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Cognitive-Behavioral Theory and Treatment of Antisocial Personality Disorder

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Abstract

Antisocial personality disorder (ASPD) has a distinct cognitive profile according to cognitive theory of personality disorders. Antisocial individuals' view of the world is personal rather than interpersonal. They cannot accept another's point of view over their own. As such, they cannot take on the role of another. Their actions are not based on choices in a social sense because of this cognitive limitation. Cognitive theory of personality disorders conceptualizes personality disorder including the ASPD, according to their basic beliefs or schemas. The content of beliefs can vary in different personality disorders. Antisocial patients view themselves as loners, autonomous, and strong. Some of them see themselves as having been abused and mistreated by society and therefore justify victimizing others because they believe that they have been victimized. Their view about other people is very negative; they see others as exploitative and thus deserving of being exploited in retaliation. In this chapter, after overviewing general features of ASPD, we aim to give an explanation how cognitive behavioral therapy (CBT) conceptualizes personality disorders in general and ASPD in particular and highlight the important implementations of CBT and schema therapy.

Keywords: antisocial personality disorder, cognitive behavioral theory

1. Introduction

Antisocial personality disorder (ASPD) is defined as a pervasive pattern of disregard and violation of the right of others [1]. Patients with ASPD often have problems with judiciary system like being arrested or imprisoned because they do not respect the right of others, they have tendency to violate the laws, anger problems, and alcohol/substance addiction [2].

During psychiatric interview they may seem inoffensive and even little bit charming but under this mask of sanity there is aggression, hostility, rage, and tension. They have defensiveness when replying the self-report scales [3]. During their lifetime, they repeatedly exhibit traits of impulsivity, low conscientiousness, which cause social and interpersonal problems. They may repeatedly perform illegal acts, lie or malingering people. They are manipulative in order to gain personal profit or pleasure. They disregard the feelings or wishes of others. Due to their impulsivity, they may change their jobs, accommodation or relationships all of a sudden without taking into consideration of the consequences. They are irresponsible as a partner and as a parent. They frequently have more than one sexual partner and hardly sustain monogamous relationships. Their children generally live in bad conditions such as lack of hygiene, malnutrition, or accommodation. All these disadvantages result in high rates of unemployment, bad housing, and being imprisoned and dying prematurely due to reckless behavior [4, 5].

The two main diagnostic systems, Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and WHO's International Statistical Classification of Diseases and Related Health Problems, 10th edition (ICD-10), have similar criteria for antisocial personality construct.

According to the latest version of Diagnostic and Statistical Manual of Mental Disorders (DSM-5), ASPD is conceptualized through a criterion set which includes criminal behavior, lying, reckless and impulsive behavior, aggression and irresponsibility [4]. Although it defines a similar construct, the diagnostic label for antisocial personality has different name in ICD-10, as dissocial personality disorder. Dissocial personality disorder is defined in ICD-10 as characterized by disregard for social obligations, and callous unconcern for the feelings of others. There is gross disparity between behavior and the prevailing social norms. Behavior is not readily modifiable by adverse experience, including punishment. There is a low tolerance for frustration and a low threshold for discharge of aggression, including violence; there is a tendency to blame others or to offer plausible rationalizations for the behavior bringing the patient into conflict with society.

The two classifications are not identical but similar. The ICD-10 emphasizes the impairment in the interpersonal and the affective domain while DSM-5 focuses merely on the antisocial behaviour. (For instance there is a criteria of low tolerance for frustration, low threshold for aggression and violence in ICD-10 whereas DSM-5 focuses merely impulsivity, disregard for others, and irresponsible behaviors.) Also conduct disorder before the age of 15 is not necessary in ICD-10 criteria.

Antisocial personality like clinical entity is first defined as "moral insanity" in nineteenth century by Dr. J.C. Prichard in England. The moral insanity term is later replaced by another term psychopathy [6]. Psychopathy is first defined in "The mask of sanity" book of Cleckley and later conceptualized by Hare with the psychopathy checklist-revised (PCL-R) [7, 8]. Psychopathy is accepted as more severe than ASPD or dissocial personality disorder. It generally includes remorselessness, deceitfulness, egocentricity, superficial charm to others, depression and anxiety, and externalization of blame [9]. The psychopaths generally have lack of fear to aversive events and a deficit in processing affective information regardless of whether it is positive or negative [10]. There are studies suggesting that psychopaths have deficiency in empathy [11].

