Child and Adolescent Psychopathy: Assessment Issues and Treatment Needs

1. Introduction

The first clinical descriptions of psychopathy are attributed to Pinel (1806/1962) and Pritchard (1835) who used the terms "manie sans delire" and "moral insanity", respectively. They described individuals who, without apparent psychopathology, rejected basic social rules and recurrently assumed an antisocial behavior. Brutality, emotional coldness, and callous exploitation of others constitute a set of attributes emphasized in these historical references. Rush (1812) postulated that a deeply rooted "moral depravity" was central in the psychopathic disorder. Schneider (1950) and Kraepelin (1904/1915) considered these individuals pathologically deceitful and with a tendency to fraudulent behaviors. Kraepelin (1904/1915) named them "swindlers" and described them as glib, charming, and fascinating, but presenting basic failures in morality or loyalty to others. Schneider (1950) considered these individuals a "self-seeking type" and characterized them as pleasant and affable but egocentric, and superficial in their emotional reactions and in their relationships.

However, it was Hervey Cleckley (1941/1988) who, while studying inpatients at a psychiatric hospital, established a set of specific criteria as the core features of psychopathic personality. Central to his conception, and origin of the title of his book - The Mask of Sanity - is the idea that psychopathy is a severe disorder masked by an outward appearance of robust mental health.

According to Cleckley (1941/1988), antagonistic, aggressive, predatory, vindictive or cruel behaviors were not crucial in the conceptualization of psychopathy. He considered that the deeply rooted impairment of emotional processing among psychopaths (like aphasia or color-blindness), weakened enraged or cruel reactions. Thus, all the harm inflicted to others (as well as to themselves) was a result of their superficiality, boldness, and capricious nature.

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In spite of the efforts by Cleckley (1941/1988) to focus the construct of psychopathy upon affective and interpersonal features, the inclusiveness of the anti-social/deviant life-style factor, as a trait inherent to psychopathy or its product, is still questionable (Cooke & Michie, 2001; Cooke, Michie, & Skeem, 2007; Hare, 2003; Lester, Salekin, & Sellbom, in press; Salekin, Brannen, Zalot, Leistico, & Neumann, 2006; Skeem & Cooke, 2010).

Regardless of these divergences, because of the impact of psychopathy in society, many authors state that the best way is to prevent and intervene early in life. To make prevention a possibility, is mandatory to study the construct in early childhood (Lynam, 1996; Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007; Salekin & Frick, 2005).

2. Child and Adolescent Psychopathy

In the 40s, Cleckley (1941/1988) already recognized that psychopathy was a disorder with roots in childhood and adolescence. In the same decade, Karpman (1949/1950) organized and chaired two consecutive round table discussions about the applicability of the construct to childhood. About 10 years later, McCord and McCord (1964), in the book - *The psychopathic: An essay on the criminal mind*, stressed the importance of identifying and treating psychopathy in younger populations. These authors emphasized the importance of early intervention, noting that youths who presented signs of psychopathic personality disorder showed their behavior problems in a different way, compared to the ones who had not that same disorder. By the same time, Quay (1964, 1965) tried to define subtypes for juvenile delinquency, considering a psychopathic category that he called "under socialized aggressive".

Extension of the construct of psychopathy to childhood and adolescence is a controversial issue. The overrepresentation in childhood and adolescence of some characteristics of the disorder; the malleability of personality during development; the heterogeneity of minors

with anti-social behavior; the validity and stability of psychopathy; the derogatory connotation of the term, and its implications in legal contexts; the potential stigmatization of youths; the triggering of iatrogenic effects, are some of the problems under intensive debate. (e.g., Chanen & McCutchenon, 2008; Edens & Vincent, 2008; Murrie, Boccaccini, McCoy, & Cornell, 2007; Seagrave & Grisso, 2002; Silk, 2008).

Salekin and Lynam (2010) underline that the term psychopathy "should not be used in a damaging way, but rather that the concept be used in a constructive manner to understand better the various types of youth as well as to chart ways to help youth lead more prosocial, productive, and meaningful lives" (p. 8).

This paper addresses child and adolescent psychopathy assessment and treatment, reviewing: (a) the assessment of psychopathy in an historical perspective, (b) the most frequently used instruments in the assessment of child and adolescent psychopathy, and (c) available treatment approaches to youths with psychopathic traits. The need for new and adequate treatment programs will be outlined.

3. Assessment of Psychopathy

From the works of Lykken (1957), until the early 80s, Cleckley's diagnostic criteria were frequently used in sample selection for the study of psychopathy. Research was conducted mainly on adult male offenders. In the 80s, there was a turning point in the study of the disorder, when Robert Hare (1980) developed a systematic method to assess psychopathy, based on Cleckley's criteria, but presenting some significant differences – the Psychopathy Checklist (PCL; Hare, 1980) and its revised edition (PCL-R; Hare 1991, 2003). After 30 years of research, the debate about PCL factorial structure still persists. Table 1 shows different results from studies on the dimensionality of PCL.

Table 1 about here

Besides PCL-R, and other instruments to assess psychopathy in forensic populations (e.g., P-SCAN, Hare & Hervé, 1999), there are different self-report measures designed to assess psychopathy in non-criminal samples, thus increasing research in this area. Instruments of this type include: the Screening Version of PCL-R (PCL:SV; Hart, Cox, & Hare, 1995); the Psychopathic Personality Inventory (PPI; Lilienfeld & Widows, 2005); the Levenson Primary and Secondary Psychopathy Scale (LPSP; Levenson, Kiehl, & Fitzpatrick, 1995), the Self-Report Psychopathy Scale (SRP; Hare, 1985; Lester et al., in press), and the Triarchic Psychopathy Measure (TriPM; Patrick, Fowles, & Krueger, 2009; Patrick, 2010).

As stated previously, psychopathy in adulthood is a valued construct, relevant for violence prediction, risk assessment, and risk management (DeLisi & Piquero, 2011; Hemphill, 2007; Leistico, Salekin, DeCoster, & Rogers, 2008; Vitacco & Neumann, 2008). Understanding the development of aggression in childhood in general and of psychopathic traits in particular has received a growing interest by the scientific community, mainly in violence risk prediction research (e.g., Kotler & McMahon, 2005; Marczyf, Heilbrun, Lander, & DeMatteo, 2003; Salekin & Frick, 2005; Schwalbe, 2007).

Until 1990, few works about child psychopathy were published, and little attention was given to psychopathic traits in children and adolescents (Salekin & Lynam, 2010). Forth, Hart, and Hare (1990) became pioneers, by adapting the Psychopathy Checklist (PLC; Hare, 1991) in a study with adolescent offenders, showing that psychopathy could be assessed in youth. Later, other authors developed instruments to assess psychopathy in children and adolescents, either by adapting instruments used in adults, or by creating new measures adjusted from a developmental point a view (Forth et al., 1990; Kotler & McMahon, 2010; Lynam, 1997; Skeem, Polaschek, Patrick, & Lilienfeld, 2011). As a result of these efforts, the

last decade has witnessed an exponential increase in the number of publications about child and adolescent psychopathy (Salekin & Lynam, 2010).

