONALITY DISORDERS

The cognitive-behavioral therapy (CBT) framework/paradigm has a set of interrelated theoretical principles (i.e., CBT architecture) and a set of techniques that can be organized into clinical strategies included in more or less manualized clinical protocols. Indeed, from this general CBT framework, various CBT psychological treatments can be derived based on (1) general and/or specific models related to various clinical conditions, thus promoting theoretically driven techniques (i.e., *systemic CBT psychological treatments*); and/or (2) a multicomponential combination of CBT techniques for a specific clinical condition, with less theoretical integration, derived pragmatically from the general CBT theoretical principles rather than from a CBT general and/or specific model of that clinical condition (i.e., *multicomponential CBT psychological treatments*).

Among the empirically investigated systemic CBT psychological treatments—each organized like a "CBT school of thought"—we can mention alphabetically acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 2011), dialectic behavior therapy (DBT; Dimeff & Linehan, 2001), and schema therapy (ST; Young, Klosko, & Weishaar, 2003). Obviously, we should include here cognitive therapy (CT; Beck, 1976; J. Beck, 1995) and rational-emotive behavior therapy (REBT; DiGiuseppe, Doyle, Dryden, & Backx, 2013; Ellis, 1994), which, although are

the foundational approaches of the general CBT paradigm (see below), were also investigated as systemic CBT psychological treatments. Finally, there is a plethora of multicomponential CBT psychological treatments, organized more like a pragmatic therapeutic package that are less theoretically driven and/or integrated (check the Research-Supported Psychological Treatments list of the American Psychological Association, Division 12; *www.div12.org/PsychologicalTreatments/index.html*).

CBT Theoretical Foundations

Beck's CT (Beck 1963, 1976) and Ellis's REBT (Ellis, 1957, 1962, 1994) have established the foundational structure of the modern CBT paradigm. Congruent with earlier models of behavior therapy, they did not treat personality disorder symptoms as an expression of an underlying illness/disorder/conflict, but rather as learned human responses to specific or general stimuli. However, innovatively and differently from both the older behavior therapy and the extant medical approaches, the individual's responses (e.g., subjective, cognitive, behavioral, psychophysiological)—be they learned or an expression of a broader underlying disorder—were not treated in the same way. The cognitive component has been much emphasized and often promoted as a preliminary "cause" of the others. However, it does not mean that the causality is unidirectional. Both Beck (by his concept of "mode"—Beck, 1996; see also Chapter 2, this volume) and Ellis (by his concept of "interdependency"—Ellis, 1957, 1994) were careful to argue that all types of responses are strongly interrelated, forming a multidimensional interactive psychological structure. Thus, the ABC model (Ellis, 1994; but see also J. Beck, 1995) has arguably emerged explicitly as a general foundation of the CBT architecture (see Figure 1.1).

The "A" refers to various activating events, whether external and/or internal. "B" refers to the individual's beliefs more generally to our information processing (i.e., cognitions) in the forms of beliefs and thoughts. Initially, both Ellis (1957, 1962, 1994) and Beck (1963, 1976) emphasized conscious information processing (i.e., explicit cognitions in the form of beliefs and thoughts); it might function unconsciously (i.e., functional cognitive unconscious), but by specific techniques (e.g., thought monitoring or

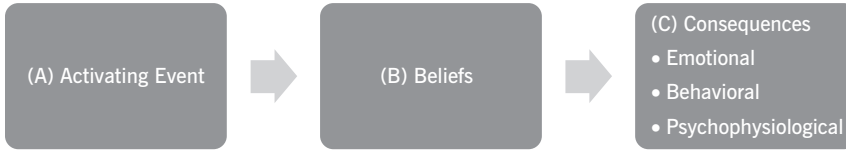

FIGURE 1.1. The general ABC model of CBT.

imagery), these cognitions can be made consciously accessible. The "C" refers to various consequences in the form of the individual's subjective, behavioral, and/or psychophysiological responses. Typically, distorted cognitions are associated with dysfunctional consequences (e.g., dysfunctional/unhealthy feelings, maladaptive behaviors), while nondistorted cognitions are associated with functional consequences (e.g., functional/healthy feelings, adaptive behaviors). Once generated, a C could become a new A, thus further priming metabeliefs/secondary beliefs (B′) that generate metaconsequences/secondary consequences (C′).