The prevalence of ASPD varies from depending on the instruments, methodology, and the country. It is between 1.3 and 6.8% for men and 0 and 0.8% for women [5, 12]. The prevalence is higher in populations that are affected by low socioeconomic factors. The ratio of men/women is 3. Approximately 50–80% of the criminals meet the diagnostic criteria of ASPD [13, 14]. Patients with ASPD may also have comorbid substance use disorders, anxiety disorders, depressive disorders, somatic symptoms and impulse control problems such as gambling disorder [5, 15, 16].

Like most of the psychiatric disorders, antisocial personality disorder is a heterogeneous diagnosis which has both biological and psychological etiology. From the adoption studies, it is seen that a child who has genetic vulnerability living in an adverse environment is prone to ASPD [17].

It was also asserted that psychopaths may have lack of cortical physiological responses that are associated with experiencing feelings, especially fear. Accordingly, some studies determined that psychopaths do not have autonomic hyperarousal when faced with a provoking stimulus unlike people without ASPD [18, 19].

On the other hand, according to cognitive behavioral theory it is assumed that there is developmental delay in the moral maturity and cognitive functioning of antisocial individuals which we will focus on the next chapter deeply [20].

2. Cognitive behavioral theory of antisocial personality disorder

2.1. Cognitive behavioral theory

When conceptualizing the human behaviour, cognitions and emotions, cognitive model views the cognition under two main titles: Automatic thoughts and schemas. Automatic thoughts are cognitions that accompany the distressful emotions and are specific to that situation/activating event. They are not the product of directed/driven thoughts that are created after a willing process. They rather pop up suddenly and the individuals mostly do not notice the automatic thought but the emotion resulting from it. They do not follow grammatical rules but rather they are set of meanings or images (i.e., “I am a bad mother,” or having an image of himself/herself lying in bed in emergency service) flowing in the mind which are immediately accepted without evaluation by the individual and cause a distressful emotion [21, 22]. So when an activating event (A) occurs, this leads to a cognition, interpretation, evaluation, an automatic thought which is merely maladaptive/functional (B) and this leads to an emotion and a behaviour (C). Accordingly, the cognitive behavioral model emphasizes that it is not the event/situation that determines how the individual feels or behaves (**Figure 1**). It is the interpretation of that event/situation that determines the feelings and behaviors. This is why cognitive behavioral therapists suggest disputing these maladaptive/dysfunctional thoughts to modify emotions [23].

Schemas are divided into two domains: core beliefs and intermediate beliefs (underlying rules and assumptions). Although some authors like Padesky have used the term schema only to describe core beliefs; in general, core beliefs are included as a domain of schema along

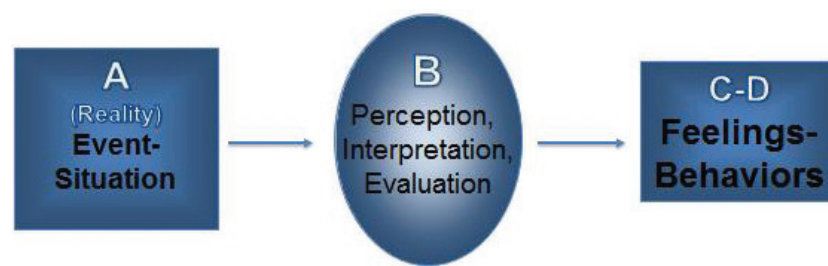


Figure 1. ABC model of cognitive behavioral therapy.

with intermediate beliefs [24]. Core beliefs are the cognitive constructs that determine how to regulate the information about himself/herself and his/her environment and include the essential assumptions about himself/herself, the others, and the world. After being developed as a result of early life experiences/memories and identifications with the important figures, core beliefs are reinforced with the similar experiences and learnings throughout the years [22, 25]. These beliefs about self and life constitute the emotional and behavioral traits of personality. These beliefs are so rigid, fundamental, and deep that even the individual himself/herself does not articulate them. The individual accepts these ideas as undisputable truths. Beck divides the core beliefs in three [25]:

- (1) Unlovable core beliefs: "I am unlovable," "I am unattractive," "I am rejected," "I am not desired," "I am ugly," etc.
- (2) Helpless core beliefs: "I am weak," "I am incompetent," "I am passive," "I am a loser," "I am coward," etc.
- (3) Worthless core beliefs: "I am worthless," "I am bad," "I am disgusting," "I deserve to be punished," "I am guilty," etc.