3.1. Assessment of Child and Adolescent Psychopathy

The instruments used in the assessment of child and adolescent psychopathy capture a construct that, apparently, is similar to the conceptualization of psychopathy in adulthood (see Table 2). The most frequently employed is the Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2003). Nevertheless, other screening measures of psychopathy in youths are available, most of them draw from PCL:YV, although not being a direct adaptation of it.

Table 2 about here

The PCL:YV (Forth et al., 2003) is an adaptation for adolescents of the PCL-R (Hare, 1991, 2003), requiring trained raters, and emphasizing the need for multi-domain and multi-source information. This instrument is a full-scale assessment tool, includes a thorough record review and a structured interview. The clinician rates the PCL:YV 20 items on a 3-point scale (0 = definitely does not apply; 1 = item may or may not apply; 2 = definitely apply). The version of PCL assesses adolescents aged 13 or more. Concerning its factorial structure, there are divergent research outcomes: two factors (interpersonal-affective and socially-deviant lifestyle – Forth at al., 2003), three factors (interpersonal, affective and behavioral – Cooke & Michie, 2001; Salekin, Brannen, Zalot, Leistico, & Neumann, 2006), or four factors (interpersonal, affective, lifestyle and antisocial – Hare & Neumann, 2006; Salekin et al, 2006), as it happens in the adult version.

The Antisocial Process Screening Device (APSD; Frick, & Hare, 2001) is the most widely used and tested youth psychopathy screening measure. APSD is a 20-item questionnaire, available in three formats: parents/educators, teachers, and self-report. Scoring for each item

ranges from 0 (not at all true) to 2 (definitely true). It can be used with youths between 4 and 18 years old. Research on its dimensionality indicate a two factors (impulsivity-conduct problems and callous-unemotional – Frick & Hare, 2003) or a three factors (impulsivity, narcissism and callous-unemotional – Frick, Bodin, & Barry, 2000) structure. Impulsivity and behavioral problems dimensions are mainly associated with factor 2 of the PCL-R for adults, assessing externalizing tendencies. The callous-unemotional (CU) factor is consistent with factor 1 of the PCL-R and it is associated with low anxiety, deficient emotional reactivity, thrill seeking, and proactive aggression. APSD predictive validity for anti-social behavior problems was studied by Frick and Hare, (2003) thus showing a parallelism with adult psychopathy. Although it should be noted that there do appear to be differences between the APSD and PCL-YV (see Dillard, Salekin, Barker, & Grimes, in press; Kotler & McMahon, 2010).

The Child Psychopathy Scale (CPS; Lyman, 1997) is an instrument composed by 12 brief scales (with a minimum of 3 and a maximum of 7 items each one), being the items adapted from the Child Behavioral Checklist (CBCL; Achenbach, 1991) and/or the California Child Q-Set (CCQ; Block & Block, 1980). This instrument is to be answered by parents of children aged 12 or more.

The Youth Psychopathic Traits Inventory (YPI; Andershed, Kerr, Stattin, & Levander, 2002) includes 10 different scales (each one with 5 items to be answered according to a 4-point Likert-like scale). This instrument was designed to assess 10 core personality traits associated with psychopathy (grandiosity, lying, manipulation, callousness, unemotionally, impulsivity, irresponsibility, dishonest charm, remorselessness, thrill seeking), grouped in three facets: callous-unemotional grandiose-manipulative, and impulsive-irresponsible (classification similar to the proposal of Cooke & Michie, 2001). YPI is a self-report instrument that can be answered by children aged 12 or more. One of its advantages is the

carefully formulated items, in a way that minimizes the possibility of deceitful answers by individual with psychopathic traits (e.g., "I can make people believe almost anything"). A version of the YPI is available for children aged between 9 and 12 years old: the Youth Psychopathic Traits Inventory-Child Version (YPI-CV; Van Baardewijk et al., 2008).

Other available measures include the Psychopathy Content Scale and the Inventory of Callous-Unemotional Traits. The Psychopathy Content Scale and the P-16 are two psychopathy scales that can be used when administering the MACI (PCS; Murrie & Cornell, 2000; P-16; Salekin, Ziegler, Larrea, Anthony, & Bennett, 2003) are self-report instruments composed by 20 and 16 items respectively (true/false answer). The measures can be applied to adolescents aged between 12 and 18. The Inventory of Callous-Unemotional Traits (ICU; Frick, 2003) assesses the CU factor (consistent with factor 1 of PCL-R) of psychopathy. The ICU is a 24-item questionnaire available in parent/caregiver, teacher, and youth self-report form. Scoring is based on a 4-point scale (0 = nor all true; 1 = somewhat true; 2 = very true; 3 = definitely true). Items are grouped in three distinct factors: callousness, uncaring and unemotional. The ICU can be used to assess children and adolescents, aged between 4 and 18 years old.

Regardless of the growing number of measures developed in the last decades to assess psychopathy in children and adolescents, as Johnstone and Cooke (2004) point out, there is still a need for more precise instruments. As stated before, some of these instruments are frequently used by researchers and clinicians, while others are much less known. The lack of agreement on the dimensionality of the psychopathy construct is a major issue that should be addressed in order to better compare results from different studies. The diversity of psychopathy assessment instruments (namely when assessing youths) may also be the cause for misunderstandings and mistakes, when using the construct in forensic or clinical evaluations.

3.2. Comorbidity

Some studies examined the relationship between psychopathic traits and other psychiatric disorders, although there are just a few comprehensive and wide-raging reviews (Sevecke, Lehmkuhl, Krischer, 2009; Sevecke & Kosson, 2010). Recent studies have documented that early behavioral problems usually precede the development of severe anti-social behavior (e.g., Fontaine, McCrory, Boivin, & Moffitt, 2011; Frick, Cornell, Barry, Bodin, & Dane, 2003; Glenn, Raine, Venables, & Mednick, 2007). Although behavioral desinhibition is considered a dimension of psychopathy (impulsivity/conduct problems), this factor tends to overlap with symptoms of Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD) of DSM-IV-TR (APA, 2000). Thus, it seems that the impulsivity/conduct problems factor identifies above all a group of anti-social youth whereas the presence of CU traits is typical of a group of children whose anti-social behavior comes from low fear levels and shallow affect (Frick, Stickle, Dandreaux, Farrel, & Kimonis, 2005; Lykken, 1995, Lykken, 2006; Sylvers, Brennan, & Lilienfeld, 2011; Vitale et al., 2005), and from a type of immediate reward based response (Forth et al., 2003; White & Frick, 2010). Available data also suggest that children with CD, also presenting CU traits, display features similar to adults with psychopathy, in terms of antisocial behavior and emotional processing (Barry et al., 2000; Blair, Colledge, Murray, & Mitchell, 2001; Wilson, Juodis, & Porter, 2011).

CD can be diagnosed in youth, with greater prevalence in boys (1.8% to 16% vs. 0.8% to 9.2% in girls). Some researchers defend that an early onset of CD is a strong predictor of future involvement in criminal activities (Frick et al., 2003; Glenn et al., 2007; DeLisi, 2009; DeLisi & Piquero, 2011). In DSM-IV (1994) and DSM-IV-TR (2000), it is included a specifier for CD, according to the onset of the first symptoms (Childhood onset – before 10

years old; Adolescent onset – after 10 years old) and to symptomatic severity (mild, moderate, severe). Also worth noticing, the prevalence of CD in the universe of delinquent adolescents ranges between 31% and 100% (e.g., Vermeiren, 2003).

