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Aggressive and antisocial behaviour in childhood and adolescence: psychopathological and clinical considerations

Condotte aggressive ed antisociali nell'infanzia e nella adolescenza: alcune riflessioni cliniche e psicopatologiche

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Abstract
In Childhood and Adolescence, conduct problems and antisocial behaviour are largely widespread and the most common reason for referral to public and private mental health professionals. Aggressive and defiant behaviour is not pathological itself, but is part of normal functioning, particularly at some specific ages, and a component of human nature. Therefore, deciding when aggressive or antisocial behaviour needs clinical intervention is a challenge, especially across developmental stages when the plasticity of mental functioning has an impact on the fluency and instability of the diagnosis. In this paper, we are going to consider psychological, emotional and interpersonal features of children and adolescents displaying a psychopathological conduct, beyond behaviour and acts, which, according to a clinical perspective, could be more useful and should address effective interventions.

Key words: aggressive behaviour • conduct problems • callous-unemotional traits • antisocial behaviour • childhood and adolescence

Riassunto
In età evolutiva, i problemi di comportamento e antisociali sono piuttosto diffusi e costituiscono la principale ragione per cui ci si rivolge ai professionisti della salute mentale sia pubblici che privati. Le condotte aggressive e devianti non sono psicopatologiche di per sé, ma sono una componente costitutiva dello sviluppo normativo, in particolare in specifiche fasi evolutive, e dell'essere umano. Stabilire quando queste condotte necessitino di interventi rappresenta una sfida, ancor più in età evolutiva, quando la plasticità del funzionamento mentale si riflette nella fluidità e instabilità delle diagnosi. In questo lavoro, prendiamo in considerazione, oltre alle condotte, gli aspetti psicologici e affettivo-interpersonali di bambini e adolescenti con psicopatologie del comportamento, che si mostrano in una prospettiva clinica di maggiore utilità per orientare interventi efficaci.

Parole chiave: condotte aggressive • problemi della condotta • tratti *callous-unemotional* • comportamenti antisociali • infanzia e adolescenza

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1. Aggressiveness, violence and antisocial behaviour

The tendency to give a psychopathological meaning to any form of human aggressiveness can be considered a *prejudice* based on the defensive or moralistic disavowal of uncomfortable and generally disapproved aspects that are instead fundamental and universal components of the human behaviour. These components are there even when they remain unexpressed and are functional to growth and existence. This happens both in case of reactive aggressiveness, which belongs to a more defensive and hot-blooded nature, as well as in case of proactive aggressiveness, which is linked to a more predatorily and cold-blooded nature.

"Aggressiveness" is a polysemy that can define the basic energy of a personality, which aims to survival and reproduction, it can identify a defensive conduct in response to a real or imagined threat, or it can refer to a destructive attitude or to a tendency to oppress others.

Less clear, but nonetheless equally relevant, is its relational meaning, already included in its etymology (*ad-gredior* means "go against" and implies a recipient) and tangibly verifiable in the fact that the aggressiveness, when translated into action, is towards the outer world, towards an object (being animated or not), with an outburst that makes the object the depository of the aggressive rush. Although in a wider framework, it can be traced also for the self-harm and self-aggressive behaviours (both physical and psychological), implicating that the own body is used like a "sign" acting as mediator in the relationship with the external object (Saussure, 1916) and expresses violence and aggressiveness[1]. In this context it is the other person that perceives distress and pain, to the point that, in a more specifically clinical and psychopathological framework, it is more frequent - if not the norm - that it is someone different than the aggressive subject that expresses concern and seeks counselling or various nature of intervention (educational, psychiatric and psychological, legal).

To be complex and inclusive of different parts, a definition of aggressiveness should be referred both to the destructive, violent and offensive dimension, and to aspects of assertiveness autonomy and self-affirmation. On the other hand, the denial of our own aggressive and antisocial side and the extreme, excessive cohesion to the social conformism represents a relevant counterpart and deserves just as much attention and clinical analysis[2].

A different scenario is provided when these aspects are a constant, predominant and common pattern, which permeate the personal identity and the relational and social environment, leaving very little space for other aspects of the existence, compromising and preventing the possibility for the person to adapt to the environment, causing undeniable pain and distress to her/himself and others.

Aggressiveness and *Violence*, even if strictly connected, are not synonyms (Sabatello & Stefanile, 2016). Violence (from the Latin *Vis*, strength) is not an instinctive phenomenon and it is oriented to a scope; moreover, it represents only one of the possible results of aggressiveness and it is a phenomenological concept that adds further qualitative connotations to the behaviour, since it implies a relationship between subject and object characterized by the use of the physical strength, power struggle, prevarication, oppression and damage. *Antisociality* and *Deviance* add further connotations which, even if acknowledged in the psychopathological field, refer to a legal and etic setting, as they suggest an antithesis and/or a derailment from what is considered social, from what is legally established and accepted. *Delinquency* is an important subcategory of the antisocial and deviant behaviour, with the particularity that it is the society which considers them illegal and, as a result, the definition changes through time and cultures.

There is no traceable cut-off or cleavage point which could help identify when aggressive conduct or clear antisocial actions in childhood and adolescence are linked to a psychopathological condition, becoming a *necessarily arbitrary* choice (Moffitt et al., 2008). This choice is even more reliable and effective if guided by a clinical evaluation that is accurate, including multiple aspects, phenomenological and psychopathological, but also developmental and subjective, and environmental and cultural[3].

Conduct disorders are a "multifactorial pathology", which implicates many factors (i.e. genetic-constitutional, psychological, environmental and social), each one with specific weights in relation to different developmental ages. Empirical researches suggest that behavioural disorders are

1 "*If it is accepted that all behavior in an interactional situation has message value, i.e., is communication, it follows that no matter how one may try, one cannot not communicate. Activity or inactivity, words or silence all have message value: they influence others and these others, in turn, cannot not respond to these communications and are thus themselves communicating*" (Watzlawick, Beavin & Jackson, 1967, p. 49).

2 Christopher Bollas (1989) proposed the concept of "normotic illness" or "normotic personality": "*A normotic person is someone who is abnormally normal. He is too stable, secure, comfortable and socially extrovert. He is fundamentally disinterested in subjective life and he is inclined to reflect on the thingness of objects, on their material reality, or on 'data' that relates to material phenomena*" (p. 320).

3 In the range of human behaviour and conduct the limit between normal and pathological cannot be easily defined. In any case, it has to do with social norms and with the local dominant culture, with a *cultural bias* that must be taken into consideration (Sabatello, 2010).

based on a genetic vulnerability that could however (and luckily for the treatment's likelihoods) be essential but not enough. In fact, these genetic factors need to run themselves into different environmental (negative) events to develop, and lose their expressive potential without this *nature-nurture* encounter. The assumption that a gene-environment interaction is unavoidable in psychopathology appears in the whole scientific literature (Rutter, 1997; Caspi & Moffitt, 2006; Dodge & Rutter, 2011), in terms of different forms of *gene-environmental interplay*[4]. Although it is important to know the weight genetic influences have on conduct disorders, in a clinical framework it appears even more useful to recognize that they are modifiable (improving or worsening) interacting with environmental factors, including healthcare interventions and treatments.