Core beliefs exist in pairs in all the humans. For example, an individual has both "I am lovable" and "I am not lovable" core beliefs. A healthy person who does not have a psychiatric disorder or a personality disorder has the positive core belief as the effective trait ("I am lovable"). When the healthy individual experiences a negative event, the negative core belief gets activated. For example, when a healthy person breaks up from his/her partner, the core belief "I am not lovable" gets activated. This person may feel down for a while or he/she may have depression for a period. But when he/she gets rid of depression, the positive core belief becomes active. If the individual has chronic depression or a personality disorder, this means that the positive core belief is very weak. It is generally the negative core belief dominant in his/her life. As a result he/she is not able to get rid of what that core belief ("I am not lovable") is imposing. This kind of person only accepts the data confirming the negative core belief and discounts the data that does not fit into the schema. The negative core belief is like a broadcasting radio that never stops telling how much unlovable he/she is.

Underneath the superficial automatic thoughts, there lie the intermediate beliefs, rules, and assumptions. These rules, beliefs, and assumptions are the abstract regulators of the behaviour although they are not verbalized by the individual. They are settled rules, expectations,

and attitudes about the individual himself/herself, the others or the world/experiences (i.e., “If I cry, it means that I am a weak person,” “I must do everything perfect so that people would not understand I am actually incompetent”). Intermediate beliefs are the interconnections between the core beliefs and the automatic thoughts. Their functions are:

- Maintaining the core belief by bringing an explanation to the life experiences which are in contradiction with the core beliefs. For instance, an individual has a belief of “All human beings are bad.” When this person comes across with someone who treats him/her in a good manner, he runs into a contradiction with his/her core belief. In order to overcome this contradiction, the individual comes up with the intermediate belief “If someone treats me well that means that he/she has an axe to grind.”
- Having a life compatible with the core belief: If a person has a core belief of incompetency, he/she avoids taking any risks.
- Protecting the individual from the intense affect that arises from the activation of the core belief. For instance, if a person has a core belief of worthlessness, in order not to confront this core belief, the individual grabs to the intermediate belief: “If I become successful at work, I will be worthful.”

Intermediate beliefs can be determined by determining the common and repeating themes in the automatic thoughts, by asking the meaning and the possible consequences of the automatic thought (downward arrow technique), or patient filling some scales (i.e., dysfunctional attitudes scale—DAS) [22].

To sum up, cognitive behavioral model assumes that we all have core beliefs that are rooted from genetic disposition and early childhood experiences. These core beliefs determine our intermediate beliefs (assumptions, rules, attitudes). Together these two are called schema. Schemas are kind of reservoir, which has explanations, assumptions, and strategies about the individual, others, and the world. When an activating event occurs, automatic thoughts are generated from this reservoir and shape feelings and behaviors (Figure 2). What cognitive

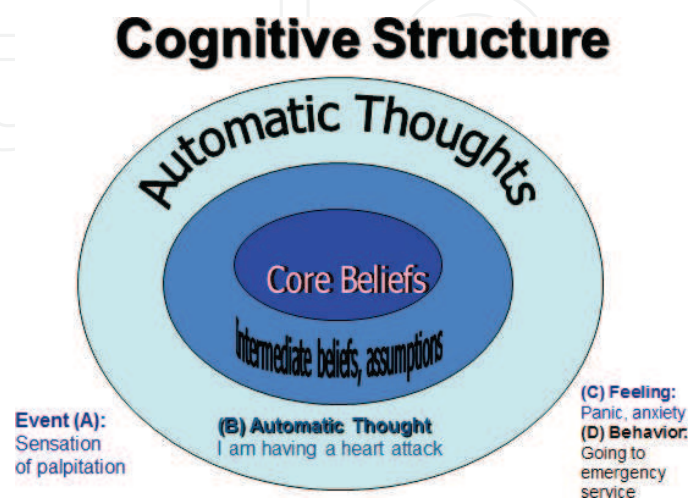


Figure 2. Cognitive structure.

behavioral therapy does, is to decrease the distressful emotions by disputing the maladaptive dysfunctional automatic thoughts first, and drying the reservoir (schemas) which from which these thoughts generate in the long run if the client frequently/chronically gets effected by these schemas. In cognitive behavioral therapy, cognitive processes can be integrated with the behavioral strategies to optimize the learning process.

