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COEXISTENCE OF ADHD AND PSYCHOPATHY IN MALE OFFENDERS

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SUMMARY

Background. *Empirical studies on psychopathic personality disorders indicate a correlation between conduct disorder (CD), oppositional defiant disorder (ODD) and attention-deficit-hyperactivity disorder (ADHD) in children and the occurrence of criminal behavior later in life. The present study aims at the theoretical and empirical verification of an assumption appearing in the literature, that the abovementioned disorders and psychopathy coexist. Specifically, the author attempts to analyze the evidence for the coexistence of ADHD, CD and ODD in adults with psychopathic personality disorders, who have violated the law.*

Material and methods. *30 participants duly convicted of a crime and serving a prison sentence were subjected to self-report and psychiatric examinations. The study included only those persons who were diagnosed with antisocial or dissocial personality disorders, and their results in the Psychopathy Checklist-Revision ranged from 30 to 40 points.*

Results. *Persons diagnosed with psychopathy, in the early years of their development, had earlier been observed to have control disorders, especially in the form of conduct disorder.*

Conclusions. *This study on persons with psychopathic personality disorder suggests that impulsivity and antisocial behavior predispose for the development of psychopathic personality disorders.*

INTRODUCTION

The past 20 years of research on psychopathy have indicated that there is a relation between conduct disorder (CD) and attention-deficit-hyperactivity disorder (ADHD) in children, and the occurrence of criminal behavior in later developmental periods (Farrington et al., 1990; Dalteg et al., 1999; Barry et al., 2000; Pastwa-Wojciechowska, 2004). Interestingly, it appears that children who only present high levels of hyperactivity without signs of conduct

disorder or with only a few problems are less likely to demonstrate criminal behavior in later years, although they can have problems with addiction to alcohol. Barry et al. (2000) noticed that children diagnosed with ADHD and conduct disorder and/or oppositional defiant disorders, as adults, are far more often diagnosed as psychopaths and show numerous instances of antisocial behavior in puberty. Research on this relation was pioneered by D.R. Lynam (1996), who proved that children diagnosed with ODD/CD, as well as those diagnosed with ADHD, far more often demonstrate antisocial behavior and have a greater number of neuropsychological correlates of such behavior, such as poor passive avoidance learning, subnormal cortical arousal, or executive dysfunctions, also observed in adults with psychopathic personality disorders. Studies conducted by Lynam (1998) showed that a group of boys aged 12-13, evaluated by their teachers as having behavioral problems and symptoms of ADHD, demonstrated personality traits and behavior characteristics typical of psychopathy (e.g. higher self-reported rates and variety of delinquency, poor passive avoidance learning). On the other hand, studies by Frick (1998) and Frick et al. (1999, 2000, 2008) suggested that identifying psychopathy in children should focus mostly on callous and unemotional traits (CU), such as lack of guilt, absence of empathy, shallow and constricted emotions, which are found in adults with psychopathic personality disorders (Cleckley, 1976; Hare, 1991, 1996; Pastwa-Wojciechowska, 2004, 2008). Children with conduct disorder and a high level of CU demonstrate antisocial behavior more often, and the frequency of their having been noted by the police is higher than for children who only had behavior problems without CU traits (Christian et al., 1997; Barry et al., 2000).

Gorenstein & Newman (1980) hypothesized that psychopathy, antisocial behavior, impulsivity, alcohol and psychoactive drugs abuse are different forms of externalizing a more basic disorder they called "the generalized disinhibitory complex." Later studies demonstrated many correlations confirming this hypothesis; it was found that early alcoholism coexists with an increased probability of antisocial and disinhibitory behavior (McGue et al., 1987, 1999). Moreover, certain characteristics of behavior, such as disinhibitory, uncontrolled, and impulsive actions, are a significant predictor of early alcohol abuse in children (Cloninger et al., 1988; Farrington et al., 1990). Studies from the past decade have shown that there is a relation between the age of first contact with alcohol and numerous indicators of disinhibitory behavior (McGue et al., 2001), where the age of 11-14 is at the highest risk for alcoholism (Hewitt et al., 2000). Addictions are often preceded in childhood by the so-called externalizing disorders, described as overactive, impulsive and aggressive behavior with an early onset, relatively constant over time (not to be confused with the transitory defiance occurring in puberty; Weinberg et al., 1998). The externalizing disorders evolve with age into such clinical forms as ADHD, antisocial behavior, or substance abuse. Kendler et al. (2003) noticed that various disorders in this class are conditioned by the same risk factors.