2. Between Scylla and Charybdis. The diagnosis of Conduct Disorders in Childhood and Adolescence

A certain degree of aggressive and antisocial behaviour is a constitutive aspect of children's and teenagers' development, which defines physical and social existence. After all, we could say the same about the majority of the psychopathology symptoms. Aggressiveness, likewise violence and antisocial attitude, is not a defined clinical-diagnostic entity and it is not a prerogative of externalizing disorders, as they can appear in a number of different clinical conditions with different degrees of importance. Empirical studies do not define a standard that could help differentiate psychopathological situations nor we have a threshold or cleavage point that could help distinguish normal from pathological aggressiveness. Moreover, antisocial behaviour cannot be merely reduced to aggressive display, as it has instead a much more complex configuration. Explaining all antisocial conducts with mental disorder is also a frequent misjudgement. As mentioned earlier, defining a certain degree of antisocial conduct as psychopathological, linked to a conduct disorder or to an oppositional defiant disorder, is an *inevitably arbitrary choice* and it is a result of a "social contract" more than a medical definition (Foucault, 1972, 1974-75, 1975-76).

The way a particular behaviour is expressed changes considerably in relation to age. Defining when an antisocial conduct requires a professional intervention can be challenging. This is even harder during childhood and adolescence, when the plasticity of the mind is reflected in the fluidity and instability of a possible diagnosis and its psychopathological meaning. Making a diagnosis in childhood and adolescence could be like trying to hit a "moving target" (Borum & Grisso, 2007).

Between Scylla and Charybdis as in between the risk of normalising and underestimating early signs of distress and the equally relevant risk of medicalization and stigmatization of behaviours that might happen in a normal developmental period and have an adaptive function, with clear iatrogenic damage. This results in the importance of an accurate diagnosis, the relevance of an assessment of the general adaptation processes and of the specific characteristic of each developmental phase (Rutter & Taylor, 2002).

Before defining a behaviour as atypical or problematic, we need to determine aspects such as *degree* (seriousness and frequency of the antisocial actions in comparison with children of the same age and gender), *pattern* (variety of the antisocial acts and of the context within they take place), *persistence* (duration in time) and *impact* (child's distress and social impairment; destructive behaviour and harm towards others) (NICE, 2013).

In terms of development, the first aggressive and antisocial behavioural ways, which are considered as "normal", are traceable at a very early age. The child begins showing physical aggressiveness (*overt*) by the end of the first year of life, when he acquires the necessary motor coordination skills in order to complete actions such as pushing, pulling, hitting, kicking etc. (Tremblay et al., 1999, 2004). A "Curve of Aggressiveness" has been identified in normal development, which envisages two peaks in two different developmental stages of life. The first, less renown, is traceable around the second-third year of life (the "*terrible twos and threes*"). At this stage, displays of aggressiveness and oppositional behaviour are very common and parents find it hard to deal with them (Nagin & Tremblay, 1999); on this subject, the Canadian psychologist Richard Tremblay (2000) has depicted a very evocative image: if two-year-old kids were to have the same size of an adult, they would be extremely dangerous when they hit or when they get angry.

With the progressive acquisition of linguistic and social competencies, we assist to a gradual decrease of aggressive overt behaviours and – at the same time – to the beginning of other forms of aggressiveness, more subtle and hidden (covert) (Loeber & Schmaling, 1985; Tremblay et al., 2004). On the contrary, if a consistent pattern of aggressive behaviour - in association with other individual or environmental factors - remain, this might reveal an early form of mental disorder and a psychopathological risk of emotional and/or behavioural dysregulation that could even lead to a more

4 Genetic factors can whether increase individual vulnerability to environmental adversities (*gene-environment interaction: GxE*), or be involved in the origin of them (*gene-environment correlation: rGE)*. There are three main types of rGE: (a) *passive* correlations, when, for instance, a genetic risk factor models parenting such as conditioning child environment, in order that the child is passively subjected to environmental characteristics; (b) *active* correlations, when a certain genetic trims promote specific behaviours, in order that the individual actively searches for an environment compliant with his own behavioural/temperamental features (e.g. affiliation with deviant peers in adolescence); (c) *evocative* correlations, when a behaviour influenced by genetic factors elicits specific environmental responses (e.g. it is more likely that children with difficult or aggressive temperament may evoke aggressive responses by parents or peers: see the Patterson's *Coercion Model*, 1982). An example of gene-environment interaction (GxE) was proposed by Caspi and colleagues (2002). In a genetic-molecular perspective, they found that individuals exposed to childhood maltreatment, interpersonal violence or neglect show a higher risk to develop antisocial or conduct disorders if they have the low-activity variant of monoamine oxidase-A (or MAO-A "low") genotype than maltreated children with high-activity variant (or MAO-A "high") (Kim-Cohen et al., 2006).

evident deviant behaviour in pre-puberty (Loeber & Farrington, 2000)[5].

The second, more famous peak happens during the teenage *turmoil*, when the aggressiveness takes off again, after years of decline and latency. In Adolescence, deviant behaviours must necessarily be framed within an ampler tendency to carry out transgressive and antisocial behaviours (Rutter, Giller & Hagell, 1998), and within a neurobiological vulnerability linked to lack of control of impulses (Rapaport et al.,1999; Chambers & Potenza, 2003). In fact, adolescents' impulsiveness has a neurobiological basis strictly related to the different maturation timing between different structures of the brain: on the one hand those structures that lead to immediate action, which pull the trigger, and are already mature at age of 12-13 years, on the other hand, those that are used to inhibit a behaviour, increasing its control and evaluating its consequences (frontal cortex), that mature around 20-22 years old (Steinberg, 2008, 2009, 2014). The adolescent's *ad-gredior* is often a *trans-gredior* that, on the one hand, can seem pathological and dysfunctional, but, on the other hand, in normative situations, it allows the developmental process, the "go beyond" concept that is also contained in the etymology. After all, transgression is a universal aspect of the Adolescence, age in which the relationship with educational and social norms are reviewed and generally called into question. As a consequence, it can be challenging to discern when the youngster is expressing a desire to grow and be independent and when he is instead showing a sign of personal, family and social distress. In this phase, most of the times the antisocial behaviour is just temporary, nonetheless it might represent the first step towards a stabilisation of the deviant behaviour (De Leo, 1998). These "peaks of aggressiveness" are highly adaptive aspects and are functional to growth and to fulfil the developmental tasks. It is in fact significant that they show up in two moments of life in which, with the necessary phenomenological and age related differences, the individual is pushed to complete developmental transitions in which the need to stand out and grow necessarily has to go through a process of differentiation from others and an increase of the explorative impulse, in spite of the uncomfortable implications for parents, that are often worried and even alarmed (and it is not rare that they require professional counselling). Under a developmental prospective, these peaks match respectively the last step of the separation-individuation process, as identified by Mahler, Pine and Bergman (1975) in the first two years of life, and, in adolescence, the second individuation process (Blos, 1967), or subjectivation (Cahn, 1988) and the development of motivational/emotional systems[6] (MacLean, 1990; Panksepp, 1998; Liotti, 2005). In an age-normative developmental context, the enactment of aggressive behaviours has more to do with assertiveness, differentiation and self-individuation, than with destructiveness such as violation or harm to others. Nonetheless, in our opinion, in psychopathological (but also in not psychopathological) conditions it is always possible to trace both these aspects, since every evolutionary thrust towards self-affirmation has in its own core a destructive component (towards the previous equilibrium) and the same aggressive and destructive symptoms include (dysfunctional) attempts of self-affirmation.

> *If there is an overall message from our 30-year study of individual adaptation, it is that persons develop. We are not simply born to be who we become. Our patterns of adaptation and maladaptation, our particular liabilities and strengths, whether and how we are vulnerable or resilient — all are complex products of a lengthy developmental process. Likewise, the forms of psychopathology that any of us show are developmental outcomes. […] Psychopathology is not a condition that some individuals simply have or are born to have; rather, it is the outcome of a developmental process. It derives from the successive adaptations of individuals in their environment across time, each adaptation providing a foundation for the next* (Sroufe, 2009, p. 179).