Starting from this general cognitive architecture of CBT, particular cognitive models have been developed depending on (1) the type of cognitions emphasized at B; (2) the sequence of clinical strategies (e.g., first changing A and/or changing B and/or targeting directly the C); and (3) how the therapist, guided by the patient, deals with various clinical conditions and events.

For example, concerning the type of cognitions, we can make a distinction between "cold" cognitions and "hot" cognitions (for details, see Wessler, 1982, and the derivative work of David & Szentagotai, 2006). Cold cognitions refer to descriptions of reality (e.g., "My wife is not at home") and the individual's interpretations/inferences (e.g., "She is out cheating on me"). Hot cognitions refer to how we evaluate/appraise these descriptions and inferences about the reality (e.g., "My wife should not cheat on me and if it happens, it is awful and the worst thing possible"). Both cold and hot cognitions could be more surface beliefs (i.e., automatic thoughts/self-statements) or more core beliefs. Beck's CT was initially more focused on descriptions and inferences (e.g., see the "cognitive errors" described by Beck, Rush, Shaw, & Emery, 1979), thus connecting itself more to general attribution theory (see Weiner, 1985). Later, CT, and other CBT psychological treatments like ST and DBT, focused on both cold and hot cognitions that are often integrated phenomenologically (i.e., how they arise in the mind of the client). Indeed, various scales of distorted cognitions (e.g., Automatic Thoughts Questionnaire [Hollon & Kendall, 1980]; Dysfunctional Attitudes Scale [Weissman, 1979]; Young Schema Questionnaire [Young & Brown, 1994]) contain both hot and cold cognitive items. REBT makes a clear distinction between descriptions/inferences and appraisals (i.e., evaluations). Irrational beliefs (e.g., "My wife should not cheat on me and if it happens it is awful.) and rational beliefs (e.g., "I would like my wife not to cheat on me and I am doing my best to avoid it, but I can accept that sometimes things are not under my control; if it happens, it is very bad, but not the worst thing ever") are seen as appraisals, thus relating them to the more general appraisal theory (see Lazarus, 1991). Indeed, REBT considers, based on the appraisal theory (Lazarus, 1991), that unless appraised, the cold cognitions (e.g., descriptions/inferences) do not generate feelings, although they could directly generate behaviors.

The sequence of clinical strategies in CT typically focuses first on the automatic thoughts (most of them expressed as descriptions and inferences—including mental imagery—and/or as a mixture of cold and hot cognitions) and later on core beliefs (i.e., coded in our mind as schemas). At some point, CT focuses on activating events by problem-solving strategies and/or on the consequences of the beliefs by behavioral and/or coping techniques (see J. Beck, 1995). However, the interactive nature of the core elements is different for each individual. For one individual the sequence may be cognition–affect–behavior, for another the sequence may be behavior–affect–cognition, and for a third the sequence may be affect–cognition–behavior. For a comparison, REBT focuses on altering dysfunctional consequences by changing irrational beliefs first and then, if not successfully altered during the process of restructuring irrational beliefs, on changing the cold cognitions. The process is first focused on the surface beliefs in the forms of specific irrational self-statements and later on general irrational core beliefs. After the cognitive restructuring process, REBT would focus on the other components like the activating events/A (e.g., by problem-solving strategies) and/or consequences C (e.g., by behavioral techniques and/or coping strategies; see DiGiuseppe et al., 2013). ACT (Hayes et al., 2011), mindfulness-based CT (Segal, Williams, & Teasdale, 2002), and other so-called third-wave CBT have challenged the need of changing the content of distorted cognitions to achieve a more adaptive change at the emotional and behavioral level by arguing that we need to modify (i.e., cognitively restructure) the function of distorted cognitions—to neutralize and to cognitively defuse them—by acceptance and mindfulness techniques.