As far as psychopathy is concerned, it is worth noting that this concept is more and more often identified with the operational definition of psychopathy by Robert D. Hare (1991, 1996), and with criteria of the Psychopathy Checklist – Revision (PCL-R), which is a method for its diagnosis. The diagnostic criteria suggested by Hare (1991, 1996) allow for the measurement of two factors, each of them described by 10 items. Thus, factor 1 describes a constellation of psychopathic traits considered by many clinicians to be basic for this type of personality, that is, factors concerning an interpersonal, affective (emotional) and verbal style of functioning:

1) glibness, superficial charm;
2) grandiose sense of self-worth;
3) proneness to boredom;
4) pathological lying;
5) displays of cunning, manipulative behavior;
6) lack of remorse;
7) shallow affect;
8) callousness, lack of empathy;
9) parasitic lifestyle;
10) poor behavioral controls.

This factor correlates positively with clinical indicators of psychopathy, especially with narcissistic and histrionic personality disorders and Machiavellian measures. On the other hand, there is a negative correlation with empathy and anxiety. Factor 2 describes types of behavior indicating impulsivity, lack of stability and an antisocial lifestyle:

11) promiscuous sexual behavior;
12) early behavioral problems;
13) lack of realistic, long term goals;
14) impulsivity;
15) irresponsibility;
16) failure to accept responsibility;
17) many short-term marital relationships;
18) juvenile delinquency;
19) revocation of conditional release;
20) criminal versatility.

The variables included in this factor correlate with the criteria of antisocial personality disorder (Hare, 1991, 1996). Analyzing the variables in terms of their meaning for self-regulation and self-control, we can group them into those considered significant (axial) for this type of personality, and those which lead to certain effects and consequences that result from them. Thus, significant traits are mostly disorders of the affective sphere (affective characteristics) manifesting as lack of lasting emotional relations, inability to anticipate the consequences of one's behavior, combined with an inability to learn from previous experience (Hare, 1996, 1998; Cooke, Michie, 2001; Pastwa-Wojciechowska, 2004). As a result, these people can be characterized by their a lack of significant interests,

volatility and lability of pursuits (beginnings without ends), lack of consistency in the pursuit of aims, often a clearly high level of activity focused on achieving an immediate goal, decreasing if there are any failures, lack of insight, and inability to assess oneself and understand the relation between one's traits and failures. In effect, we observe adaptation disorders, mostly manifesting as:

- a lack of education adequate to intellectual capacity;
- a lack of lasting relationships with family and other persons;
- accidental, disordered sexual contacts without emotional attachment;
- proneness to addictions (mostly alcoholism, nicotinism);
- frequent conflicts with the law: usually minor and incidental offenses, less often serious crimes, and least often complex, planned crimes (Hare, 1996, 1998; Cooke, Michie, 2001; Pastwa-Wojciechowska, 2004).

In other words, considering the factor structure of psychopathy, we can assume that axial traits are described by the emotional factor and its consequences or effects, hwile adaptation and control disorders are caused by interpersonal, cognitive and behavioral factors. That is why more and more often these factors are referred to individual types of control (Blackburn, 1996; Hare, 2006; Pastwa-Wojciechowska, 2005). Thus the affective factor is connected with emotional control, the behavioral factor with behavioral control, and the interpersonal factor, including cognitive functioning, with cognitive control. It is assumed that the control processes involving particular areas of human behavior are aimed at focusing and optimizing the individual's purposeful activity, since such activity can be a source of informational needs, which in turn remain closely related to other types of needs, conditioning the performance of correlated goals. Lack of fulfillment of human needs (standards of regulation) leads to distractions in personality, impedes its development and can even cause its disintegration (Jakubik, 1997). In the case of psychopathic personality disorders, it appears that both focus and the ability to act purposefully can be disturbed (Pastwa-Wojciechowska, 2004, 2008). Therefore, in clinical analysis of psychopathy the notions of self-regulation and self-control are extremely useful. Moreover, in ADHD, CD and ODD, as well as in psychopathy, we can observe disorders of behavioral self-control.

The present study was designed to verify the aforementioned theses concerning the coexistence of these disorders. In order to do that, the diagnostic criteria of the disorders were analyzed and then compared with the diagnostic criteria for psychopathy as identified by Robert D. Hare (1991).

MATERIAL AND METHODS

The present study included 30 men ranging in age from 21 to 35, duly convicted of a crime by a court judgment and serving a custodial sentence. The subjects also fulfilled the following inclusion criteria:

- a) diagnosis by a psychiatrist of antisocial or dissocial personality disorder;
- b) score of 30 or more on the Psychopathy Checklist - Revision (Table 1).