ADHD is one of the most widely diagnosed problems in childhood and adolescence, often persisting in adulthood. The prevalence of ADHD is also high in anti-social adolescent/adult prison inmate samples (e.g., Johansson, Kerr, & Andershed, 2005).

Some authors (e.g., DeLisi, Vaughn, Beaver, Wexler, Barth, & Fletcher, 2011; Johansson, Kerr, & Andershed, 2005; Lynam, 1996, 1997) offer that the connection between children with disruptive behavior and psychopathy in adulthood is especially high in minors diagnosed with both ADHD and CD. They suggest that this association confers a specific vulnerability towards the development of psychopathy (e.g., Barry et al., 2000; DeLisi et al., 2011; Lynam, 1996) – the so called "comorbid subtype hypothesis" (Lyman, 1996). Other studies do not confirm this connection, defending that the CD component is primary in relation to ADHD (Lahey, Loeber, Burke, & McBurnett, 2002; Michonski & Sharp, 2010).

Some data also suggest that genetic factors contributing to alcohol and other substances abuse or dependence, Anti-Social Personality Disorder (APD), CD, and other types of externalizing psychopathology, are the same. Thus, some authors defend the existence of a common genetic factor that contributes to externalizing problems and to psychopathy (Larsson et al., 2007; Sevecke & Kosson, 2010).

With regard to comorbidity with internalizing problems, there are studies that stress a direct relationship between anxiety and psychopathy in children and adolescents (Kubak & Salekin, 2009; Lee, Salekin, & Iselin, 2010), but not in adults (Hofmann, Korte, & Suvak, 2009). Contrary to what Cleckley defended (1941/1988), the internalizing problems seem to represent an important area of discontinuity in youth psychopathy (more internalizing disorders), versus adult psychopathy (less internalizing disorders). There may also be some

links to negative affect (Price, Salekin, Klinger, & Barker, in press). Further, research is required because this may be a central point in the explanation of developmental pathways. These differences among adults and adolescents with psychopathic traits also suggest that positive treatment outcomes are possible in the early stages of the disorder.

A considerable amount of research suggests that personality disorders have a high prevalence in forensic contexts (40% a 60%) (e.g., Casey, 2000). In Portugal, an ongoing research study suggests higher prevalence rates, with 82% of male prison inmates fulfilling the criteria for at least one DSM-IV personality disorder (Baião & Rijo, 2011). However, we must be careful when evaluating the relationship between personality disorders and psychopathy. On the one hand, it is difficult to isolate the role personality disorders play in the causes or pathways of psychopathy. On the other, both phenomena may be the result of a common causal process (e.g., parental neglect, social context, genetic predisposition) (Sevecke & Kosson, 2010).

Recent studies have pointed out the need to make a differential diagnosis between psychopathy/behavior problems and autism spectrum disorders (Blair, 2005; Bons, Scheepers, Rommelse, & Buitelaar, 2010; Jones, Happé, Gilbert, Burnett, & Viding, 2010), by studying the dimensions of empathy (emotional, cognitive, and motor).

In summary, understanding the relationship between psychopathy and other disorders is simultaneously complex but of major interest, mainly for two reasons: (a) the correlation between psychopathic features and symptoms of other disorders is high, which may indicate a common or overlapping etiology, and, (b) psychopathy apparently comprises heterogeneous group of individuals with distinctive but related symptoms and different patterns concerning comorbidity, which can help in the identification of subtypes (Sevecke et al., 2009; Sevecke & Kosson, 2010).

3.3. Psychopathy and Gender

Research on gender differences in adults has been biased since the majority of the studies are conducted in forensic samples, mostly composed by men (Odgers & Moretti, 2002), even if we know that in criminal settings this phenomenon is more prevalent in males (Cale & Lilienfeld, 2002). In community samples, however, studies indicate that although psychopathy rates are similar in both genders, the factorial structure of psychopathy seems different in males and females (Vaughn, Newhill, DeLisi, Beaver, & Howard, 2008). Behavior tends to be less violent in women, but they show, among others, a greater sexual promiscuity (Loeber et al., 2009; Odgers & Moretti, 2002; Sevecke et al., 2009).

In youth, data suggest that the beginning of the disorder in childhood is rare in girls (Moffitt & Caspi, 2001). However, some authors contend that girls tend to present a "delayed-onset" pattern; that is, they start presenting symptoms of the disorder generally during adolescence (Frick & Dickens, 2006). According to this perspective, the onset of symptomatology is postponed to adolescence, when other biological (e.g., hormonal) and psychosocial (e.g., less parental supervision, greater contact with deviant peers) factors occur together with certain dispositional vulnerability factors (e.g., CU traits). Other theories suggest that girls tend to present more relational aggressiveness, a less notorious type of aggression, giving the disorder a façade of late-onset. (Crick, Ostrov, & Werner 2006).

There are highly consistent data about the prevalence of psychopathic traits in boys and girls, although this may be the result of a shortage of studies, different methodologies adopted (Skeem et al., 2011; Vaughn et al., 2008; Verona, Sadeh, & Javdani, 2010; Verona & Vitale, 2006), and the lack of instrumentation specifically adapted to assess psychopathy in females (Kotler & McMahon, 2005, 2010). The same problems and inherent conceptual difficulties are evident with regard to ethnicity (Skeem et al., 2011; Verona et al., 2010).

4. Treatment

Cleckley (1941/1988) contended that psychopathy is essentially a non-treatable condition. Other authors also support this position, including Suedfeld and Landon (1978) who stated that "no demonstrably effective treatment has been found" (p. 347). Harris and Rice (2006) even argued that "no clinical interventions will ever be helpful" (p. 563). Others have more favorable opinions, pointing out that significant improvements can happen (e.g., psychopathy traits, risk of recidivism), after certain types of therapies, and mainly with youth, stressing the importance of early intervention efforts (Hawes & Dadds, 2005; Kubak & Salekin, 2009; Salekin, 2002, 2010; Salekin, Lester, & Sellers, 2012; Salekin, Tippey, & Allen, 2012; Salekin, Worley, & Grimes, 2010; Skeem et al., 2011; Thornton & Blud, 2007).

Although further research is needed, there is some evidence that children and adolescents are more likely to benefit from therapeutic interventions because of: (a) their inherent developmental idiosyncrasies, (b) the moderate stability of child and adolescent psychopathy (e.g., Frick, 2002; Lynam et al., 2009), and (c) greater comorbidity mainly with internalizing problems (e.g., Kubak & Salekin, 2009; Lee et al., 2010; Lynam, 2010; Price et al, in press).

Some studies show that an early family intervention (McDonald, Dodson, Rosenfield, & Jouriles, 2011; Salekin, 2002; Thornton & Blud, 2007) may have some positive outcomes in psychopathy features. Cognitive-Behavioral Therapy (CBT), together with motivational based strategies (Hass et al., 2011) has also showed encouraging results. These and other works (e.g., Bayliss, Miller, & Henderson, 2010) demonstrate that psychopathic traits seem to be flexible mainly if early identified and treated.