The psychopathology comes from a sequence of individual adaptations to the environment through time; each of them forms the basis for the successive (Cicchetti, 1990; Sroufe & Rutter, 1984; Sameroff & Emde, 1989; Cicchetti, Toth, 2009). The making of a diagnosis of conduct disorders only means that - at that stage in time - child is behaving according to specific criteria. It is a pure *phenomenological* and *tautological* description and it does not involve the causes of that particular case. The child can spontaneously change his conducts and – in just a short amount of time – may not display the criteria that brought to the diagnosis or it could instead evolve to more severe psychopathological outcomes.

An approach based on developmental psychopathology is clinically more useful and aims to show how the critical factor is the failure to accomplish developmental phase-specific tasks. The right execution of these tasks is, in fact, evidence of the necessary self-fulfilment under a neurocognitive, affective, relational and environmental profile. The failure to face and succeed through the different phases and developmental tasks can determine a condition

5 Empirical research described in children at the age of 3-4 years an oppositional temperament, characterized by changing mood, irritability and regulation problems, which is associated with later aggressive and violent behaviour (Bates, Bayles, Bennett, Ridge, & Brown, 1991; Loeber & Farrington, 2000; Keenan, 2001). This behavioural style was related to specific emotional response patterns (i.e. low anger control, lack of fear and poor social control: Eisenberg, 2000). On this basis, some environmental negative interactions can take place, enhancing the risk of developing hostile, aggressive or negative behaviour and, later, more severe conduct problems (Romani, 2010). This difficult temperament can be considered as an early and previous constitutional factor for an emotional and behavioural condition, which in turn produces a low internal emotional control and difficulties to attend age-related developmental tasks (i.e. learning ability and social skills). If this individual vulnerability occurs with the exposure to negative environmental responses, it can lead to a developmental pathway in which dysfunctional behavioural patterns are gradually reinforced and can become chronic.

6 As puberty and sexual maturation progress, the primacy of attachment motivational system, biologically predetermined to regulate parent-child interactions, decreases, while an *agonistic* system arises, appointed to organize adult relationships, with a peak of maturation during adolescence (Stevens & Price, 1996).

of suffering within that specific phase and/or a risk of future distress. We also need to look at the developmental meaning of aggressive and deviant acts, placing them in context with specific developmental needs.

A deviant behaviour is generated when genetic factors, environmental aspects and life events braid a negative relationship and sum up, causing a condition of maladjustment. If it is to be considered a maladjustment or an adaptation, it mainly depends on the point of view. The concept of *maladjustment* comes from an external point of view of the observer, but if we consider the individual personal point of view it could be considered an *adaptation* to the environment[7], probably the best (and maybe the only) solution the person has found or what he thinks this is up to this moment. In addition, what appears to be specific to behavioural disorders is the fact that the person itself presents generally the distress as something that belongs to the outside and to others (i.e. out of the person). A depressed or anxious child or adolescent "feels" the pain (*egodystony*) and expresses his limitation, by his own way, though the pain; this does not happen in an oppositional child or an adolescent with behavioural issues (*egosyntony*). It is the other person who suffered the violence and aggressiveness or the social, legal environment that points out the distress, drawing the limit. More than the presence or the intensity of this behaviour, it is the pattern of these actions towards the other and the context that gives meaning to the externalizing construct (Sroufe et al, 2005)[8]. Keeping this vision in mind, helps providing a more complex overview, which is beneficial to clinical work with children and adolescents.

3. Phenomenology of conduct problems: diagnostic systems and longitudinal studies

Some aggressive and antisocial behaviour may be manifested in many (if not in all) mental disorders; nevertheless, in specified disorders they represent the psychopathological nucleus of them, that in childhood and adolescents correspond to the macro-category of *conduct disorders*.

The latest edition of the *Diagnostic and Statistical Manual of Mental Disorders*, edited by American Psychiatric Association (DSM-5: APA, 2013), includes a section called "Disruptive, Impulse-Control, and Conduct Disorders", referred to clinical pictures of emotional and behavioural dysregulation resulting in aggressive and destructive conducts, violation of other's rights, and authority conflict[9]. The specified diagnostic categories for children and adolescents are Oppositional Defiant Disorder, Explosive Intermittent Disorder, and Conduct Disorder.

Oppositional Defiant Disorder (ODD) concerns a specific recurring and pervasive pattern of hostile, negative, defiant and oppositional behaviour, together with anger and/or irritability; the onset usually occurs very earlier (e.g. preschool age). *Conduct Disorder (CD)* consists in a repetitive and persistent pattern of behaviour in which the basic rights of others and the fundamental societal norms and rules are violated, including: aggression to people and animals, destruction of property, deceitfulness or theft, and serious violations of rules. It is further possible to distinguish different subtypes of CD, based on different onset-age (i.e. *childhood-onset*, prior to age of 10 years; adolescent-onset, after to age of 10 years), on current severity (i.e. referred to the behaviour's amount of damage and offense), and on the presence or not of *limited-prosocial-emotions* (LPE). The specifier LPE included in DSM-5 is an important novelty, that permits to identify a specific subtype of children with CD, characterized by stable and pervasive (i.e. displayed in multiple relationships and settings) features. It is connected to the concept of psychopathy and includes at least two of the following characteristics: lack of remorse or guilt, callous-lack of empathy, unconcerned about performance, and shallow or deficient affect.

In the *International Classification of Diseases and Related Health Problems, 10th Revision* (ICD-10: WHO, 1990), conduct disorders are included into the section entitled "Behavioural and emotional disorders with onset usually occurring in childhood and adolescence". Compared to DSM-5, ICD-10 reduces the relevance of dissocial disorder's early-onset and increases the significance of personality traits as compared with behaviours; moreover, it requires that social conflicts and deviance, individually and without personal pain (e.g. décalage of relational, social or scholastic abilities), would be not considered as psychopathological conditions. *Conduct Disorders* consist in a repetitive and persistent pattern of dissocial, aggressive, or defiant conduct, which should amount of more serious behaviour than age-appropriated social expectations (e.g. ordinary childish mis-

7 In his paper *The Antisocial Tendency* (1956), Donald Winnicott explains aggressive and antisocial expressions as reactions to experiences of deprivation or loss. Lacking a trusted environment, the child is not able to repair his destructive impulse, which is acted in reality through violent actions. In this perspective, aggression is conceived as a request for help and containment, and as a "*urge to seek for a cure by new environmental provision*" (p. 313).

8 A moral philosopher would say that the difference, at equal behaviours, is in the purpose. In the book "*Would You Kill the Fat Man?*" (2013), David Edmonds introduces an interesting journey across moral philosophy starting from an ethical dilemma: "*A runaway train is racing toward five men who are tied to the track. Unless the train is stopped, it will inevitably kill all five men. You are standing on a footbridge looking down on the unfolding disaster. However, a fat man, a stranger, is standing next to you: if you push him off the bridge, he will topple onto the line and, although he will die, his chunky body will stop the train, saving five lives. Would you kill the fat man?*". The question may seem bizarre, but has baffled moral philosophers for almost half a century and more recently has come to preoccupy neuroscientists, psychologists and other thinkers as well. As the author shows, answering the question is far more complex than it first appears, and the way we answer it tells us a great deal about right and wrong.