The surveys also included possible disorders diagnosed earlier – ADHD, conduct disorder (CD) and oppositional defiant disorder (ODD) (Fig. 1). It turned out that 12 subjects had been diagnosed with ADHD, all demonstrated behavioral issues (there was also an incidence of early behavioral issues), one person had been diagnosed with oppositional defiant disorder, and 10 with conduct disorder. Seven subjects did not have any of these diagnoses, apart from behavioral issues.

Another problem analyzed was the age of first contact with alcohol and the degree of possible addiction. First contact with alcohol under the age of 11 was admitted by 4 subjects, 12 said that this occurred between the ages of 11 and 14, and 14 participants over 14 (Fig. 2).

As far as the degree of addiction is concerned, 5 persons (17%) claimed that they do not drink at all, and the remaining 25 subjects (83%) said they drink occasionally. The analysis of medical documents proved that in this group 4 subjects abused alcohol and 7 were diagnosed with addiction.

The following research methods were used for the research:

- Clinical interview. The subjects answered questions concerning their development and functioning in adult life; the questions in the interview include diagnostic indicators of ADHD, CD, ODD, and antisocial personality disorder.

Table 1. Average scores on the PCL-R for subjects with psychopathic personality disorders

Tested variable	factor 1 (mean)	factor 2 (mean)	overall score (mean)
Psychopathy	17.17	13.82	30.97

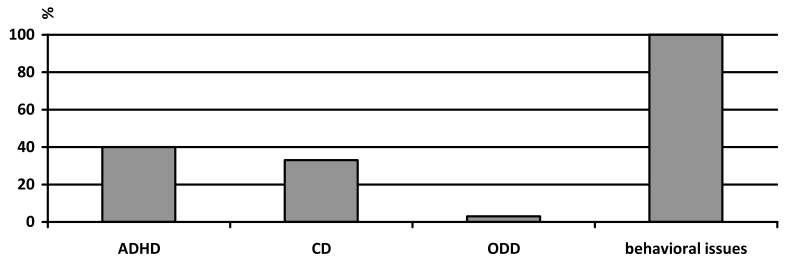

Fig. 1. Diagnosed disorders (ADHD, CD, ODD) and behavioral issues in the study group

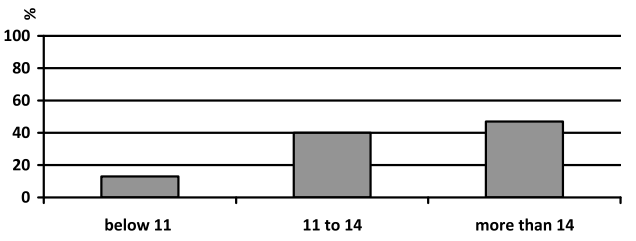

Fig. 2. Age of first contact with alcohol

- The Hare Psychopathy Checklist – Revision. Hare's PCL-R (Hare, 1991) is commonly accepted as the most powerful instrument to detect and measure psychopathy, and there is a wide consensus that, for the moment, there is no other procedure that can be as accurate and as well-correlated with antisocial variables. PCL-R encompasses a unidimensional measure of the disorder with two correlated factors, one related to personality traits and the other portraying an antisocial lifestyle. Items are scored from 0 (the characteristic is not present) to 1 (some features are present but not the whole description) to 2 (the characteristic is fully present), through a combination of the results of a long semi-structured interview with file consultation in different institutional sources. According to Hare (1991), total scores can be divided into three groups: less than 20: nonpsychopaths; 20-29, mild psychopaths; 30 or more, psychopaths.

Each person taking part in the study was subject to a detailed clinical interview, which included traits characteristic for ADHD, CD or ODD type disorders. The subjects were then given the PCL-R test, which allows for the measurement of three indicators, i.e. general intensity of psychopathy (overall score), evaluation of clinical traits characteristic of psychopathy (factor I) and behavioral indicators characteristic for psychopaths (factor II).

RESULTS

As has already been stated, the most often discussed personality or behavioral disorders involve the individual's compliance with various standards of regulation and their experience, i.e. self-control, understood as control of the subject's own activity. Following the conclusions of Burns (2000), it was similarly assumed that symptoms and traits coexisting in ADHD, OD or CD correlate as shown below.

A correlation is assumed between traits of psychopathy and the diagnostic criteria of ADHD, understood as a demonstration of impulsiveness and attention disorders (Fig. 3), which is also reflected in such medical classifications as DSM or ICD.