Let us consider a person who has antisocial personality disorder and when this person gets across with new people he/she may have thoughts of cheating or giving harm. These thoughts may come from the intermediate beliefs of "I must be the one who hits first, otherwise I will be the loser," "Other people are nothing but wimps and they exist in life for being cheated/deceived," or "Laws are impediments for a satisfactory life and they are for weak people, if I obey the laws I will be exploited by other people." Of course these beliefs may be very well reflection of the core belief "I am weak and I may get hurt."

Today, with many schools focusing on the different components (i.e., schema therapy, dialectical behavioral therapy, acceptance, and commitment therapy, mindfulness based cognitive therapy) cognitive behavioral therapy (CBT) is found to be effective in numerous psychiatric disorders/psychological problems like depression, obsessive-compulsive disorder, panic disorder, generalized anxiety disorder, personality disorders, eating disorders, couple problems, family problems, and anger control problems [26–30].

2.2. Schema concept according to Young

Similar to cognitive behavioral therapy, Jeffrey Young stated that schemas develop in childhood in response to genetic predisposition and some environmental influences. Young viewed schema as resulting from unmet emotional needs in childhood [31]. To explain these unhelpful schemas, he introduced the concept of early maladaptive schemas (EMSs). According to Young, EMSs are unconditional and dysfunctional beliefs about the self. Like the adaptive schemas, EMSs develop from early experiences with the parents, caretakers, or peers during the childhood. A child who is not able to get his/her basic needs actualized; he/she develops schemas as the coping mechanisms to make sense of the experience and the world around him/her [32]. Young has delineated 18 schemas in five domains. These domains reflect the basic emotional needs of the child. The domains and the early maladaptive schemas are listed below [31]:

- (a) **Disconnection and rejection:** Abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, social isolation/alienation
- (b) **Impaired autonomy and performance:** Dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, failure
- (c) **Impaired limits:** Entitlement/grandiosity, insufficient self-control/self-discipline
- (d) **Other-directedness:** Subjugation, self-sacrifice, approval-seeking/recognition-seeking
- (e) **Overvigilance and inhibition:** Negativity/pessimism, emotional inhibition, unrelenting standards/hypercriticalness, punitiveness

Because each schema has interpersonal, cognitive, and affective components, and it gives a perspective to the individual about the unmet needs that are experienced during early childhood; when EMSs are activated, high levels of affects show up causing significant distress and even psychiatric disorders. To overcome this distress, the individual may choose three options. Whichever option he/she chooses, he/she may decrease the intense affect, but the schema will be reinforced anyway. According to Young, these three options are [31]:

- (1) **Schema maintenance:** Individuals, who have schema maintenance, accept the schema as completely true. Although they experience the negative emotions provoked by the schema, they keep on behaving in a way to confirm the schema. In their adulthood, they re-experience the similar traumas which created that schema. This type of behaviour is like taking the same action and hoping for a different outcome desperately.
- (2) **Schema avoidance:** In this type of maladaptive coping mechanism, the individual completely tries to ignore the schema. They try not to think or feel anything that has a potential to trigger schema. In order to avoid the schema, they may spend their time to distract themselves like alcohol, etc. Similarly, they have a tendency to avoid therapy and to face these disturbing thoughts and feelings about their schema. It is not uncommon for these kinds of clients to engage in therapy interfering behaviors like being late or not doing the homework. This type of behaviour is like burying one's head in the sand like an ostrich.
- (3) **Schema compensation:** Schema compensation means behaving in a way that the schema does not exist at all. At first glance, it may seem like a healthy mechanism but what the client does is merely an overcompensation effort to camouflage the schema beneath. This overcompensation effort may likely cause affective and interpersonal problems. Metaphorically speaking, this coping mechanism resembles a balloon being overinflated and blowing out ultimately. An example could be a person who has a schema of mistrust/abuse abusing others.