There are also variations among CBTs regarding how psychotherapists deal with the clinical conditions (for a debate, cf. Ellis, 2003; Padesky & Beck, 2003). CT argues for very specific and detailed models for each clinical disorder (J. Beck, 1995; Beck, Freeman, & Davis, 2004). REBT (see DiGiuseppe et al., 2013) and more recently ST (see Bamelis, Evers, Spinhoven, & Arntz, 2014) have supported more general models dealing with various clinical conditions, arguing that while these specific models can be valid, underneath the specificity there are core common psychological processes expressed in distorted core beliefs. These distorted core beliefs can interact differently for various clinical conditions (see David, Lynn, & Ellis, 2010). The process is similar to what is seen in neuroscience, where a large variety of symptoms and disorders can be reduced and/or explained by a few classes of neurotransmitters and their interrelations.

David (in press) has recently tried to unify these specific models, by extending the classical ABC architecture of the CBT paradigm, based on a cognitive science and cognitive neuroscience framework, thus trying to move the field from various "CBT schools of thought" to an integrative and multimodal CBT (IM-CBT; see also David, Matu, & David, 2013). It is "integrative" because the interrelated theoretical principles are better

organized in a coherent CBT theory (i.e., a CBT general model) that can accommodate various CBT schools and their general and/or specific models. It is multimodal because various techniques and clinical strategies (from CBT and/or other psychotherapy tradition) are derived and/or conceptualized based on the integrative CBT theory, rather than being components, more or less related to one another, derived from various CBT general principles, organized pragmatically to deal with a clinical condition in a multicomponential CBT package. Thus, IM-CBT emphasizes a theoretically driven (i.e., integrative) multimodal approach toward helping patients deal with various psychological conditions.

According to the IM-CBT framework (see Figure 1.2) there are two types of core beliefs. The first type is related to cold cognitions. Here we can include the Beckian general core beliefs like "unlovability" and "helplessness," coded in the human mind as schemas (see A. Beck, Chapter 2, this volume; J. Beck, 1995). The second type is related to hot cognitions. Here we can include the Ellisian general irrational core beliefs expressed as "demandingness" ("Things *must* be done my way"), "catastrophizing" ("It is the worst thing possible"), "frustration intolerance," ("I cannot bear these demands on me"), and "global evaluation of human worth" (for acting or believing in that way shows that the person is a totally worthless

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FIGURE 1.2. The modern architecture of CBT. From David (in press). Copyright by Wiley-Blackwell. Reprinted by permission.

individual), coded in the human mind as schemas (DiGiuseppe, 1996, called them "evaluative schemas"; but see also Szentagotai et al., 2005). Phenomenologically, these cold and hot core beliefs could come into our conscious mind in a mixed way. Various core beliefs interact to bias the information processing of events, thus generating specific automatic thoughts that lead to dysfunctional consequences (see Szentagotai & Freeman, 2007). Automatic thoughts, both hot and cold, may come to our conscious mind unintentionally (automatically) and are typically related to the activating event. Indeed, as mentioned above, many scales measuring automatic thoughts and core beliefs contain items referring to both cold and hot cognitions (e.g., Automatic Thoughts Questionnaire, Dysfunctional Attitudes Scale, Young Schema Questionnaire). However, from a psychological mechanistic view, they are different processes and thus, future studies should investigate them as such. The source of core beliefs is related to both environment/education and biological (e.g., genetic/evolutionary) predisposition (A. Beck, Chapter 2, this volume; J. Beck, 1995; David & DiGiuseppe, 2010). The genetic/evolutionary predispositions have been specially emphasized in relationship to general irrational core beliefs.

Based on IM-CBT, the coping mechanisms are not different cognitive and/or behavioral processes. They are the regular cognitive and behavioral processes that have a different function, namely to help us cope with various feelings and experiences (see Lazarus, 1991).

Finally, the IM-CBT also adds the concept of unconscious information processing at the level of the individual's beliefs. It is a kind of structural cognitive unconscious, containing information coded in formats that are not usually consciously accessible. It can generate dysfunctional consequences directly (e.g., classical conditioning) and/or indirectly (i.e., the output of classical conditioning becomes an A in the A-B-C process; for details, see David, 2003). This information is embedded in the nonconscious, automatic core brain structures like the amygdala (see Treadway, Chapter 4, this volume) and cannot be directly changed on the sole basis of classical cognitive restructuring techniques. However, behavioral techniques (e.g., exposure) and reappraisals based on new experiential information are promising methods to alter the strength of cognitive neural networks that modify input to the core system (Treadway, Chapter 4, this volume).