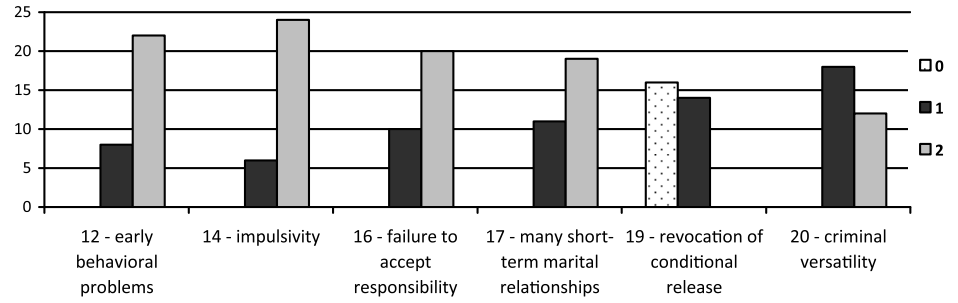

Fig. 3. Number of points scored by subjects for items 12, 14, 16, 17, 19, and 20 on the Psychopathy Checklist-Revision and symptoms of ADHD impulsivity

In the study group it was observed that, consist with the concept of ADHD as a symptom of impulsivity, in the PCL-R test we can distinguish items connected with the description of psychopathic personality:

- early behavioral problems (item 12);
- impulsivity (item 14);
- failure to accept responsibility (item 16);
- many short-term marital relationships (item 17);
- revocation of conditional release (item 19);
- criminal versatility (item 20).

Most often the maximum number of points (2 pts) was scored for items 14 (impulsivity), 12 (early behavioural problems) and 16 (failure to accept responsibility). The least diagnostic was item 19 (revocation of conditional release).

For impulsivity, understood as a lack of attention (Fig. 4), there were two items distinguished:

- item 3 (increased need for stimulation combined with increased proneness to boredom);
- item 13 (lack of realistic, long term goals).

More often the subjects scored a maximum of 2 points for item 3 (increased need for stimulation combined with increased vulnerability to boredom).

Fig. 5. presents the points in the PCL-R test scored by subjects for the traits coexisting in conduct disorder. Thus we assume that items 2 (grandiose sense of self-worth), 6 (lack of remorse or guilt), 7 (shallow affect), 8 (callousness, lack of empathy) and 20 (criminal versatility) are the ones most commonly coexisting with conduct disorder. The highest number of points was most often scored for item 2 (grandiose sense of self-worth), item 8 (callousness, lack of empathy) and item 6 (lack of remorse or guilt).

Fig. 6 shows the number of points scored by the subjects in the PCL-R test for symptoms of conduct disorder. It was assumed that the most accurate in terms of correspondence with both a clinical and criminological understanding of the symptoms of conduct disorder in PCL-R were the following items:

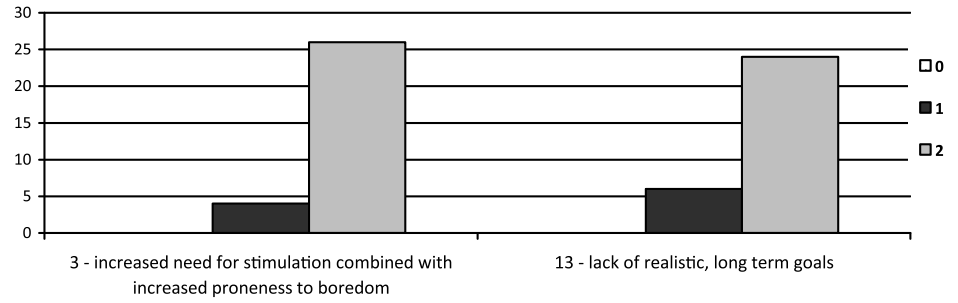

Fig. 4. Number of points scored by subjects for items 3 and 13 on the Psychopathy Checklist-Revision and impulsivity as a symptom of lack of attention in ADHD