Having defined these concepts, Young developed schema therapy which has some adaptations cognitive behavioral therapy, psychodynamic therapy, and gestalt therapy. Because an individual always has more than one schema and there is always a shift from one schema to another in response to activating event, Young defined modes. A mode is a state of mind consisting of many schemas, coping behaviors in reaction to these schemas and the emotions. A mode can be maladaptive or healthy. An individual has many different modes and with result of the activating event, one of these modes get activated while others remain silent. As a new activating event occurs, another mode becomes active. To sum up, at any given time there is an active mode in an individual and due to the activating events there is always a shift from one mode to another.

Young defined the modes under four headings: child modes, coping modes, parent modes, and the healthy adult mode [31].

Child modes: There are four child modes. These are vulnerable child, angry child, impulsive/undisciplined child, and the contented child. Vulnerable child is characterized by the emotions

of sadness, anguish, and shame. It includes subtypes of “lonely child,” “abandoned and abused child,” and “humiliated and inferior child” while angry child mode has subtypes of “stubborn child” and “enraged child”. The last one “contended child” is the mode in which the basic needs of the child are met. Child modes are assumed to be universal and congenital [33].

Maladaptive coping modes: These modes are compliant surrenderer, detached protector, and overcompensator.

Parent modes: Because schemas come into existence because of the basic needs not implemented, or aversive experiences such as trauma, neglect, or abuse, parental modes usually derive from attachment figures which can be parents or anyone else (peers, social authority, etc.). While overwhelming emotions dominate the child modes, clients experience parental modes as negative thoughts. There are two parent modes: punitive parent and demanding parent.

Healthy adult: This is the aim of the schema therapy to accomplish ultimately. A healthy adult is able to set limits and/or accept and embrace the unhealthy maladaptive modes besides function in domains of social/family and occupational life.

The strategy in schema therapy is once modes are identified, the therapist and the client challenge the current maladaptive modes to deactivate it. After the deactivation, more adaptive and functional mode is introduced with some cognitive and experiential techniques which we will mention in the following chapters [33]. During this process, after identifying early maladaptive schemas, it is crucial to notice and validate the client’s unmet emotional needs. Changing early maladaptive schemas to more adaptive and functional, adaptive schemas must be necessarily accompanied by changing maladaptive coping skills and replacing them with more appropriate ones.

Schema therapy has been investigated in many personality disorders but most of the studies were conducted about the efficacy in borderline personality disorder. Studies found that schema therapy was superior to treatment as usual and some other psychotherapy approaches with lower dropout rate and more cost effective [34–36]. In a study conducted by Bamelis et al., schema therapy was compared with clarification oriented psychotherapy (COP) and treatment as usual group in terms of clinical effectiveness and economical cost effectiveness-cost utility in six personality disorders (avoidant, dependent, obsessive-compulsive, paranoid, histrionic, and narcissistic). The study was conducted in 12 mental health institutes with 323 patients. It was found that schema therapy was more effective and had less dropout rates compared to treatment as usual or COP [37].

2.3. Cognitive behavioral theory of antisocial personality disorder

Although Young schema questionnaire (YSQ) scores are generally found to be higher in clients with personality disorders, there is still insufficient evidence to identify specific schemas for specific disorders. In the study that was conducted by Jovev and Jackson, it was aimed to examine which of the schema domains are specific in three personality disorders. For borderline personality disorder, high scores on dependence/incompetence, defectiveness/shame,

and abandonment schema domains were detected while elevations on unrelenting standards and emotional inhibition schema domains were associated with obsessive-compulsive personality disorder and avoidant personality disorder, respectively [38]. While Nordahl et al. found that vulnerability to harm, emotional inhibition, and insufficient self-control were associated with narcissistic personality disorder [39], in their nonclinical sample, Reeves and Taylor found that men endorsed more symptoms of ASPD and higher levels of the core beliefs of emotional deprivation, social isolation, defectiveness/shame, and emotional inhibition [40].

The traditional view of ASPD is that these people have deficiency in internalizing the standards of the society [41]. Beck and Freeman suggest that there is evidence for developmental delay in moral maturity and cognitive functioning of antisocial individuals [20]. They have poor empathic ability and they are not able to perceive other people's point of view. They see themselves as loners, autonomous, and strong, and some of them may see themselves as abused and mistreated by society. They see others as either exploitative or weak and vulnerable [25].