CBT Applications to Personality Disorders

In the case of personality disorders, the main etiopathogenetic mechanisms should be related to our core beliefs, which are shaped through key developmental experiences and some of which might be based on biological predispositions (A. Beck, Chapter 2, this volume; Young et al., 2003). However, each school of therapy is focused on its main hypothesized core beliefs.

The CT model is mainly focused on the cold general core beliefs and the mechanisms to cope with them (e.g., intermediate beliefs in the form of evaluations, positive and negative assumptions, and rules; A. Beck, Chapter 2, this volume). One can, therefore, see the issue as one of the individual's interpretations or parenthetic views. For example, if an individual were self-focused as a result of the life experience in his or her family of origin, he or she may believe that "I am special." The key issue is not the idea of the individual's specialness, but how he or she completes the sentence. It may be completed in a variety of ways, each determining a different emotional, behavioral, and social outcome.

"I am special (therefore others should give me all that I demand)."
"I am special (and I have to always do things for others to maintain my special status)."
"I am special (and anyone who does not recognize and agree must be punished)."
"I am special (and I will never get the special treatment that I deserve and was given to me by my early caretakers and that would be awful and unlivable)."
"I am special (and regarded as odd by others, and so will never fit in or be understood)."
"I am special (and more clever than most, so I can get away with things others cannot)."

The focus on altering the initial idea of specialness can be a fruitless goal. Does the therapist challenge and dispute the individual's specialness (What about high self-esteem? Shall we build unconditional self-acceptance rather than self-esteem?)? Does the therapist look at the patient's reality? Many readers of this text would endorse the idea that "I am special by virtue of being able to seek, attain, show interest in, and read this book." Thus, the therapeutic focus is on considering the meaning embedded in the belief, and how it impacts an individual's adaptive functions.

ST originated in CT, but expanded the original theory. Thus, ST identified more core beliefs (i.e., early maladaptive schemas) and added several mechanisms of coping with them. DBT also started from behavioral skills training, and expanded it by adding new theoretical mechanisms (e.g., biological diathesis related to the reactivity of the arousal system) and new clinical strategies and techniques to cope with cognitive and emotional distress (e.g., acceptance and mindfulness). REBT is mainly focused on general irrational core beliefs and their interaction to one another (e.g., demandingness + catastrophizing) and on their role (e.g., primary generative mechanisms vs. coping processes) in the primary and secondary/meta-consequences.

Key Features of the CBT Clinical Intervention

The CBT intervention for personality disorders typically includes (1) clinical assessment; (2) cognitive conceptualization; (3) technical interventions; and (4) building and using the therapeutic relationship, much the same as treatment for symptomatic disorders.

However, various adaptations for patients with personality disorders deserve note. Based on the current DSM-5, the clinical assessment can be focused on both categorical and dimensional aspects. For some personality disorders (e.g., antisocial personality disorder) clinical interviews and psychological tests based on self-report should be complemented by psychological tests based on clinicians' (or other relevant persons') report and external and corroborative data.

As concerning the cognitive conceptualization, it is often more dynamic in the case of personality disorders, including (for details, see David, in press) a connection among (1) the cognitive conceptualization of the current problems, (2) the cognitive conceptualization of the past problems, and (3) the cognitive conceptualization of the problems expressed in the therapeutic relationship/setting (see also Figure 8.2 in Brauer & Reinecke, Chapter 8, this volume). This process is similar to the one found in short-term dynamic therapies, although based on clear-cut cognitive conceptualizations as opposed to interpretations or interpolations of dynamic unconscious data. Doing this, the patients can understand how they historically developed their current problems and can even face them directly and experientially ("here and now") as they move through the therapy sessions.

The CBT intervention for personality disorders is typically longer than the CBT intervention for other clinical conditions and often includes more experiential techniques, creating a multimodal approach. As in the case of other clinical conditions, the interventions could be delivered individually or in group.