Results concerning treatment efficacy are quite inconsistent in samples of delinquent adolescents scoring in psychopathy measures. Some authors believe that the attempt to treat psychopathy does not alter the characteristics of the disorder, and may even worsen the symptomatology (Harris & Rice, 2006). These researchers indicate that the complexity of

psychopathy (namely, the interpersonal and affective features) makes individuals with psychopathic traits inadequate subjects for psychotherapy. They argue that these traits may hinder the success of therapy. In the worst scenario, they feel that the training of certain social and emotional skills in individuals with psychopathy, may improve their criminal strategies in a way that they become more capable of avoiding legal detention. It should be pointed out that this thesis can only be sustained in theory, as there has been no specific investigation of this issue.

On the other hand, Salekin (2002) states that intensive individual psychotherapy can have positive effects not only on the behavioral component, but also on the affective component of psychopathy, mainly when it is associated with group psychotherapy, and when family members are integrated in the therapeutic program. That is, this author sustains that in complex problems, as is the case of psychopathic disorder, intensive and multimodal programs, which involve different therapeutic interventions (individual, group, and family), must be developed. In this regard, the authors have tested new models for intervening with youth with psychopathic features (Salekin, Tippey, & Allen, 2012).

Different opinions are, at least partially, due to the adoption of different measures and methodologies in these meta-analytic studies (Harris & Rice, 2006; Salekin, 2002). In Salekin's (2002) review, the author included different types of studies (case studies, quasi-experimental designs, and fewer experimental studies), samples obtained through different psychopathy assessment instruments (other than PCL-R/PCL:YV), and a diversity of therapeutic outcomes (e.g., recidivism, increasing the capacity of feeling remorse and empathy, maintaining a job). On the other hand, in their review, Harris and Rice (2006) only included studies using the PCL:YV/PCL-R, and that included recidivism as a treatment outcome. They criticize the methodology used by Salekin (2002), and point out that many of the studies demonstrating positive therapeutic effects are case studies.

In short, and regardless of these discrepancies, there is a considerable gap in treatment programs specifically tailored to psychopathy and specifically geared toward deficits found in the affective and interpersonal features of the disorder (Salekin, 2010; Salekin et al., 2010; Salekin et al., 2012a, 2012b). Up to the present, few well designed studies were conducted in order to evaluate the therapeutic outcomes in individuals with psychopathic disorder (Caldwell, Skeem, Salekin, & Van Rybroek. 2006; Caldwell, 2012; McCormick, Wolfe, & Umstead, 2012; Salekin et al., 2010; Salekin et al., 2012b). Some of these studies also present important methodological weaknesses, in terms of inclusion criteria (Harris & Rice, 2006; Salekin, 2002; Thornton & Blud, 2007), and also in outcome assessment. In many cases, treatment efficacy is evaluated based on treatment compliance and recidivism. That is, other positive therapeutic effects, mainly those associated with affective and interpersonal facets of psychopathy (e.g., improving interpersonal relationships), are not included neither correctly controlled (Salekin, 2010; Salekin et al., 2012a, 2012b).

5. Discussion

In the last two decades, there has been a great development in the study of psychopathy in adults and, particularly, in the study of children and adolescents. However, it is important to understand that more research is needed, namely: (a) in the improvement of instruments to assess the disorder (e.g., Johnstone & Cooke, 2004), and (b) to establish and evaluate therapeutic programs (Salekin & Lyman, 2010; Vitacco & Salekin, in press; Vitacco, Salekin, & Rogers, 2010).

In the assessment of child and adolescent psychopathy, it is essential for researchers to create more precise assessment instruments, which may help to answer several questions: Why do different factorial structures of psychopathy in children and adults emerge? Why is there instability of the factorial structure using the same instrument or among disparate

measures? Are the available instruments adequate for female populations and different racial and ethnical groups? (see review by Kotler & McMahon, 2010).

With regard to treatment, little research has emerged, especially compared to the considerable amount literature on the description, etiology, and assessment of the disorder.

Several authors contend that the construct of psychopathy, besides being very valued and used in risk management (DeLisi & Piquero, 2011; Hemphill, 2007; Leistico et al., 2008; Vitacco & Neumann, 2008), can be crucial if directed to the early identification of children at risk of developing the disorder (e.g., Lynam et al., 2007; Salekin & Frick, 2005). This suggestion is of unquestionable relevance, but several questions can be formulated.

Concerning the early identification of psychopathic traits, how would children be screened? Which groups of children would be targeted for assessment (fearless, aggressive, with CU traits, with grandiosity, narcissism or manipulation traits)? This first question is, by itself, very complex to put into practice and leads to other issues, namely: Who shall be informed of alarm signs and how should this be done? Which is the most adequate assessment method in these cases (measures, raters, informants)?

If children score high on psychopathy measures, questions concerning early intervention still remain. How can we take into account the issue of psychopathic trait stability from childhood to adulthood? How can we take into account protective and/or risk factors capable of reducing, maintaining, or increasing the stability of psychopathy over the course of development? And, after having answered these two questions, it is crucial to decide which type of treatment is the most adequate for each case.

Regardless of these questions, a more fundamental one persists – How to treat children and adolescents scoring high in psychopathy, namely in the affective and interpersonal components, with or without anti-social and/or criminal behavior?

Studies of therapeutic outcomes show that children with behavioral problems can significantly improve with a cognitive-behavioral approach (e.g., Kazdin, 2009; Kazdin & Wassell, 2000, Kolko et al., 2009). Nevertheless, in children and adolescents with psychopathy, results are less encouraging (Harris & Rice, 2006; Hass et al., 2011; Salekin, 2002). Therefore, how shall we intervene effectively in the affective and interpersonal features of psychopathy (CU traits, grandiosity, manipulation, narcissism)?

As stated earlier, there is some evidence showing that early intervention: family (e.g., McDonald et al., 2011), or cognitive—behavioral, together with motivational work (Hass et al., 2011), can produce promising results. These and other studies (e.g., Bayliss et al., 2010; Salekin et al., 2012b) show that psychopathic traits can be changeable if identified and treated up to pre-adolescence, which underscores the importance of establishing criteria for early identification of psychopathic traits.

With regard to delinquent adolescents who score high on psychopathic measures (see review by Salekin, 2010), results about treatment effectiveness are more inconsistent. Some authors point out that the attempt to treat psychopathy does not change features of the disorder, and can even worsen the symptoms (Harris & Rice, 2006). Data from other researchers show that intensive therapy (Caldwell et al., 2012; Caldwell et al., 2006; Salekin, 2002; Salekin et al., 2010; Salekin et al., 2012bb) can have positive effects upon the behavioral and affective components of the psychopathic disorder. It is worth remembering that, up to the present, very few studies (frequently associated with important methodological limitations) were conducted to specifically assess the therapeutic efficiency in psychopathic individuals. Of greater concern is the lack of treatment programs specifically designed for psychopathic subjects, and focused on the affective and interpersonal features of the disorder (Salekin, 2010; Salekin et al., 2010; Salekin et al., 2012a, 2012b).