9 Compared to DSM-IV-TR (APA, 2000), Attention Deficit Hyperactivity Disorder is not included in this part, but in the new section of Neurodevelopmental Disorders, characterized by emotional and behavioural dysregulation without aggressive and hostile conducts toward the others. This is an important restatement of the diagnostic category: thus, disruptive behaviour and conduct disorders focus on conflict and violence tendency, which may develop by a predisposition to impulsivity, inattention or hyperactivity, but transcend it.

chief or adolescent rebelliousness). Even though diagnostic descriptions, such those of DSM-5, are mainly based on behavioural aspects, in the subtypes of ICD-10 can be retraced also contextual and relational characteristics with the distinction between disorders confined to the family context, unsocialized or socialized conduct disorders. In ICD-10, the *Oppositional Defiant Disorder* is considered as a milder and earlier form of conduct disorder, which does not include delinquent acts or the more extreme forms of aggressive or dissocial behaviour, restricted to defiant, disobedient, disruptive behaviour. Furthermore, two additional categories are included: *Mixed disorders of conduct and emotions*, characterized by the combination of behavioural problems with overt and marked symptoms of depression, anxiety or other emotional upsets (i.e. *Depressive conduct disorder*, as the main clinical picture), and *Hyperkinetic disorders*, marked by the coexistence of hyperactivity and conduct symptoms[10].

Longitudinal studies on developmental pathways of deviancy over time, as *Dunedin Multidisciplinary Health and Development Study* and *Pittsburgh Youth Study*, are classical but still actual, by reason of their validity and capability to build taxonomies that are widely shared, evidence-based, and adopted by diagnostic systems, inspiring continuously following researchers.

The Dunedin Study is an epidemiological research conducted by the group of Terrie E. Moffitt and Avshalom Caspi in collaboration with New Zealand researchers (in fact, Dunedin is a New Zealand's city) to study the causes and the course of developmental physical and mental health problems. By the analysis of morbidity's variations of disorders and their susceptibility to environmental risk factors, Moffitt proposed a developmental theory of antisocial behaviour (Moffitt, 1993, 2003, 2006; Moffitt & Caspi, 2001), based on the concept of *heterotypic continuity*[11] to explain the spectrum of behavioural variations during different ages. This study identified a dual taxonomy of antisocial behaviour, consisting in two types characterized by different psychopathological constructs, psychological and biological antecedents, and developmental features: *Life-Course-Persistent* (LCP) and *Adolescent-Limited* (AL) antisocial behaviours. If considering their phenomenological presentation, it might be difficult to distinguish them (i.e. the clinical manifestation may be identical), they could be discerned by longitudinal assessment (Moffitt, 2006; Frick & Viding 2009). LCP group shows antisocial behaviour during childhood and during the overall life course (*childhood-onset* or *early-starter*), and it seem to be more strongly related to neuropsychological (e.g. deficits in executive functioning) and cognitive (e.g. a lower QI) impairments, more temperamental and personality risk factors (i.e. impulsivity, attention dysfunctions, and problems in emotional regulation), more severe problems with peers group, and probably (but not exclusively) dysfunctional families. In addition, they often have attention-deficit/hyperactivity disorder (ADHD) symptoms (Carabellese et al, 2016; Margari et al, 2015), which forerun conduct problems and represented an early marker and an important risk factor for more severe psychopathological outcomes (Waschbusch, 2002). AL group presents a pattern of antisocial and deviant behaviour (i.e. it generally consists, differently to LCP, in crimes against proprieties, as violation or destruction) that begins and, in most of cases, ends during adolescent period (*adolescent-onset*), without antecedents in childhood or persistence in adulthood (*adolescent-limited*); it appears to be more influenced by social and environmental conditions (e.g. affiliation to deviant group), without neuropsychological impairments. The classification of antisocial subgroups based on the age of onset has a strong predictive validity; nevertheless, recent studies suggest that adolescent-onset group would be limited at this age only in their antisocial behaviour, since it would present different outcomes in adulthood, more than previously supposed (NICE, 2013). Following researches have suggested that about half of those with a childhood-onset would not persist in their antisocial behaviour into adulthood, pointing to the need to recognize another subgroup with early onset and *childhood-limited* (CL: Odgers et al., 2008); however, for this subgroup, the psychopathological condition, further than be resolved over time, would evolve into different and various problems (e.g. depression, social isolation and to be dependent on others: Wiesner, Kim & Capaldi, 2005). Additionally, it has been proposed to identify an additional subgroup, even though rare, characterized by *adult-onset* (Elander et al., 2000) antisocial behaviour (i.e. violent and coercive), that generally develops only after the onset of psychosis (Hodgins,Viding, & Plodowski, 2009), substance abuse (Brook, Whiteman, Finch, & Cohen, 1996), sexual offences (Barbaree & Marshall, 2008) or associated with psychopathy (Rutter, 2012).

The *Pittsburgh Youth Study*, directed by Rolf Loeber (Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998), examined the factors associated with delinquency onset, identifying different developmental pathways. According to this study, the onset of severe forms of delinquency would not be concentrated in early childhood, but would progressively emerge up to 14-15 years old, often forerun by various, not necessarily antisocial, problems. Loeber and colleagues suggested that these different antisocial *pathways* could express specified deviance models or refusal of social rules, but also that temperamental, personality and environmental factors could determinate behavioural patterns that are only apparently different as they share an antisocial hint. "Delinquency careers" (different groups with specified paths, identified by the nature of antisocial attitude, actions, and behaviour) include: (1) an *authority conflict pathway*, that starts prior to the age of 12 and occurs earlier with stubbornness, following with defiance/disobedience, and after with authority avoidance (i.e. truancy, running away from home, staying out at night); (2) a *covert pathway*, that stars prior to the age of 15 with minor deviant behaviour (i.e. lie, petty theft) and carries on with property damage (i.e. vandalism and fire-setting), moderate antisocial acts

10 The revision of ICD, as of now updating (the publication of ICD-11 is expected in 2018), results to get closer to DSM-5, with the section "Disruptive behaviour or dissocial disorders", including *Oppositional defiant disorder* and *Conduct-dissocial disorder*. Moreover, ICD-11 introduces a subtype of ODD "with limited prosocial emotions", not included in DSM-5 (cf. https://icd.who.int/dev11/l-m/en).

11 The concept of *heterotypic continuity* (or behavioural coherence) suggests that conduct problems are expressed with a range of behaviours which are modified with growth and developmental stages, according to functional correspondence parameters.

(i.e. fraud, pick-pocketing), and later serious delinquent acts (i.e. car theft, burglary); (3) an *overt pathway*, that stars with minor aggressive behaviour (i.e. annoying others, bullying) and continues with physical fighting, and then with severe violent acts (i.e. rape, attack, strong-arm).

4. *Beyond* behaviour: psychological, emotional and interpersonal aspects of antisocial and psychopathic conducts

The diagnostic systems and longitudinal taxonomies categorise antisocial acts and conduct disorder purely in behavioural terms, overlooking any explicit reference to psychological and relational aspects. As a consequence, these mental disorders are described with terms that appear closer to legal categorizations than psychiatric, just like conducts that violate regulations more than with psychopathological meaning, with ethical concern about acts and a sort of "dehumanization" of the acting person.

Violence, deviancy and aggressive behaviours are purely phenomenological concepts that hint at a tendency of the individual to take action, they describe *what a person does*. So, using only this level of assessment brings to a diagnosis that is essentially *tautological*. Looking at the behaviour only, without going beyond what is openly displayed, shows a peculiar correspondence – almost a *collusion* – with the pathological core of the behavioural psychopathology: the tendency to translate into action (acting out) and the transfer on what is other than self (object or person to whom the action is directed) of aspects that are instead part of the individual psychic world.