The therapeutic relationship is characterized by collaboration, congruence, empathy, and genuineness (Davis & J. Beck, Chapter 6, this volume). For personality disorders the relationship must be often used as a vehicle for change, and as a modeling procedure, rather than only as a context of implementing a CBT intervention. Indeed, the therapeutic relationship is often used to generate strong experiences during and subsequent to the session related to the patient's past experiences or current life experiences.

EMPIRICAL SUPPORT FOR CBT IN THE TREATMENT OF PERSONALITY DISORDERS

Barlow (2004) has proposed a clear distinction between "psychotherapy" (i.e., a general psychological intervention in mental health) and

"psychological treatment" (i.e., an intervention designed for specific clinical conditions). We further develop this framework, arguing that while "CBT framework" (e.g., IM-CBT) refers to a comprehensive theory and a set of multimodal techniques derived and/or underlined by this integrative theory, CBT psychological treatments refer to (more or less manualized) clinical protocols—often theoretically driven—designed for specific clinical conditions. Furthermore, David and Montgomery (2011) argued that a real evidence-based psychotherapy (i.e., evidence-based psychological treatment) should be validated both in terms of the efficacy/effectiveness of the clinical protocol and the support for the theory underlying the proposed clinical protocol.

Psychotherapy and Personality Disorders

In general, there is strong support for the use of psychotherapy for personality disorders in terms of efficacy and effectiveness (for details, see Hadjipavlou & Ogrodniczuk, 2010). Arnevik and colleagues (2010) found that eclectic psychotherapy implemented in private practice is comparable to a more comprehensive day hospital and outpatient follow-up treatment. Moreover, Mulder, Joyce, and Frampton (2010) found that patients treated for major depression also improved in regard to an identified personality disorder. Thus, personality disorders are neither stable nor treatment resistant. Recent analyses also support the cost-effectiveness of psychotherapy for personality disorders. Indeed, Soeteman and colleagues (2011) found that short-term day hospital psychotherapy and short-term inpatient psychotherapy are more cost-effective than long-term day hospital psychotherapy, long-term inpatient psychotherapy, and long-term outpatient psychotherapy for patients with avoidant, dependent, and obsessive–compulsive personality disorders. Pasieczny and Connor (2011) found DBT to be cost-effective in a routine public mental health setting (e.g., including the treatment of patients with borderline personality disorder). Finally, van Asselt and colleagues (2008) found ST cost-effective in the treatment of borderline personality disorder.

CBT Psychological Treatments for Personality Disorders

Most of the investigated psychological treatments for personality disorders are CBT. Among them, the best investigated are DBT, ST, CT, and multicomponential CBT. As concerning the clinical conditions (for a review, see Dixon-Gordon, Turner, & Chapman, 2011), the most investigated personality disorder is borderline personality disorder. In recent years, some trials have focused on the other personality disorders (e.g., avoidant personality disorder). We still miss rigorous trials for schizoid and schizotypal

personality disorders. A recent meta-analysis of psychological interventions for antisocial personality disorder (Gibbon et al., 2010) concluded that there is not enough evidence to argue for the use of psychological treatments in adults with antisocial personality disorder, although CBT psychological treatments (or containing CBT modules) seem promising (see Mitchell, Tafrate, & Freeman, Chapter 16, this volume).

The empirical support of CBT for personality disorders will be examined here based on the CBT psychological treatments derived from it and mainly from an intervention point of view (see also Matusiewicz, Hopwood, Banducci, & Lejuez, 2010). Some CBT psychological treatments have an underlying theoretical model that is consistent with the general CBT framework and the techniques and clinical strategies are derived from the specific model; we call them systemic CBT psychological treatments. Other CBT psychological treatments are based on the general CBT theory, containing a mixture of CBT techniques and clinical strategies, more pragmatically and less theoretically related/integrated; we will call them multicomponential CBT psychological treatments.