There are promising studies showing that youths with psychopathic traits present greater comorbidity with internalizing problems (e.g., Lee et al, 2010; Kuback & Salekin 2009, Lynam, 2010), and greater response to treatment (Caldwell et al., 2006; Caldwell et al., 2012; Hass et al., 2011; Salekin, 2010; Salekin et al., 2010; Salekin et al., 2012b), when compared to adults. These outcomes give children and adolescents a higher probability of therapeutic change and encourage the development of future intervention programs for youth.

From our point of view, and as Skeem, Polashek, and Manchak (2009), and Thornton and Blud (2007) point out, it must be stressed that some features of the disorder (e.g., low motivation to change, deception and manipulation, lack of deep or lasting emotion), cannot serve to justify the exclusion of individuals (children, adolescents, or adults) from treatment. By the contrary, these characteristics should be taken into account when drawing specific therapeutic programs (Salekin, 2010).

Because much attention has been paid to the construct dimensions and assessment issues, few comprehensive models explaining the onset and development of psychopathic traits exist. There are a number of avenues that researchers may want to consider and explore in the treatment evaluation of youth with psychopathic features. For instance, several authors argue that insecure bonds with parental figures and other factors of the psychosocial environment (e.g., child abuse, neglect, toxic experience), can play a major role in the origins and/or exacerbation of psychopathic traits (see review by Ribeiro da Silva, Rijo, & Salekin, 2012), making these individuals use, in their social interactions, exploitative strategies rather than affiliative ones (Gilbert, 2005, Glenn, Kurzban, & Raine, 2011). This may be an important target of prevention or intervention programs that target the bond between parents and children. These interventions might need to be adapted to consider other care givers and community warmth factors.

Also, there is the so called 3rd generation of cognitive behavioral therapies, in particular Compassion-Focused Therapy (CFT; Gilbert, 2005, 2010a, 2010b), may be of interest for treating psychopathy. This model for psychotherapy is greatly based in an evolutionary perspective of emotional and relational functioning. If one hypothesizes that psychopathy develops from shame then this model might be quite viable as method for treating the disorder as CFT was mainly developed for individuals that "feel deep internal shame and for whom the inner and outer worlds have become cold" (Gilbert & Gerlsma, 1999, p. 288). CFT helps in the activation (for the individual himself and for others) of "potentially dormant affiliative strategies" (Gilbert & Gerlsma, 1999, p. 282). Alternately, if it is thought that the use of positive psychology interventions to reduce negative affect generally may help with the reduction of psychopathic traits, then such interventions as the mental models intervention for positive emotion may be used (MMPE; Salekin et al., 2012b). Both of these latter therapies focus on the elicitation of positive human traits and this is why they may be adequate therapeutic approaches to bring about advantages for individuals scoring high on psychopathic traits.

In short, and from our point of view, there is no point in identifying psychopathic traits in children and adolescents, if the aim is not to prevent and/or treat the disorder. Since the 40s, when Hervey Cleckley (1941/1988) stated that psychopathy was a non-treatable personality disorder, there have been extraordinary advances in the domain of psychotherapies. New approaches to treatment, such as CFT, and/or MMPE, seem to bring promising intervention strategies for individuals with psychopathy. Moreover, response to specifically designed treatments may also inform the theoretical assumptions that persist when trying to explain the roots and course of the psychopathic disorder.

References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 profile*.

 Burlington: University of Vermont, Department of Psychiatry.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. Text rev.). Washington, DC: Author.
- Andershed, H., Kerr, M., Stattin, H., Levander, S. (2002). Psychopathic traits in non-reffered youths: Initial test of a new assessment tool. In E. Blaauw & I. Sheridan, (Eds.), *Psychopaths: Current international perspectives* (pp. 131-158). Hague, The Netherlands: Elsevier.
- Baião, R., & Rijo, D. (2011, June). Personality disorders and self-concept in portuguese prison inmates. In S. Aslan (Chair). *Cognitive Theory of Antisocial Personality Disorder*. Symposium conducted at the meeting of 7th International Congress of Cognitive Psychotherapy, Istanbul.
- Barry, C. T., Frick, P. J., DeShazo, T. M., McCoy, M. Ellis, M., & Loney, B. R. (2000). The importance of callous-unemotional traits for extending the concept of psychopathy to children. *Journal of Abnormal Psychology*, *109*, 335-340.
- Bayliss, C., Miller, A., & Henderson, C. (2010). Psychopathy development and implications for early interventions. *Journal of Cognitive Psychotherapy: An International Quarterly*, 24, 71-80.
- Blair, R. J. R., Colledge, E., Murray, L. & Mitchell, D. G. V. (2001). A selective impairment in the processing of sad and fearful expressions in children with psychopathic tendencies. *Journal of Abnormal Child Psychology*, 29, 491-498.
- Blair, R. J. R., Mitchell, D. G. V., & Blair, K. S. (2005). The psychopath: Emotion and brain. Oxford, UK: Blackwell.

- Block, J., & Block, J. H. (1980). *The California Child Q-Set*. Palo-Alto, CA: Consulting Psychologists Press.
- Bons, D. M. A., Scheepers, F. E., Rommelse, N. N. J., & Buitelaar, J. K. (2010). Motor, Emotional and cognitive empathic abilities in children with autism and conduct disorder. *Proceeding of Measures Behaviors*, 24, 109-113.
- Caldwell, M. F., McCormick, D., Wolfe, J., & Umstead, D. (2012). Treatment-related changes in psychopathy features and behavior in adolescent offenders. *Criminal Justice and Behavior*, 39, 144-155.
- Caldwell, M., Skeem, J. L., Salekin, R. T., & Van Rybroek, G. (2006). Treatment response of adolescents offenders with psychopathy features: A 2-year follow-up. *Criminal Justice and Behavior*, 33, 571-596.
- Cale, E. M., & Lilienfeld, S. O. (2006). Psychophathic factors and risk for aggressive behavior: A test of the "Threatened Egotism" hypothesis. *Law and Human Behavior*, *30*, 51-74.
- Casey, P. (2000). The epidemiology of personality disorders. In P. Tyrer (Ed.), *Personality disorders: Diagnosis, management and course* (pp. 71-79). London: Arnold.
- Chanen, A. M., & McCutchenon, L. K. (2008). Personality disorder in adolescence: The diagnosis that dare not speak its name. *Personality and Mental Health*, 2, 35-41.
- Cleckley, H. (1988). *The mask of sanity* (6th Ed.). St. Louis, MO: Mosby. (Original work published 1941).
- Cooke, D. J., Michie, C., & Hart, S. D. (2006). Facets of Clinical Psychopathy. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 91-106). New York: Guildford Press.
- Cooke, D. J., Michie, C., & Skeem, J. (2007). Understanding the structure of Psychopathy Checklist-Revised. *British Journal of Psychiatry*, *190*, 39-50.