According to Millon and Everly, antisocial individuals tend to be interpersonally aggressive, abusive, and cruel. They have learned to rely on themselves and to distrust others because they have a fear of being exploited and humiliated by others. They are secured only when they are in control of the situation and are independent of the will of others who may threaten their security (e.g., interpersonal control) [42].

When we look at the relation between the EMS and the aggressive behaviour, we see that Tremblay and Dozois found a relation between the domain of disconnection and rejection (abandonment, mistrust/abuse, social isolation) and domain of impaired limits (entitlement, insufficient self-control) and trait aggressiveness [43]. Gilbert and colleagues aimed to find out the prevalence of EMSs in offenders and they determined that entitlement, social isolation, dependence, insufficient self-control, and failure to achieve are associated with aggression [44]. Loper et al. investigated the relation between the schemas and the personality disorders in 116 incarcerated women who were convicted from robbery to assault. According to results, impaired limits presented with a sense of entitlement, poor impulse control, and lack of concern for others were correlated with cluster-B personality disorders including antisocial personality. This domain was also associated with hostility, institutional misconduct, self-reported violence, and victimization [45].

Polaschek and colleagues analyzed the interviews of the violent offenders and they identified implicit theories—a term which they define as structured interconnected belief network that guides behaviour and allows the individual to predict the result of a particular event [46]—instead of schema. From the transcript of the interview of the offenders, they uncovered four implicit theories: (1) beat or beaten, (2) I am the law, (3) violence is normal, and (4) I get out of control which corresponds to entitlement, mistrust/abuse, and insufficient self-control [47].

Ozdel et al. examined 38 patients diagnosed antisocial personality disorder selected from young soldiers most of whom were having substance abuse treatment in the army and 24 nonclinical volunteers. The purpose of the study was to identify core beliefs and early maladaptive schemas that characterize antisocial personality disorder. Diagnosis was made

according to structured clinical interview for DSM-III-R personality disorders (SCID-II), Young schema questionnaire (YSQ), and the social comparison scale (SCS). SCS tries to identify judgments concerned with rank (inferior-superior) and determines how a person judges himself/herself as fitting in with or being similar to others. When the SCS scores of two groups were compared, it was found that there was a significant difference favoring the control group on these items: unlovable-lovable, lonely-not lonely, rejected-accepted, etc. In other words, control group subjects scored higher, meaning more positive social comparison perception. When the two groups were compared for YSQ, instead of simply comparing the means for specific schemas, the authors preferred to focus on schemas that showed significant differences and also had raw schema scores of 20 or more points. Using this procedure, significant findings were obtained for the specific schemas for emotional deprivation, entitlement/grandiosity, mistrust/abuse, vulnerability to harm, and social isolation. Three out of above five schemas-emotional deprivation, mistrust/abuse and social isolation fall into disconnection/rejection domain. Since this domain is conceptualized as stemming from a person's unmet needs for love, security, stability, and nurturance, it can be assumed that the current individual diagnosed with ASPD see himself/herself as unlovable, lonelier, and more rejected than the normal controls [48]. The results of SCS (the persons with ASPD tend to see themselves unlovable-lonely and rejected) supports the notion that antisocial persons may behave in order to compensate for a sense of victimization (ie., "I am weak so I must be the one who hits first."). Hence these findings may suggest that a conditional belief such as "I should hurt him before he hurts me" is behind the primary social strategies of attacking and exploiting used by individuals with ASPD [49]. This finding fits very well with the schema compensation strategy.

2.4. Treatment in antisocial personality disorder

When a therapist works with a client with antisocial personality disorder (ASPD) many challenges would be there from the beginning. First of all, most of the professionals believed that antisocial personality disorder is an untreatable condition. That's why they are reluctant to treat patients with ASPD. On the other side of the relationship antisocial patients that are coming for therapy are also very reluctant [50].

It is not common that an individual with ASPD goes to the therapist's office for getting help for the problems that are already considered so by the environment. They usually come to therapy when their conventional strategies have stopped working and have not been able to get what they wanted or the law or unofficial authority has threatened them. In these conditions, subjects of the admission are usually mood problems, behavioral problems, and alcohol and substance use problems. Another issue while working with ASPD is motivation. From the stages of change perspective, individuals with ASPD are usually at precontemplation or contemplation stages. This suggests that these people believe the source of the problem is from the outside; they are not the responsible one; or there is some kind of problem but they cannot do anything to solve it.