Systemic CBT Psychological Treatments

DBT is one of the CBT psychological treatments that have a clear theoretical model and techniques consistent with this model. DBT has been well validated mainly for borderline personality disorder. Indeed, its efficacy and effectiveness have been investigated in various randomized clinical trials and it is recognized as an evidence-based treatment by both National Institute for Health and Clinical Excellence Guidelines (NICE Guidelines) and the Research-Supported Psychological Treatments of the American Psychological Association, Division 12. Lynch and colleagues (2007) found that DBT added to medication is better than medication alone in a sample of older adults suffering from depression with comorbid personality disorders. However, although the impact of DBT on borderline personality disorder is seen as very good, recent analyses added some cautionary ideas. In a recent Cochrane Review, Stoffers and colleagues (2012) argued that none of the investigated psychological treatments (i.e., DBT, mentalization-based treatment in a partial hospitalization setting, mentalization-based treatment outpatient, transference-focused therapy, multicomponential CBT, dynamic deconstructive therapy, interpersonal psychotherapy, and interpersonal psychotherapy for borderline personality disorder) displayed a robust evidence base, although there are some important beneficial clinical effects. Similarly, Springer, Lohr, Buchtel, and Silk (1996) found that a brief inpatient DBT psychological treatment for a sample of patients with mixed personality disorder is, in general, not better than a discussion group (although DBT group considered the intervention more beneficial in lives outside the hospital).

ST is another CBT psychological treatment that has a clear theoretical model and techniques consistent with this model. ST has been investigated in randomized clinical trials for various personality disorders. The study of Gisen-Bloo and colleagues (2006) found that ST was superior to transference-focused therapy for borderline personality disorder (and even more cost-effective) and Farrell, Shaw, and Webber (2009) found ST superior to treatment as usual for borderline personality disorder. In the Bamelis and colleagues (2014) study it was found that ST provided better results than either psychological treatment as usual or a humanistic–existential–experiential approach (i.e., a Rogerian approach in the form of clarification-oriented therapy) for a mixed group of personality disorders (e.g., avoidant, dependent, obsessive–compulsive, histrionic, narcissistic, and paranoid personality disorders). For borderline personality disorder, individual ST seemed to have the same efficacy as combined group–individual ST, but with a lower dropout rate (Dickhaut & Arntz, 2014). However, Dickhaut and Arntz (2014) noted that when the psychotherapists delivering the group sessions are trained in group psychotherapy, the speed of recovery in combined specialized group–individual ST was higher in comparison to individual ST. Ball, Maccarelli, LaPaglia, and Ostrowski (2011) compared individual drug counseling with dual-focus ST for 105 patients who were substance dependent with versus without specific personality disorders. They found that individual drug counseling impacted the symptoms of personality disorders more than dual-focus ST, thus questioning the need of dual-focus ST for patients who were substance dependent with comorbid personality disorders. Some ST research (see Renner et al., 2013) also investigated the mechanisms of change underlying ST psychological treatment. For example, the reduction in global distress in adults with personality disorders and/or personality disorder symptoms was accompanied by a decrease in maladaptive schemas and coping and a slight increase in adaptive schema; however, the reduction in maladaptive schemas did not remain significant after controlling for distress.

CT, together with REBT, is the foundational approach of the CBT framework. However, several CT-oriented psychological treatments were specifically developed for personality disorders. For example, Davidson and colleagues (2006; see also Davidson, Tyrer, Norrie, Palmer, & Tyrer, 2010) compared treatment as usual with treatment as usual as routinely delivered in the UK National Health service plus CT (BOSCOT study) in the case of patients with borderline personality disorder. Adding CT improved the outcome in several domains (e.g., less anxiety, less distress, less dysfunctional cognitions), while other domains were not affected (e.g., frequency of nonsuicidal self-injury, interpersonal functioning, global functioning, psychopathology symptoms, inpatient hospitalization, emergency room visits, cost-effectiveness). Cottraux and colleagues (2009) found that CT

for patients with borderline personality disorder was superior to Rogerian counseling in several outcomes (e.g., more rapid improvement in hopelessness, impulsivity, global symptoms severity); however, Matusiewicz and colleagues (2010) noted that the results of this study should be interpreted cautiously because of the high rate of dropouts. Manual-assisted CT seems effective for borderline personality disorder (see Evans et al., 1999; Morey, Lowmaster, & Hopwood, 2010; Weinberg, Gunderson, Hennen, & Cutter, 2006) when used in combination to treatment as usual; in samples with mixed diagnoses its effect is less stable (for a detailed analysis, see Matusiewicz et al., 2010). Finally, Rees and Pritchard (in press) found preliminary support for a brief CT intervention for avoidant personality disorder and Emmelkamp and colleagues (2006) found CT superior to short dynamic therapy for avoidant personality disorder.