- Crick, N. R., Ostrov, J. M., & WernerM- E. (2006). A longitudinal study of relational aggression, physical aggression, and children's social-psychological adjustment. *Journal of Abnormal Child Psychology*, *34*, 127-138.
- DeLisi, M. (2009). Psychopathy is the unified theory of crime. *Youth Violence and Juvenile Justice*, 7, 256-273.
- DeLisi, M., & Piquero, A. R. (2011). New frontiers in criminal careers research, 2000-2011:

 A state-of-the-art review. *Journal of Criminal Justice*, *39*, 289-301.
- DeLisi, M., Vaughn, M., Beaver, K. M., Wexler, J., Barth, A. E., & Fletcher, J. M. (2011). Fledging psychopathy in classroom: Adhd subtypes, psychopathy, and reading comprehension in a community sample of adolescents. *Youth Violence and Juvenile Justice*, *9*, 43-58.
- Dillard, C. L., Salekin, R. T., Barker, E. D., & Grimes, R. D. (in press). Psychopathy in adolescent offenders: An item response investigation of the Antisocial Process Screening Device Self Report and the Psychopathy Checklist: Youth Version. *Personality Disorders: Theory Research and Treatment*.
- Edens, J. F., & Vincent, G. M. (2008). Juvenile psychopathy: A clinical construct in need of restraint? *Journal of Forensic Psychology Practice*, 8, 186-197.
- Fontaine, N. M. G., McCrory, E. J. P., Boivin, M., Moffitt, T. E. (2011). Predictors and outcomes of joint trajectories of callous-unemotional traits and conduct problems in childhood. *Journal of Abnormal Psychology*, *120*, 730-742.
- Forth, A. E., Hart, S. D., & Hare, R. D. (1990). Assessment of psychopathy in male offenders. *Psychological Assessment*, 2, 342-344.
- Forth, A. E., Kosson, D. S., & Hare, R. D. (2003). *The Psychopathy Checklist: Youth Version*. Toronto: Multi-Health Systems.

- Frick, P. J. (2002). Juvenile psychopathy from a developmental perspective: Implications for construct development and use in forensic assessments. *Law and Human Behavior*, 26, 247-253.
- Frick, P. J. (2003). *The Inventory of Callous-Unemotional Traits*. Unpublished rating scale, The University of New Orleans.
- Frick, P. J., Bodin, S. D., & Barry, C. T. (2000). Psychopathic traits and conduct problems in community and clinic-referred samples of children: Further development of the Psychopathy Screening Device. *Psychological Assessment*, *12*, 382-393.
- Frick, P. J., Cornell, A. H., Barry, C. T., Bodin, S. D., & Dane, H. E. (2003). Callous-unemotional traits and conduct problems in the prediction of conduct problem severity, aggression, and self-report of delinquency. *Journal of Abnormal Child Psychology*, *31*, 457-470.
- Frick, P. J., Stickle, T. R., Dandreaux, D. M., Farrell, J. M., & Kimonis, E. R. (2005).Callous-unemotional traits in predicting the severity and stability of conduct problems and delinquency. *Journal of Abnormal Psychology*, 33, 471-487.
- Frick, P.J., & Hare, R. D. (2001). *The Antisocial Process Screening Device (APSD)*. Toronto: Multi-Health Systems.
- Frick. P. J., & Dickens, C. (2006). Current perspectives on conduct disorder. *Current Psychiatry Reports*, 8, 59-72.
- Gilbert, P. (2005). Compassion and cruelty. In P. Gilbert (Ed.), *Compassion:*Conceptualizations, research and use in psychotherapy (pp. 9-74). New York: Routledge.
- Gilbert, P. (2010a). *The compassionate mind: A new approach to life's challenges*. Oakland: New Harbinger Publications.
- Gilbert, P. (2010b). Compassion focused therapy. New York: Routledge

- Gilbert, P., & Gerlsma, C. (1999). Recall of shame and favouritism in relation to psychopathology. *The British Journal of Clinical sychology*, *38*, 357-373.
- Glenn, A. L., Kuzban, R., & Raine, A. (2011). Evolutionary theory and psychopathy. Agression and Violent Behavior, 16, 371-380.
- Glenn, A. L., Raine, A., Venables, P. H., & Mendnick, S. A. (2007). Early temperamental and psychophysiological precursors of adult psychopathic personality. *Journal of Abnormal Psychology*, 116, 508-518.
- Hare, R. D. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences*, *1*, 111-119.
- Hare, R. D. (1985). A comparison of procedures for the assessment of psychopathy. *Journal of Cousulting and Clinical Psychology*, 53, 7-16.
- Hare, R. D. (1991). *The Hare Psychopathiy Checklist-Revised*. Toronto: Multi-Health Systems.
- Hare, R. D. (2003). *The Hare Psychopathy Checklist-Revised* (2nd ed.). Toronto: Multi-Health Systems.
- Hare, R. D., & Hervé, H. (1999). *The Hare P-Scan: Research Version*. Toronto: Multi-Health Systems.
- Hare, R. D., & Neumann, C. S. (2006). The PCL-R assessment of psychopathy:Development, structural proprieties, and new directions. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 58-90). New York: Guildford Press.
- Harris, G. T., & Rice, M. E. (2006). Treatment of psychopathy: A review of empirical findings. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 555-572). New York: Guildford Press.
- Hart, S., Cox, D., & Hare, R. D. (1995). Manual for the Psychopathy Checklist: Screening

- Hass, S., Waschbusch, D., Pelham, W., King, S., Andrade, B., & Carrey, N. (2011).

 Treatment response in CP/ADHD children with callous/unemotional traits. *Journal of Abnormal Child Psychology*. 39, 541-552.
- Hawes, D. J., & Dadds, M. R., (2005). The treatment of conduct problems in children with callous-unemotional traits. *Journal of Consulting and Clinical Psychology*, 73, 737-741.
- Hemphill, J. F. (2007). The Hare Psychopathy Checklist and recidivism: Methodological issues and critical evaluating empirical evidence. In H. Herve & J. C. Yuille (Eds.), *The psychopath: Theory, research, and practice* (pp. 141-172). Mahwah, NJ: Erlbaum.
- Hofmann, S. G., Korte, K. J., Suvak, M. K. (2009). The upside of being socially anxious: Psychopathic attributes and social anxiety are negatively associated. *Journal of Social and Clinical Psychology*, 28, 714-727.
- Johansson, P., Kerr, M., & Andershed, H. (2005). Linking adult psychopathy with childhood hyperactivity-impulsivity-attention problems and conduct problems through retrospective self-reports. *Journal of Personality Disorders*, 19, 94-101.
- Johnstone, L., & Cooke, D. J. (2004). Psychopathic-like traits in childhood: Conceptual and measurement concerns. *Behavioral Sciences and the Law*, 22, 103-125.
- Jones, A. P., Happé, F. G., Gilbert, F., Burnett, S., & Viding, E. (2010). Feeling, caring, knowing: different types of empathy deficit in boys with psychopathy tendencies and autism spectrum disorder. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 51, 1188-1197.
- Karpman, B. (1949). The psychopathic delinquent child. *American Journal of Orthopsychiatry*, 20, 223-265.
- Karpman, B. (1950). Psychopathic behavior in infants and children: A critical surveyof existing concepts. *American Journal of Orthopsychiatry*, 21, 223-22.