Above mentioned characteristics of the clinical picture of ASPD are also important guides to the therapist while working with them. This is all to say that the problem areas are mood

problems including anger, anxiety, or depression; alcohol and substance use problems and the treatment strategy should consider teaching more functional attitudes and ways to get things wanted, and methods used in the treatment process must be motivational (i.e., pros and cons analysis).

Unfortunately, there is not any satisfactory evidence which therapeutic intervention is effective for antisocial personality disorder. In a meta-analysis searching for an effective therapy for ASPD concluded that although there are some interventions (i.e., contingency management with standard maintenance or CBT with standard maintenance, etc.) appeared to be effective for substance use problems, none of the psychological treatments were significantly effective [51].

Davidson et al. randomized 52 patients diagnosed with ASPD in two groups, one for CBT and one for treatment as usual. The CBT group received treatment either for 6 months or for 12 months. When the assessments made at baseline and at 12 months were compared, it was found that although 6 months of CBT decreased the problematic alcohol use and increased positive beliefs and social functioning more than the treatment as usual group, the difference was not significant [52].

From the cognitive behavioral point of view, treatment modalities are conventional CBT and schema therapy. Results of the studies used traditional CBT approaches are discouraging with nonsignificant behavioral changes and attitudes [53, 54]. However, a new cognitive behavioral model called the risk-need-responsivity (RNR) has become hope for the treatment of ASPD [55]. This approach assesses individuals with criminal and antisocial behavioral pattern based on their future risk of the criminal act, their needs, and environmental factors related to recidivism. In this approach, the aim is to reduce risk factors specifically connected lasting criminal behaviors since it is not usually used in untraditional mental health settings like prisons. The “risk” part of the model is about the intensity of the treatment because it is considered that the bigger the risk of future criminal behaviour, the more intense treatment is required. The “need” part of the model is about the goals of treatment. These goals are the ones that considered attempts of crimes mostly related to future. The “responsivity” part is about the consistency between the learning styles, ability, and motivational stages and interventions provided [56]. Since antisocial individuals have low motivation or learning abilities to change their somehow “working” strategies, completely individual treatment plan should be warranted. In this treatment plan, strategies pertaining to cognitive, behavioral, and social learning paradigms are used in order to construct an individual profile of learning. Andrew et al. proposed eight factors related to recidivism of the individuals with ASPD. In this risk-need-responsivity (RNR) model, risk factors are categorized under the two domains, which are static risk factors, such as previous crimes committed, and dynamic risk factors, such as current substance misuse. The main static risk factor is the history of antisocial behavior and the dynamic risk factors are disordered personality, criminal thinking (antisocial beliefs), antisocial associates, dysfunctional family or marital bonds, low levels of functioning and/or satisfaction in work/school, low levels of pro-social leisure activities, and substance abuse. Criminal thinking and disordered personality represent the focus for cognitive part of the therapeutic work. The other factors such as low family bond, unemployment, etc. represent

the behavioral part of the therapy. Both cognitive and behavioral parts are sustained together. Antisocial personality beliefs can be assessed by an unstructured interview or some empirically supported tools such as personality belief questionnaire [57]. As for criminal thinking, there are various assessment tools for them. Once personality beliefs and criminal thinking aspects are found, cognitive interventions are implemented.

Cognitive interventions include introduction of conditional and unconditional beliefs; first cognitive restructuring of the intermediate beliefs in terms of rationality and functionality; positive schema log; and behavioral experiments.

Introduction of general CBT model and especially beliefs are of therapeutic effect. Attitudes, rules, and standards can be introduced as personal doctrines that can be held or discharged according to their functionality and doctrine change would need time. Positive schema log is a cognitive technique in which client tries to detect concrete evidences contradicting to old core beliefs (these core beliefs can be about self or others). Behavioral experiments are well-designed individual experiments that try to test certain beliefs.

Behavioral interventions include functional analysis, self-monitoring, activity scheduling, and skills training (social skills training and assertiveness training).

Functional analysis is a work to examine triggers, behaviors, and the consequences of behaviors. These consequences are discussed in a short and long run. Intentions are not always in line with the consequences. This intervention has the individual focus on those consequences. Self-monitoring helps client to be able to stand back and observe him or herself. Activity scheduling helps clients to realize how they spend their times, which activities they usually engage in, and the effects of those activities. Skills training such as social skills training and assertiveness training should be better if added in treatment protocol when working with individuals with ASPD [58].