Besides these standard CBT psychological treatments, which showed very good, preliminary good, and/or promising effects, two new emerging systemic CBT psychological treatments should be mentioned. A recent public-sector pilot study analyzing treatment as usual argued that borderline personality symptoms could be treated more efficiently with the addition of 12 two-hour ACT group sessions to the treatment as usual consisting of support, medication management, and crisis contact as needed (Morton, Snowdon, Gopold, & Guymer, 2012). The study also found that psychological flexibility, emotional regulation skills, and mindfulness mediated the changes in symptoms of borderline personality disorder. Those researching ACT should build on these encouraging preliminary results to investigate more of the theoretically driven psychological treatments for personality disorders in rigorous large-scale randomized trials.

A study by Fuller, DiGiuseppe, O'Leary, Fountain, and Lang (2010) used REBT as the main therapeutic component in a multicomponential psychological treatment (16 two-hour group sessions) for adult outpatients (N = 12) diagnosed with 29 symptomatic and 43 personality disorders. Positive results (pre–post) were found for reducing trait anger, anger symptoms, and depression symptoms. Other theoretically driven empirical studies have shown a systematic association between irrational beliefs and various personality disorders (Lohr, Hamberger, & Bonge, 1988). Spörrle, Strobel, and Tumasjan (2010) found that irrational beliefs have an effect on life satisfaction even beyond the Big Five personality factors. Finally, Sava (2009) found strong associations between general irrational core beliefs measured by the Attitude and Belief Scale–II (DiGiuseppe, Leaf, Exner, & Robin, 1988) and early maladaptive schemas measured by the Young Schema Questionnaire. Taking all these together, REBT should be investigated in large-scale randomized trials for its efficacy and/or effectiveness in the treatment of personality disorders. Given that the NICE Guidelines for antisocial personality disorder argue for a preventive action focused on

children with disruptive disorders, and that REBT is considered a probably efficacious treatment for disruptive behavior in children (see the Division 52 list of evidence-based treatments), such a study would be useful.

Multicomponent CBT Psychological Treatments

Various multicomponent cognitive-behavioral treatments have been investigated for borderline personality disorder and antisocial personality disorder (see Matusiewicz et al., 2010). Muran, Safran, Samstag, Wallner, and Winston (2005) found that CBT seems useful for reducing the symptoms and dysfunctionality (e.g., interpersonal problems) in a sample of patients with complex personality disorders. System training for emotional predictability and problem solving (STEPPS)—based on a behavioral skills training approach (Blum et al., 2008)—seems effective for reducing symptoms in patients with borderline personality disorder either alone and/or in combination with treatment as usual. Emotional regulation group treatment (REGT)—based on an acceptance skills training approach—can also generate clinically important reductions in symptoms of nonsuicidal patients with borderline personality disorder (Gratz & Gunderson, 2006). Cognitive-behavioral group therapy (CBGT) has been investigated for avoidant personality disorder (see Alden, 1989; Renneberg, Goldstein, Phillips, & Chambliss, 1990). This type of psychological treatment typically includes exposure, cognitive restructuring, and social skills training. In general, CBGT has been found efficacious in reducing symptoms of avoidant personality disorder and many comorbid problems (e.g., anxiety).

Summarizing, although overall studies support the role of CBT psychological treatment for personality disorders, there is need for more rigorous replication studies and place for new CBT psychological treatments.

Other Psychological and Pharmacotherapy Treatments

By contrast to CBT, the efficacy and effectiveness of psychological treatments derived from the dynamic–psychoanalytical paradigm for personality disorders is mixed. For example, Town, Abbass, and Hardy (2011) argued that short-term psychodynamic psychotherapy may be considered an efficacious evidence-based treatment for a large range of personality disorders, based on results of eight randomized trials of moderate quality. On the other hand, Leichsenring and Rabung (2011) found, after analyzing 10 controlled studies, that long-term psychodynamic psychotherapy is better than short-term psychotherapies in complex mental disorders, including personality disorders. However, more recently, Smit and colleagues (2012), after analyzing 11 trials, argued that the effectiveness of long-term psychoanalytical psychotherapy is limited and conflicting. For example, they found that for personality pathology the combined Hedges'*g*, at the longest