- Kazdin, A. E. (2009). *The Kasdin method for parenting the defiant child.* New York: Houghton Mifflin.
- Kazdin, A., & Wassell, G. (2000). Therapeutic changes in children, parents, and families resulting from treatment of children with conduct problems. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39, 414-420.
- Kolko, D. J., Dorn, L. D., Bukstein, O. G., Pardini, D., Holden, E. A., & Hart, J. (2009).Community vs. clinical treatment of children with early-onset ODD or CD: A clinical trial with 3 years follow-up. *Journal of Abnormal Child Psychology*, 37, 591-609.
- Kotler, J. S., & McMahon, R. J. (2005). Child Psychopathy: Theories, measurement, and relations with the development and persistence of conduct problems. *Clinical Child and Family Psychology Review*, 8, 291-325.
- Kotler, J. S., & McMahon, R. J. (2010). Assessment of child and adolescent psychopathy. InR. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 79-112). New York: Guilford Press.
- Kraeplin, É. (1904, 1915). Psychiatrie: Ein lehbuch (7th & 8th eds.). Leipzig: Barth.
- Kubak, F. A., & Salekin, R. T. (2009). Psychopathy and anxiety in children and adolescents:

 New insights on developmental pathways to offending. *Journal of Psychopathology Behavior and Assessment*, 31, 271-284.
- Lahey, B. B., Loeber, R., Burke, J., Rathouz, P. J., & McBurnette, K. (2002). Waxing and waning in concert: Dynamic comorbidity of conduct disorder with other disruptive and emotional problems over 17 years among clinic-referred boys. *Journal of Abnormal Psychology*, 111, 556, 567.
- Larsson, H., Tuvblad, C., Rijsdik, V. F., Andershed, H., Grann, M., & Lichtenstein, P. (2007). A common genetic factor explains the association between psychopathic personality and antisocial behavior. *Psychological Medicine*, *37*, 1-12.

- Lee, Z., Salekin, R. T., & Iselin, A. R. (2010). Psychopathic traits in youth: Is there evidence of primary and secondary subtypes? *Journal of Abnormal Child Psychology*, *38*, 381-393.
- Leistico, A. R., Salekin, R. T., DeCoster, J., & Rogers, R. (2008). A large-scale meta-analysis related the Hare measures of psychopathy to antisocial conduct. *Law and Human Behavior*, 32, 28-45.
- Lester, W. S., Salekin, R. T., & Sellbom, M. (in press). The SRP-II as a rich source of data on psychopathy. *Psychological Assessment*.
- Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutionalized population. *Journal of Personality and Social Psychology*, 68, 151-158.
- Lilienfeld, S. O., & Widows, M. R. (2005). *Psychopathic Personality Inventory-Revised: Professional Manual*. Lutz, Florida: Psychological Assessment Resources, Inc.
- Loeber, R., Pardini, D. A., Hipwell, A. Stouthamer-Loeber, M., Keenan, K., & Sembower,
 M. A. (2009). Are there stable factor in preadolescents girls' externalizing behaviors?
 Journal of Abnormal Child Psychology, 37, 777-791.
- Lykken, D. T. (1957). A study of anxiety in the sociopathic personality. *Journal of Abnormal* and Clinical Psychology, 55, 6-10.
- Lykken, D. T. (1995). The antisocial personalities. Mahwah, NJ: Erlbaum.
- Lykken, D. T. (2006). Psychopathic personality: The scope of the problem. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 3-13). New York: Guildford Press
- Lyman, D. R. (1996). Early identification of chronic offenders: Who is the fledgling psychopath? *Psychological Bulletin*, *120*, 209-234.
- Lyman, D. R. (1997). Pursuing the psychopath: Capturing the fledgling, psychopath in a nomological net. *Journal of Abnormal Psychology*, *106*, 425-438.

- Lyman, D. R. (2010). Child and adolescent psychopathy and personality. In R. T. Salekin &
 D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 179-201). New York: Guilford Press.
- Lyman, D. R., Caspi, A., Moffitt, T. E., Loeber, R., & Stouthamer-Loeber, M. (2007).
 Longitudinal evidence that psychopathy scores in early adolescence predict adult.
 psychopathy. *Journal of Abnormal Psychology*, 116, 155-165.
- Lynam, D. R., Charnigo, R., Moffitt, T. E., Raine, A., Loeber, R., Stouthamer-Loeber, M. (2009). The stability of psychopathy across adolescence. *Development and Psychopathology*, 21, 1133-1153.
- Marczyk, G. R., Heilbrun, K, Lander, T., & DaMatteo, D. (2003). Predicting juvenile recidivism with PCL:YV, MAYSI, and YLS/CMI. *International Journal of Forensic Mental Health*, 2, 7-18.
- McCord, W., & McCord, J. (1964). *The psychopath: Na essay on the criminal mind*. Princeton, NJ: Van Nostrand.
- McDonald, R., Dodson, M., Rosenfield, D., Jouriles, E. (2011). Effects of a parenting interventions on features of psychopathy in children. *Journal of Abnormal Child Psychology*. 39, 1013-1023.
- Mishonsky, J. D., & Sharp, C. (2010). Revisiting Lynam's notion of the "fledgling psychopath": Are HIA-CP children truly psychopathic-like? *Child and Adolescent Psychiatry and Mental Health*, 4, 1-9.
- Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescent-limited antisocial pathways among males and females. *Development and Psychopathology*, *13*, 355-375.
- Murrie, D. C., & Cornell, D. G. (2000). The Millon Adolescent Clinical Inventory and psychopathy. *Journal of Personality Assessment*, 75, 110-125.

- Murrie, D. C., Boccaccini, M. T., McCoy, W., & Cornell, D. G. (2007). Diagnostic labeling in juvenile court: How do descriptions of psychopathy and conduct disorder influence judges? *Journal of Clinical Child and Adolescent Psychology*, *36*, 228-241.
- Odgers, C. L., & Moretti, M. M. (2002). Aggressive and antisocial girls: Research update and challenges. *International Journal of Forensic Mental Health*, 1, 103-119.
- Patrick, C. (2010). Conceptualizing the psychopathic personality: Desinhibited, bold, ... or just plain mean?. In R. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 15-48). New York: Guilford Press.
- Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualization of psychopathy: Developmental origins of disinhibition, boldness, and meanness.

 *Development and Psychopathology 21, 913-928.
- Pinel, P. (1962). *A treatise on insanity* (D. Davis, Trans.). New York: Hafner. (Original work published 1806).
- Price, S. & Salekin, R. T., Klinger, M., & Barker, E. D. (in press). Psychopathy and depression in adolescent offenders. *Personality Disorders: Theory Research and Treatment*.
- Prichard, J. C. (1835). A treatise on insanity and other disorders affecting the mind. London: Sherwood, Gilbert & Piper.
- Quay, H. C. (1964). Dimensions of personality in delinquent boys as inferred from the factor analysis of case history data. *Child Development*, *35*, 479-484.
- Quay, H. C. (1965). Psychopathic personality as pathological stimulation seeking. *American Journal of Psychiatry*, 122, 180-183.
- Ribeiro da Silva, D., Rijo, D., & Salekin, R. T. (2012). Child and adolescent psychopathy: A State-of-the art reflection on the construct and etiological theories. *Journal of Criminal Justice*, 40, 269-277.