2.5. The basic concepts in schema therapy of antisocial personality disorder

As mentioned above, because antisocial personality disordered patients generally do not have enough motivation and referred to therapy for legal reasons, it is hard to keep them in therapy. Patients who have ASPD have very little concern about the consequences of their actions and how the others feel. They see themselves as lonely and victimized, so one of the most important things to move forward in therapy is to build a therapeutic rapport. Therapist uses two important strategies—limited reparenting and empathic confrontation—to build a relationship. ASPD patients have strong schemas due to their early childhood memories of unmet basic needs. Limited reparenting provides “corrective emotional experience” that feeds these unmet needs [59]. The responses, empathic attitude, and behaviors of the therapist construct the limited parenting in therapy sessions.

Empathic confrontation is another relational construct which is extremely useful during the change phase of the therapy. It is like a teeter-totter. On one hand, the therapist accepts and shows the schema of the patient. He/she shows empathy about why the patient has that schema, what the utility of the schema was in the early childhood, and how it helped the patient to survive that traumatic period. On the other hand, the therapist confronts with the patient about the current consequences of the schema, how it destructs the patient’s interpersonal relations, etc. Swinging between empathy and confrontation will lead the patient to be more open to alternative interpretations.

Cognitive strategies help the patient build a healthy adult mode, but before that the patient first has to realize his/her mode and then challenge it. It is very obvious that the patient will have difficulty in realizing his/her schema from many aspects; it is (was) a life-saving strategy for him/her. So cognitive strategies help the patient to step back and look at the picture from a distance. Cognitive strategies include [31]:

Testing the validity of a schema: It is like testing the validity of the automatic thoughts in CBT with the exception that, here the validity will be tested in considering the whole life rather than a particular situation. The therapist and the client search for the evidence for and against the schema.

Reframing the evidence supporting the schema: The therapist and the patient make a list of evidences supporting the schema, and then together generate alternative explanations to provide better understanding.

Evaluating the advantages and disadvantages of the patient's coping responses: The aim is to make patients notice that the schemas would have been once the key components for survival sometime during their lifetime but not anymore.

Conducting dialogues between the "schema side" and the "healthy side": Adapted from the "empty chair technique" of Gestalt therapy, the therapist guides the patient to produce healthy answers to the "schema side" and then they switch places and the client plays the "healthy side" or plays both the "healthy side" and the "schema side" and generates healthy answers to accusations of the schema.

Schema flash cards: Patients carry these coping cards when their schemas get activated.

Schema diary: Patients use these diaries again when their schemas are triggered. They identify the triggering event, emotions, thoughts, schema underneath, realistic and unrealistic concerns, and the healthy responses to these.

Following the cognitive strategies, experiential change strategies which include reparenting (imaginary dialogues between the vulnerable child, unhealthy adult, and the healthy adult) take place, letters to the parent and imagination for pattern-breaking [31].

Schema therapy of ASPD is a long journey with obstacles requiring the motivation of both the patient and the therapist. During the process, the therapist must prepare himself/herself for the therapy interfering behaviors/obstacles such as schema avoidance-detached protector mode, anger control problems, alcohol/substance abuse, and criminal behaviors/legal issues and keep his/her own schemas, avoidances, and overcompensations as well.

3. Conclusion

In conclusion, antisocial personality disorder has a great burden on the society in terms of both the financial expenses to treat the disorder and the juridical problems. Yet, there are no satisfactory results in the treatment of ASPD. Full (optimal) remission seems to be an unrealistic target for health professionals. The biggest obstacle is the demotivation of the client, which results in disengagement to the therapy or even not attending the sessions properly. It would not be

surprising for the client to commit therapy interfering behaviors like cheating, lying, or even ridiculing the therapist. Cognitive behavioral-oriented therapies hypothesize that antisocial persons see themselves as unlovable, lonely, etc., which may be a compensation of victimization and suggest focusing on cognitive restructuring of the intermediate beliefs. Although there is not enough evidence of any psychotherapeutic interventions that are significantly effective, improvements in the symptoms like impulsivity, aggressive behaviour, or substance misuse will definitely have positive effects not only on the society in general (like reducing crime rates, etc.) but also on the interpersonal relations that the client have with the others.

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