follow-up for each study, was nonsignificant (g = 0.17, with a 95% confidence interval: –0.25 to 0.59). Clarke, Thomas, and James (2013) recently found that cognitive analytic therapy (N = 38) is more effective than treatment as usual (N = 40) in improving symptoms and interpersonal difficulties in patients with a personality disorder. Thus psychological treatments for personality disorders, derived from a dynamic–psychoanalytical tradition, seem to work in the form of short-term dynamic therapy and/or in combination with CBT (i.e., cognitive analytic therapy). The impact of long-term dynamic–psychoanalytical treatments for personality disorders is, at this time, debatable.

The results of studies investigating the use of pharmacotherapy for the treatment of personally disorders are mixed. Pharmacotherapy with mood stabilizers, second-generation antipsychotics, and omega-3 fatty acids can target some symptoms of borderline personality disorder and associated psychopathology (see Bellino, Rinaldi, Bozzatello, & Bogetto, et al., 2011; Lieb, Völlm, Rücker, Timmer, & Stoffers, 2010; Stoffers et al., 2010); however, they do not impact on the core symptoms and overall severity of borderline personality disorder. Regarding antisocial personality disorder, after analyzing eight existing trials, there are no firm conclusions about the efficacy of pharmacotherapy (Khalifa et al., 2010).

CONCLUSION

Personality disorders are important clinical conditions that impact other psychological and/or medical clinical conditions. Summarizing the current state of the art, at this moment CBT seems to be the best validated form of psychological intervention for a variety of personality disorders. Although CBT appears promising in the treatment of personality disorders, a number of patients do not fully respond to the intervention and/or the results are not yet completely convincing. Most studies are focused on borderline personality disorder and only a few of them on the other personality disorders, so our conclusions are framed with this caution in mind. Most of the studies are focused on a category of personality disorders (i.e., efficacy paradigm), although studies focused on patients with mixed (Bamelis et al., 2014; Springer et al., 1996) or comorbid personality disorders (Muran et al., 2005) exist (i.e., effectiveness paradigm). Various CBT psychological treatments derived from the general CBT framework (e.g., IM-CBT) are not equally well validated. Some have more empirical support than others. Future studies should further test the existing clinical protocols, such as those outlined in this volume, and even develop new more powerful ones. The new studies should investigate both the efficacy (i.e., how psychotherapy works in controlled conditions), to obtain internal validity, and the effectiveness (e.g., how psychotherapy works in real clinical practice),

to obtain external validity. As concerning effectiveness, to fit the real-life contexts, it is expected that more studies will focus on comorbid personality disorders, personality disorders with other comorbid disorders, and even mixed samples (e.g., patients with various personality disorders). The transdiagnostic approach (i.e., the dimensional component of personality disorders) should be an important line of study, consistent with the programmatic research of the National Institutes of Health. Cost-effectiveness analyses will also be very important, in a health system influenced by limited resources and by health insurance companies. Future studies should also explore the role of preventive CBT interventions for personality disorders by focusing on child and adolescent pathology and/or traits (see also the NICE Guidelines for antisocial personality disorder).

In general, the specific theories underlying the clinical protocols are less rigorously investigated than the efficacy and/or effectiveness of the clinical protocols. Therefore, future studies should also focus on theory testing, preferably guided by an etiopathogenetic point of view, rather than by a symptomatic point of view. Only by integrating well-validated theories expressed in efficacious CBT psychological treatments can we promote a rigorous evidence-based approach in the field of personality disorders (see David & Montgomery, 2011).

As there are preliminary evidences for the efficacy and effectiveness of psychological treatments derived from other psychotherapy paradigms (e.g., dynamic–psychoanalytical), CBT should act as a platform for psychotherapy integration, also preparing for integration with other nonpsychological treatments (i.e., pharmacotherapy) when they are evidence based. A multilevel analysis of the CBT outcomes (e.g., including the neurobiological level) is important for an integration between psychological and pharmacological treatments, although, taking the state of pharmacotherapy reviewed here into account, at this time the psychological treatments are the first-line interventions for personality disorders.