When we go from the "official diagnosis" to the clinical one, staying at this level is reductive and useless. The core of the therapy of these psychopathological conditions must be inverting the externalization process by rebuilding the relationship of the individual with the emotional and relational world, which goes beyond the actions and considers human and subjective aspects. An important step in this direction has been taken by introducing the possibility, within the DSM-5, to indicate the presence of *limited-prosocial-emotions* (LPE), naming in a less stigmatizing way as *callous-unemotional* (CU) traits. In doing so, it has recognized well-known clinical evidences, which have been confirmed empirically in 30 years of scientific literature, around the existence of psychopathic features in childhood and adolescence and the identification of a subgroup that shows different genetic, cognitive, emotional and social aspects, with autonomous aetiology and pathogenesis and evident clinical implications (Frick, Ray, Thornton, & Kahn, 2013).

The interest and the debate around antisocial and psychopathic behaviours in childhood and adolescence starts with the work of Frick and colleagues (Frick, O'Brien, Wootton, & McBurnett, 1994), which has then been taken up and examined in depth by Forth (1995) and Lynam (1996), in the nineties. The interest has then increased in the last 15 years, as showed by the number of articles on the subject (Frick, 2000; Caspi & Shiner, 2006; Lynam et al., 2009; Frick & Viding, 2009; Salekin & Lynam, 2010).

Despite the reluctance to refer to psychopathy in childhood and adolescence, with the ethic and practical implications involved, we cannot identify its onset as sudden, once the adulthood approaches. Both the clinical experience and the empirical research clearly indicate that the prior symptoms can be already identified in this early phase, anticipating what will be a psychopathic profile in adulthood (Robins, 1966; Farrington, 2005; Frick & Viding, 2009; Sabatello, 2010; Sabatello & Stefanile, 2016)[12].

Callous-unemotional traits (CU) are considered as the core of psychopathy (Cleckley, 1941; Hare, 2003) and they identify, among children and adolescents with early conduct and antisocial psychopathologies, a subgroup of individuals with distinct temperamental, emotional, cognitive, interpersonal and family features. These traits have a consistent behavioural *pattern* that include: *indifference towards others, superficial affectivity, lack of empathy, no sense of guilt or remorse, tendency to take advantage of others, lack of responsibility for the consequences of their actions, deficit of relational capability, deceptive use of aggressiveness* (Sabatello & Stefanile, 2016).

In childhood and adolescence, as in adulthood, antisociality is organized along two axes, depending on the type of displayed aggressiveness: an *impulsive* axis, in which the aggressiveness is mainly reactive (this is the real antisocial behaviour, responsible of the most common crimes) and it

12 The American psychiatrist Hervey M. Cleckley, in his *The Mask of Sanity* (1941) proposed for the first time a clinical systematic depiction of psychopathy. The author refused to reduce psychopaths to criminals and pointed at the ability to conceal themselves behind a face of normality as the subtlest and most dangerous feature; beyond their mask they hide low levels or lack of empathy and sense of guilt or honesty, egocentrism, glibness, tendency to manipulation, failure to learn from previous experiences and to feel object-love, which are clear only if carefully observed in different settings. Not all people with psychopathic traits undertake criminal careers, and often they appear well-adjusted and above suspicion (e.g. the *White Collars*; Hare, 2003; Neumann, Hare & Newman, 2007; Lishner et al., 2012).
In the nineties, starting from Cleckley's descriptions, Robert Hare developed and, at a later time, revised the *Psychopathy Checklist Revised* (PCL-R: Cooke, Michie, Hart & Hare, 1999), an effective and reliable method to assess psychopathic characteristics. Later, he develops the PCL-Youth Version for children and adolescents (Forth, Kosson & Hare, 2003; Sabatello, Abbate & Spissu, 2013). Based on findings from factorial experimental studies, Hare (1991, 2003) proposed a multidimensional structure of adult psychopathy, inclusive of three conceptually separated, but inter-correlated domains. An *interpersonal* domain, consisting of grandiose-manipulative traits (i.e. *narcissism*) characterized by verbal and manipulative abilities, superficial charm, egocentricity and glibness. An *affective* domain, consisting of callous-unemotional (CU) traits marked by lack of empathy and guilt, with short-lived emotions. A *behavioural* domain, consisting of daring impulsive traits like irresponsibility, proneness to boredom, novelty seeking and antisocial behaviour. Psychopathy arises as a disorder with high stability over-time, low sensitivity to treatments, and high recidivism risk (Ogloff, Wong & Greenwood, 1990; Shine & Hobson, 2000; Salekin, 2008). This construct becomes important especially in the legal setting, for assessing of personality and of possible measures for individual (i.e. the probation's assessment in adult or juvenile criminal trial), considering his connections with violent acting and the high risk of recidivism (Edens, Campbell, & Weir, 2006).

suggests impulsiveness and no ability to control the explosive response (emotional and behavioural dyscontrol); a *cold blooded and insensible* axis, in which the aggressiveness is sadistic and predatory (this is the psychopathy, responsible of the most serious crimes), in which the behaviour is generally linked to a damage of the social and emotional processes, with lack of empathy and prosocial emotions. Some authors locate antisociality and psychopathy along a continuum, as they consider psychopathy a more serious declination of antisociality (Coid & Ullrich, 2010); others consider them as two different configurations (Hare, 2003; Cooke, Michie & Skeem, 2007).

In terms of developmental pathways, although it might seem simplistic, it may be representative to divide children and adolescents with aggressive and violent behaviours in two categories, based on physical and psychological temperature and/or in terms of full vs. empty. On one side, we have a "too hot" polarity, that involves a failure to develop an adequate emotional regulation, that brings to more impulsive aggressive or antisocial behaviours during intense emotional arousal (full) and prevents the child from understanding the consequences of his own actions (almost an emotional eruption that clouds the mind). On the other hand, a "too cold" polarity that prevents the development of an adequate level of empathy, guilt and other aspects of conscience (empty), which bring to a more severe aggressiveness of planned and deceptive nature.

The construct of Emotional and Affect regulation (Bion, 1962; Winnicott, 1971; Fonagy & Target, 2001; Trevarthen, 2001), is widely used in the attempt to explain impulsive polarity of conduct disorders, with the continuous research of a regulation (i.e. dyadic regulation, or regulation by others) through action and externalization. Nonetheless in the psychopathic pattern this concept appears just as much relevant, as in those cases it is shown an exceeding regulation (i.e. self-regulation) that brings to a calcification or freeze of the emotions (and of their physiologic correlates), neutralizing the intersubjective contribution of what is else from self (we could say that inter-subjectivity becomes *inter-objectivity*).