- Rush, B. (1812). *Medical inquiries and observations upon the diseases of the mind.*Philadelphia: Kimber & Richardson.
- Salekin, R. T. (2002). Psychopathy and therapeutic pessimism: Clinical lore or clinical reality? *Clinical Psychology Review*, 22, 79-112.
- Salekin, R. T. (2006). Psychopathy in children and adolescents: Key issues in conceptualization and assessment. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 389-414). New York: Guildford Press.
- Salekin, R. T. (2010). Treatment of child and adolescent psychopathy: Focusing on change.In R. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 343-373). New York: Guilford Press.
- Salekin, R. T., Brannen, D. N., Zalot, A. A., Leistico, A. R., & Neumann, C. S. (2006).
 Factor structure of psychopathy in youth: Testing the applicability of the new four factor model. *Criminal Justice and Behavior*, 33, 135-157.
- Salekin, R. T., Lester, W. S., & Sellers, M. K. (2012a). Psychopathy in youth and mental sets: Incremental and entity theories of intelligence. *Law and Human Behavior*, *36*, 283-292.
- Salekin, R. T., & Lyman, D. R. (2010). Child and adolescence psychopathy: The road ahead.In R. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy*(pp. 401-420). New York: Guilford Press.
- Salekin, R. T., & Lynam, D. R. (2010). Child and adolescent psychopathy: An introduction.In R. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 1-12). New York: Guilford Press.
- Salekin, R. T., & Frick, P. J. (2005). Psychopathy in children and adolescents: The need for a developmental perspective. *Journal of Abnormal Child Psychology*, *33*, 403-409.

- Salekin, R. T., Tippey, J. G., & Allen, A. D. (2012b). Treatment of conduct problem youth with interpersonal callous traits using mental models: Measurement of risk and change.

 Behavioral Sciences and the Law, 30, 470-486.
- Salekin, R. T., Ziegler, T. A., Larrea, M. A., Anthony, V. L., & Bennett, A. D. (2003).
 Predicting dangerousness with two Millon Adolescent Clinical Inventory psychopathy
 scales: The importance of egocentric and callous traits. *Journal of Personality Assessment*,
 80, 154-163.
- Schneider, K. (1950). Psychopathic personalities. London: Cassell.
- Schwalb, C. S. (2007). Risk assessment for juvenile justice: A meta-analysis. *Law and Human Behavior*, *31*, 449-462.
- Seagrave, D., & Grisso, T. (2002). Adolescent development and the measurement of juvenile psychopathy. *Law and Human Behavior*, 26, 219-239.
- Sevecke, K., & Kosson, D. S. (2010). Relationships of child and adolescent psychopathy to other forms of psychopathology. In R. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 284-317). New York: Guilford Press.
- Sevecke, K., Lehmkuhl, G., & Krisher, M. (2009) Examining relations between psychopathology and psychopathy dimensions among female and male offenders. *European Journal of Child and Adolescent Psychiatry*, 18. 85-95.
- Silk, K. R. (2008). Commentary: Personality disorder in adolescence: The diagnosis that dare not speak its name. *Personality and Mental Health*, *2*, 46-48.
- Skeem, J. L., & Cooke, D. J. (2010). Is criminal behavior a central component of psychopathy? Conceptual directions for resolving the debate. *Psychological Assessment*, 22, 433-445.
- Skeem, J. L., Plaschek, D. L. L., & Manchak, S. (2009). Appropriate treatment works, but how? Rehabilitating general, psychopathic, and high risk offenders. In J. L. Skeem, K. S.

- Douglas, & S. O. Lilienfeld (Eds.), *Psychological science in the courtroom: Consensus and controversy* (pp. 358-384). New York: Guildford Press.
- Skeem, J. L., Polaschek, D. L. L., Patrick, C. J., & Lilienfeld, S. O. (2011). Psychopathic personality: Bridging the gap between scientific evidence and public policy. *Psychological Science in the Public Interest*, *12*, 95-162.
- Sueldfeld, P., & Landon, P. B. (1978). Approaches to treatment. In R. D. Hare & D. Schalling (Eds.), *Psychopathic behavior: Approaches to research* (pp. 347-378). New York: Wiley.
- Sylvers, P. D., Brennan, P. A., & Lilienfeld, S. O. (2011). Psychopathic traits and preattentive threat processing in children: A novel test of the fearlessness hypothesis. *Psychological Science*, 22, 1280-1287).
- Thorton, D., & Blud. L. (2007). The influence of psychopathic traits on response to treatment. In H. Herve & J. C. Yullie (Eds.), *The psychopath: Theory, research, and practice* (pp. 505-539). Mahwah, NJ:Erlbaum.
- Van Baardewijk, Y., Stegge, H., Andershed, H., Thomaes, S., Scholte, E., & Vermeiren, R.
 (2008). Measuring psychopathic traits in children through self-report. The development of the Youth Psychopathic traits Inventory Child Version. *The International Journal of Law and Psychiatry*, 31 (3), 199–209.
- Vaughn, M. G., Newhill, C. E., DeLisi, M., Beaver, K. M., & Howard, M. O. (2008). An investigation of psychopathic features among delinquent girls: Violence, theft, and drug abuse. *Youth Violence and Juvenile Justice*, *6*, 240-255.
- Vermeiren, R. (2003). Psychopathology and delinquency in adolescents: A descriptive and developmental perspective. *Clinical Psychological Review*, 23, 277-318.

- Verona, E., & Vitale, J. (2006). Psychopathy in woman: Assessment, manifestations and etiology. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 415-436). New York: Guildford Press.
- Verona, E., Sadeh, N., & Javdani, S. (2010). The influences of gender and culture on child and adolescent psychopathy. In R. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 317-342). New York: Guilford Press.
- Vitacco, M. J., & Neumann, C. S. (2008). The clinical assessment of psychopathy. In R. Jacksom (Ed.), *Learning Forensic assessment* (pp.129-152). New York: Routledge/Taylor & Francis.
- Vitacco, M. J., & Salekin, R. T. (in press). Adolescent psychopathy and the law. In K. Kiehl & W. Sinnott-Armstrong (Eds.). Psychopathy and the law. New York: Wiley.
- Vitacco, M. J., Salekin, R. T., & Rogers, R. (2010). Forensic issues for child and adolescent psychopathy, In R. T. Salekin & D. R. Lynam (Eds.), Handbook of child and adolescent psychopathy, (pp. 374-397). New York: Guilford Press.
- Vitale, J. E., Newman, J. P., Bates, J. E., Goodnight, J., Dodge, K. A., Pettit, G. S. (2005).
 Deficient behavioral inhibition and anomalous selective attention in a community sample of adolescents with psychopathic traits and low-anxiety traits. *Journal of abnormal Child Psychology*, 33, 461-470.
- White, S. F., & Frick, P. J. (2010). Callous-unemotional traits and their importance to causal models of severe antisocial behavior in youth. In R. T. Salekin & D. R. Lynam ((Eds.), *Handbook of child and adolescent psychopathy* (pp. 135-155). New York: Guilford Press.
- Wilson, K. Juodis, M., & Porter, S. (2011). Fear and loathing in psychopaths: A metaanalytic investigation of the affect recognition deficit. *Criminal Justice and Behavior*, *38*, 659-668.