Children and adolescents with antisocial or conduct disorders which refer to a "hot" or "impulsive" pathway (not significant levels of CU traits) show an excessive environmental sensitivity (*fearful-type*) and over-reactivity towards neutral or ambiguous stimulus that are wrongly interpreted (*mislabelling*) as threatening, hostile or dangerous; in general, there is no premeditation in their action, acting-out is linked to a low tolerance and frustration, lack of regulation of the emotional and behavioural responses to emotional stimulus, increase of physical excitement and levels of arousal, deficit of the inhibitory functions (Hubbard, McAuliffe, Morrow, & Romano, 2010; Qiao, Xie, & Du, 2012). The emotional and behavioural consequence of these aspects is a loss of control that brings the internal world to "explode" in actions and conducts that are difficult to manage. These children feel bothered, provoked and they hit as reacting, often thinking that something unfair happened to them (they frequently feel they are victims of other people). In more general terms, we could define a subgroup that shows a highly reactive temperament in combination with an inadequate experience with socialization. This mix causes a failure in the development of the necessary skills that regulate the emotional and behavioural response (Frick & Morris, 2004; Blair, 2010) and produce antisocial actions driven by an "affective rage" (Panksepp, 1998). These children and adolescents might feel some level of anxiety and, later, some remorse for these actions, but they would still be not able to refrain from repeating them, since they are not able to learn from the experience (Frick, 2016). Some etiopathogenetic studies show that these behaviours are less influenced by genetics and are rather affected by environmental factors, such as hostile and/or coercive parenting style (Waschbusch, 2002; Hare & Neumann, 2008; Frick & Viding, 2009; Frick et al., 2013).

Of a completely different nature is the subgroup of children and adolescents with conduct problems and psychopathic traits, characterized mainly by aspects of deficiency or absence, both with respect to feelings (*callousness*) as well as physiological and emotional response (*unemotional*). The phenomenological outcome can be expressed either as lower levels of prosocial behaviour or as higher level of antisocial conduct, but this last result must not be taken for granted, since psychopathy, even in developmental age, might not openly display deviant behaviours and might hide behind socially accepted appearances, without showing conduct psychopathologies (Kumsta, Sonuga-Barke & Rutter, 2012; Musser, Galloway-Long, Frick & Nigg, 2013). When they do result in antisocial conducts[13], these children and adolescents display a pattern of pathological behaviour which is more stable and aggressive, associated to an increased risk of early delinquency, more severe antisocial acts, maintenance of behavioural disorders while growing into an adult age and a low response to treatment, that suggests the presence of a specific aetiology for this group of individuals (Frick et al., 2003, 2005, 2013; Lynam & Gudonis, 2005). Even if the psychopathic behaviour more often displays an instrumental and proactive aggressiveness ("quite-bite attack": Panksepp, 1998), children and adolescents with high CU traits, in certain circumstances might use some reactive forms of aggressiveness (Frick & White, 2008).

Studies highlight an increased relevance of *genetic influences* in this kind of antisocial behaviour (Taylor et al., 2003; Viding et al., 2005, 2008; Bezdjian, Tuvblad, Raine & Baker, 2011; Hicks et al., 2012). The weight of this kind of influences is estimated at around 42% and 68% (Frick et al., 2013) and they could explain the early onset and the stability through time (Blonigen et al., 2006; Fontaine, Rijsdijk, McCrory, & Viding, 2010). There are also types of psychopathy that result from early traumatic or environmental negative experiences (Marshall & Cooke, 1999; Caspi et al., 2002; Krischer & Sevecke, 2008), for which painful emotional aspects are cleared from the mind through *autotomic processes* (Imbasciati, 1998) as these aspects are not essential to survival, in terms of adaptation process; it is frequently found in adopted children or adolescents, especially if severely abused at an early age.

CU traits can be identified and measured as early as 4-year-olds (Dadds et al., 2005; Ezpeleta et al., 2012). Empirical findings, following the recent information about the

13 Research has found that prevalence rates for elevated levels of CU traits in children with conduct problems have ranged from 12% to 46% (Rowe et al., 2010; Kahn et al., 2012).

different and individual empathy skills and around the first years of life, have suggested the existence of even earlier signs, that can be considered more as "CU conducts" (associated to lower levels of sense of guilt, or of empathy, and to forms of proactive aggressiveness) than as proper CU traits, given the early stage of development, at 2-3-year-olds (Goffin et al., 2017; Waller et al., 2017). Researches on these early signs are still very young, but they are also very promising especially for the contribution they can give if used in such early stages of development, when these aspects are still malleable and yet to become permanent.

Several empirical evidences show alterations in the processing of emotions and external inputs that could explain the failure of negative reinforcement in the treatments (Masi et al., 2014). These children and adolescents barely react to the environment and they present anomalies in terms of lack of physiological and emotional response to inputs of different nature (i.e. *fearless type*: Frick & White, 2008), with a reduced autonomic responsiveness when they look at pictures of people in distress (Blair, Colledge, Murray & Mitchell, 2001) and impairment in the facial recognition of fear and sadness (Blair, et al., 2001; Marsh & Blair, 2008), but also of other emotions conveyed through different sensory systems (e.g. vocal cues: Dawel, O'Kearney, McKone & Palermo, 2012). The under-reactivity has been confirmed by a number of experimental researches, which have found anomalies in terms of deficiency of the main physiologic and neurobiology indicators (i.e. heart rate, HPA system and cortisol response, circuits connected to the amygdala and the prefrontal cortex: Loney et al., 2006; Sondeijker et al., 2008; Jones et al., 2009; De Wied et al., 2012; Marsh et al., 2013). Their callousness towards others is well represented through the insensitivity to others' distress cues (Kimonis et al., 2006; Viding et al., 2012) and to punishment (Blair et al., 2001; Paradini et al., 2003). It is also shown through the glorification of aggressiveness, which is considered a reasonable way to reach a goal, is described in positive and profitable terms and is considered a way to dominate and take revenge in social conflicts (Pardini, Lochman & Frick, 2003; Chabrol, van Leeuwen, Rodgers & Gibbs, 2011).

In terms of empathy skills, there is an evident struggle with both main elements of the construct identified by Baron-Cohen (2011). On the one hand, there is a deficit in terms of *recognition,* as in the ability to acquire two points of view (double-minded) in order to understand others' cognitive and emotional condition (*cognitive empathy*). On the other hand, there is a deficit in terms of *response* to others' thoughts or feelings with a congruent emotion (*emotional empathy*).

These individuals appear to belong to a presocialized emotional world (Meloy, 2001), where the intersubjective aspect of relationships disappears and, if it is present, it is reduced to instrument for personal aims and, like that, it is dehumanized. It appears linked with narcissistic dimension which, as many argued, represents the functional and affective core of psychopathy (Kernberg, 1998; Meloy, 2001; Hare, 2003). Freud, in the paper *On Narcissism: An Introduction* (1914), suggested a link between narcissism and criminality by the concept of projection as defence mechanisms through the criminal, such as the narcissistic, would try to protect his own identity. One of the main contribution on narcissism's theory was proposed by Otto F. Kernberg (1992, 1998), who includes antisocial and psychopathic behaviour on psychopathological narcissism as a primitive variant. Kernberg suggests an antisocial and psychopathic behaviour's continuum, which starts out by antisocial acts as part of symptomatic neurosis (e.g. adolescent rebellion), and arrives at the most severe extreme represented by pathological narcissism and, after, antisocial and psychopathic personality disorders. Antisocial and psychopathic subjects are not able to develop object relations and lack ethic; they represent the most serious and less tractable form of borderline personality organization, characterized by a fragmented identity, pathological internal object relations and primitive defence mechanisms.

Some authors identify, as the core of psychopathy, a basic emotional deficit, consisting of callousness, insensitivity and lack of empathy (Baron-Cohen, 2011). It would result in a sort of dehumanization, with a destruction of the own's (well represented by physiological and emotional "coldness") and other's vital aspects (*humus*). Nevertheless, aggressive and antisocial acts keep necessarily a relational aspect, even in their most extreme forms: the *anti-social* is based on recognizing previously a *social,* as prerequisite that is firstly taken on and later distanced. The distance from the social is acted by behaviours, but also emotional and interpersonal conditions, that are put out and against it, breaking and destroying it.

Some of these characteristics appear also in cases of severe predatory aggression or of psychopathic dominance's glorification, anyway subtending a proposal of contact and proximity to others, even though based on interpersonal destructiveness and damage. It suggests a paradox: to get into a relationship by destroying the relationship and keeping so an essential aspect of dependency on others. The predator needs the prey to exist, as well as the dominant needs the dominated. With regard to it, some authors (Glasser, 1986; Music, 2016) refer the concept of "core complex", as a state of mind in which individual can bear neither closeness nor separation from the object, that is trackable in many aggressive patients, in particular those with sadistic or perverse traits. Attempting to go out of the paradox, these individuals use destructive or sadistic acts that, by the dominance on the object, allow the coexistence of distance (destruction) and closeness to other person and the control of it. As related to transgression, lack of limits and reject of confines, some psychoanalytic authors connect some forms of violent acts with perversion proposed a link between (Cohen, 1992; Kernberg, 1992; Racamier, 1992)[14].

14 Otto Kernberg (1992) identifies a relational style characteristic of pathological narcissism and other severe form of psychopathology, and names it as "perversity". In comparison with perversion, this quality of object relation has a higher level of perfusion, which goes beyond the sexual dimension and reveals the subjection, conscious or unconscious, of affection, dependence and sexuality to aggressiveness. Stanley Cohen (1992) refers to perversion as a form of misuse acted to avoid the responsibility of own internal conflicts; these conflicts are placed out of the self, in the victim that is dehumanized and reduced to the partial object's level. The abuser aims to control the other person and to deny its distinction and au-

The basic theme of dependency is a further key point of psychopathy's psychoanalytic theories. Nancy McWilliams (2011) identifies the *hostile dominance*, the tendency to dominate and manipulate others and the refusal to be subjugated and to depend on them, as the core feature of psychopathy. That refusal represents a reaction toward profound emotional experiences of dependency and the attempt to deal with the resulting ancestral angst, which is rejected in this way. Nevertheless, as Lingiardi (2005) argued, a real independence rests on the ability to depend on other people and to allow them to depend on us. Therefore, instead of dependent-independent, it would be better to consider the continuum between healthy and pathological dependencies. Pathological would be forms of dependency that are "not negotiable" or the extreme and deceptive presumptions of independency: from a desperate research of others, considered as only regulators of the self, to an escape from them, considered as threat for the own entirety.

5. Interventions and Treatments

In childhood and adolescence, conduct problems are largely widespread and the most common reason for referral to public and private healthcare professionals in Western countries (NICE, 2013). In terms of age-related psychopathology's continuity and/or discontinuity, studies have suggested a developmental course from oppositional defiant disorder to conduct disorder, and, in a significant minority, to antisocial personality disorder. Of course, this trajectory is not certain, nevertheless it generally occurs that antisocial adults had prior disruptive or impulsive conduct problems during childhood or adolescence. We do not see the opposite happen: most children with oppositional defiant disorder do not develop either conduct disorder, or antisocial personality disorder, even though they are at high risk for other psychopathologies (e.g. anxiety and depression: Robins, 1966; Moffitt et al., 2002; Rowe et al., 2002; Lahey et al., 2005). Therefore, psychiatric classification of conduct disorder has a prognostic validity as well; it is one of the rather few cornerstone of psychiatric knowledge, even though it appears quite simplistic to draw solid lines between child psychopathology and its continuum in adulthood.

Conduct problems in childhood and adolescence show a wide heterogeneity and high rate of comorbidity with other disorders (Blair, 2013; Frick et al., 2013; Caspi et al., 2014). In clinical practice, a pure and exclusive diagnosis of disruptive behaviour disorder is very rare, since it is mostly in comorbidity with other psychopathological conditions (Nock, Kazdin, Hiripi & Kessler, 2007), as attention deficit/hyperactivity symptoms, learning disabilities, or anxiety. In the juvenile offender population involved in criminal justice services, it has been observed a high comorbidity (more than 50% of cases) with other mental health problems, including internalizing disorders and substance use disorders (Essau & Cheng, 2009). Most recent studies have instead suggested much more significant comorbidities, showing a marked relation between attention-deficit/hyperactivity disorder (ADHD) and conduct disorder, both in terms of comorbidity (approximately one-third of boys with severe ADHD go on to develop a CD: Beauchaine, Hinshaw & Pang, 2010) and in terms of risk (the presence of ADHD predicts worsening of CD symptoms: Pardini & Fite, 2010); therefore, impulsivity and hyperactivity would be strong drivers towards early-onset conduct disorders.

Conduct disorders in childhood and adolescence are becoming more frequent in Western countries and place a large individual, social and economic burden, involving not only healthcare and social services, but also many sectors of society (i.e. family, schools, police, criminal justice system). Currently, less than a fourth of them receive specific helps (Vostanis, Meltzer, Goodman & Ford, 2003) and much of these interventions are likely to be ineffective (Scott, 2007).

Before selecting and starting therapeutic programs, clinicians should necessarily know psychological features, particular vulnerabilities (e.g. cognitive disabilities, psychiatric comorbidities, other conditions as alcohol or substance use/abuse), possible risk factors and compensatory resources (i.e. individual, relational, familiar); that in order to evaluate pertinence and relevance of the health care program, to decrease the possibility of failure, and to reduce the risk of iatrogenic damage caused by improper interventions.

As it is shared and repeatedly proved by systematic literature, assessments and intervention programs for conduct problems based on a complex perspective are clinically effective than others; it means to maintain different levels of analysis, including *multisystemic* (aimed both to individual and to his contexts), *multimodal* (inclusive of different forms of interventions) and, if necessary, *multidisciplinary* (involving various professionals). In addition, it has to be adjusted to the real means, as available economic and professional resources, which, even though outside of clinical considerations and ethics, unavoidably condition the decisions.

There is a wide range of intervention models for disruptive and deviant behaviour in childhood and adolescence. Some could be focused on particular characteristics of disorder (e.g. intrapsychic conflicts, cognitive dysfunctions, social and relational disabilities, dysfunctional family interactions), others on several levels at the same time. Some could target to the only child, others could extend to the family and/or the context (e.g. school, peer group) too.

Overall, it could be identified a general trend which concurrently occurs between developmental stages and targets of interventions and is quite unrelated to the particular paradigm or theoretical orientation of the professional or the service: it consists in a path from interventions principally aimed to environment of the child (e.g. family for preschooler) to a gradual engagement of the child and later the adolescent, as he/she develops and gets new and autonomous abilities.

Engagement of the family system is particularly impor-

tonomy. Nevertheless, the outcome is that the pervert depends on and is not able to separate himself from the victim. Racamier (1992) describes the perversions as forms of pathological dependency, as stable defensive patterns that resist changing by reason of their role in defending from destructiveness and in preserving the object's need. He argues that the leading purpose of perverse action would be trampling on the truth and manipulating for own purposed objects or persons, aiming primarily to protect from pain and avoid all internal conflicts.

tant for this group of children, both because drop-out from treatments is high (i.e. between 30 and 40%: NICE, 2013), and because parental psychopathological conditions are quite common (i.e. depression, alcohol and drugs abuse, violent and/or conflicted relationships), requiring to be treated. In addition, when the case is particularly severe or it is considered worthwhile, also other interventions could be added (i.e. interventions at school, involving social services or placement in residential child care institution).

Family-based interventions, psychoeducational and/or therapeutic ones, aim to modify and support abilities and behaviours (e.g. parental skills), or relational functioning of the family.

Parent Training (PT) is directed by improving parenting skills (Scott, 2008) and modifying parental practices which, according to research, contribute to conduct problems (i.e. pattern of negativistic, hostile, punitive or disapproving attitudes of parents, that, rather than discourage child's deviant behaviour, increase and reinforce what they aim to remove). PT interventions are rather aimed to encourage more positive and functioning interactions, in order that both parents and children may experience enjoyable and playful situations, encouraging a secure and mutually sensitive relationship. Evidences have suggested that PT would be effective for children up to about 10-years-old.

Family therapy includes treatments with the common denominator to engage the whole family system, according to the hypothesis that child or adolescent's conduct problems are based on family interaction and relational patterns which maintain or increase problems; for this, family have to be included in treatment, as both critical and essential agent/target of change. Strategic Family Therapy, Functional Family Therapy, Multisystemic Therapy and Multidimensional Treatment Foster Care are some of the more studied therapeutic programs for conduct disorders. They aim to improve family functioning, based on a combination of social learning, cognitive and systemic-relational approaches.

Strategic Family Therapy (SFT) assumes that conduct problems originate from family dysfunction and represent, at the same time, the family attempt to find or preserve own balance, so they are reinforced. SFT focus interventions on the structure and the cohesion of the family, intended to modify dysfunctional organization, interaction patterns and attitudes of thought shared by the family, and encourage adaptive and functional familiar hierarchy and patterns of mutual affective involvement.

According to *Functional Family Therapy* (FFT), conduct problems are conceptualized as form of communication with specified own function within the family system, supported and maintained by mutual interactions between all members of the family. The therapy aims to transform family interactions and beliefs, improve more functional communication patterns and promote the development of particular skills both for the child and the parents (Alexander & Robins, 2011).

Multimodal form of interventions are directed to the whole ecosystem, or *milieu*, where the child or adolescent lives, and have the therapeutic aims of modifying the surrounding environment in order to modify individual problems.

Inspired by the Ecological Systems Theory (Bronfenbrenner, 1979), the theoretical assumption of *Multisystemic Therapy* (MT), is that individual, family, school, peer group and community are interconnected systems, mutually influenced. Therefore, it is essential to aid the totality, not some parts (Henggeler et al., 2009; Manders et al., 2013). Using systemic family therapy and cognitive-behavioural therapy techniques, therapeutic acts aim to deal with problems and encourage resources of the child's environment, by the assumption of multidimensional nature of severe antisocial behaviour.

Multidimensional Treatment Foster Care (MTFC) is an intensive intervention that implicates a change of the contest: the child/adolescent with conduct problems is temporarily taken away of his/her environment and placed with specially trained *foster carers*; at the same time, interventions on other systems (e.g. school) and on parents (e.g. promoting skills) are provided (Liabo & Richardson, 2007).

As children grow-up, the opportunities of child-focused interventions increase, maintaining, if possible, those focused on parenting or family. Most *evidence-based* programs for conduct disorders make use of cognitive-behavioural methods to increase social abilities (e.g. *Social Skills Training*, aimed to promote social behaviours that facilitate and support positive responses from environment), the control negative feelings and moods (e.g. *Anger Coping* or *Management Training*, intended to the learning of self-monitoring and management of emotions, by identifying triggers of anger and aggression), the problem solving abilities (e.g. *Problem-solving skills-training*, helping children to understand the link between their own behaviour and connected consequences, and to elicit behaviours that facilitate prosocial outcomes). Those programmes may be suggested to individual or groups, and in clinical or school settings.

Interventions based on psychodynamic model (including attachment theory), even though less supported by scientific measures and empirical evidences, are widely used in practice and clinically effective.

Furthermore, recent studies and clinical considerations point at specific forms of interventions for children and adolescent with *callous-unemotional* traits. Although working with this group is a challenge, due to their poor response to many traditional treatments (Hawes, Price & Dadds, 2014; Bakker, Greven, Buitelaar & Glennon 2017), they are not "intractable", as it was once thought, if treatments are tailored to their unique/specific cognitive, emotional, motivational and interpersonal features (Frick, 2016; Wilkinson, Waller & Viding, 2016). Most recent research suggests a certain effectiveness for interventions that encourage positive parenting (e.g. use of positive reinforcement to encourage prosocial behaviour), than those that discourage negative parenting[15], and for reward-oriented approaches

15 Research on *parenting practices* (empirically measurable familiar construct) have focused mainly on negative parenting (i.e. harsh, coercive and inconsistent), linked for so long with much seriousness of disruptive behaviour in childhood and adolescence (Burke, Loeber & Birmaher, 2002; Viding, Fontaine, Oliver & Plomin, 2009; Pasalich, Dadds, Hawes & Brennan, 2011). Recent studies suggest that developmental pathways of children with high risk for CU behaviour could be modified by promoting positive parenting (i.e. warmth, responsiveness, sensitiveness), suggesting this as a target for interventions (Hawes, Dadds, Frost & Hasking, 2011; Muratori et al., 2016; Waller et al., 2017).

that increase empathic abilities (Hawes & Dadds, 2005; Caldwell, Skeem, Salekin & Van Rybroek, 2006). They include both traditional treatments for conduct disorders (Blair, 2013), as the *Coping Power Program* (Lochman & Wells, 2002; Muratori et al., 2017), and some recent and promising interventions specifically set for this group of children and adolescent, as the *Coaching and Rewarding Emotional Skills Module* e the *Emotion Recognition Training*. Coaching and Rewarding Emotional Skills Module (CARES: Datyner, Kimonis, Hunt & Armstrong, 2016) is a brief emotional training program, oriented to dealing with empathic deficits in the processing of negative emotions; it is addressed to children with conduct problems and CU traits from three and half to eight years old, associated to parent management training programs. *Emotion recognition training* (ERT: Dadds et al., 2012), based in part on the *Mind Reading* (Baron-Cohen et al., 2004), was originally developed for autism treatment and proposed in association with parent training (i.e. *Family Intervention for Child Conduct Problems*) by a software allowing to explore more than 400 emotions; it aims to promote identification and interpretation's abilities of emotional expression in an interpersonal context.

Conclusions

When working with children and adolescents with behavioural disorders, we believe that clinicians should consider three fundamental requirements, besides the chosen therapy methods and procedures.

The first one consists in a personal disposition to avoid simplistic and deterministic explanations of these clinical disorders and to keep in mind their *complexity*. In order to do so, a deep knowledge of different features is needed (i.e. multifactorial etiopathogenesis, developmental course, individual characteristics, specific needs and vulnerability, and intrapsychic and interpersonal dynamics).

The second requirement is the curiosity towards the persons in front of us, who express their vulnerability and resources in a unique way through aggressive and deviant behaviours (*subjectivity*). The third and last requirement is *intersubjectivity*, which is an essential part of the clinical practice of these disorders, where the construction of a subjective self and the emotional regulation are as impaired as in severe behavioural pathologies. In this scenario, the main clinical purpose with these children and adolescents consists in dealing with these impairments, in detouring from an inside-to-outside psychological path, which is typical of aggressive and antisocial acts, by aiming to an outside-to-inside route (from objectivization to subjectivization), and by developing a relationship based on the encounter of two subjectivities (intersubjectivity). "The self-organization of the developing brain occurs in the context of a relationship with another self, another brain" (Schore, 1996; Schore & Schore, 2011). The subjectivity aspects can be built through the intersubjectivity, for which the clinical context could be a strong propeller.

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