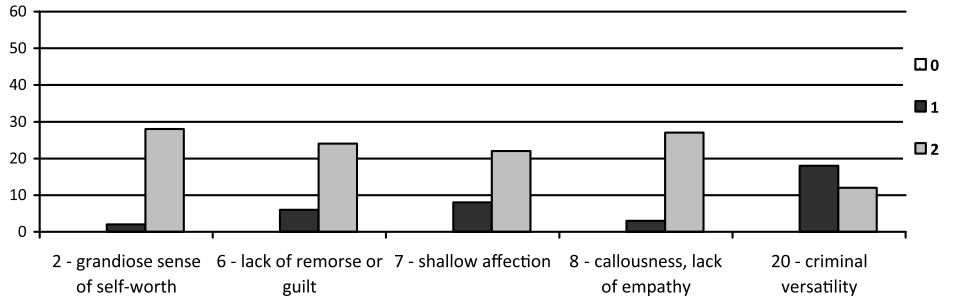

Fig. 5. Number of points scored by subjects for items 2, 6, 7, 8, and 20 on the Psychopathy Checklist-Revision and traits coexisting with conduct disorder (CD)

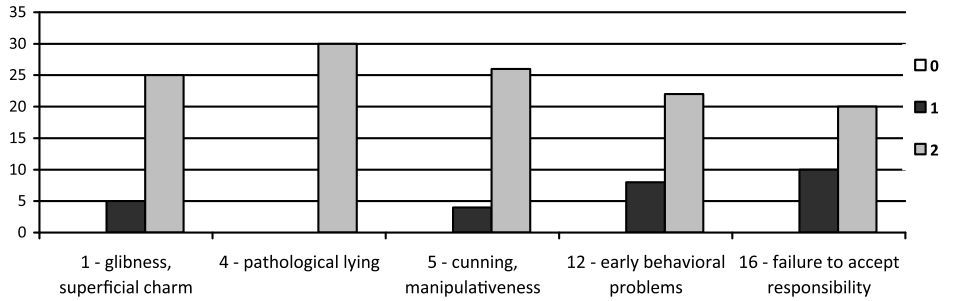

Fig. 6. Number of points scored by subjects for items 1, 4, 5, 12, and 16 on the Psychopathy Checklist-Revision and symptoms of conduct disorder (CD)

- 1 (glibness, superficial charm);
- 4 (pathological lying);
- 5 (cunning, manipulativeness);
- 12 (early behavioral problems);
- 16 (failure to accept responsibility).

It should also be noticed that for item 4 (pathological lying) all subjects scored the maximum number of points (2 pts). Moreover, they scored the maximum for item 1 (glibness, superficial charm) and 5 (cunning, manipulativeness).

The coexistence of psychopathic traits and symptoms of oppositional defiant disorder (Fig. 7) is portrayed by the following items of PCL-R:

- item 2 (grandiose sense of self-worth);
- item 12 (early behavioral problems);
- item 15 (irresponsibility, recklessness);
- item 16 (failure to accept responsibility).

Most often the subjects scored the maximum for items 2 (grandiose sense of self-worth), 12 (early behavioral problems), and 16 (failure to accept responsibility).

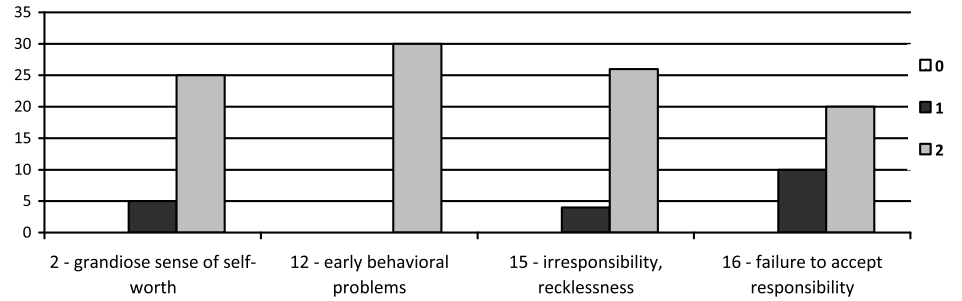

Fig. 7. Number of points scored by subjects for items 2, 12, 15, and 16 on the Psychopathy Checklist-Revision and symptoms of oppositional defiant disorder (ODD)

DISCUSSION

The results presented here indicate that persons with psychopathic personality disorders were mostly diagnosed in their early developmental periods with behavioral problems. It is worth signaling, though, that this notion is very broad and can cover various forms of behavioral disorders, which do not necessarily come from the subject himself, but can also result solely from the inefficiency of the developmental environment. Data concerning the incidence of ADHD, CD, or ODD in subjects indicate that most often behavioral problems were diagnosed along with ADHD and CD. According to the subjects, the diagnoses stemmed from the fact that "the school could not handle them and sent them to psychologists." On the basis of available materials we can conclude that such diagnoses resulted from behavioral problems and educational issues, caused to a great extent by truancy, since school activities, according to the subjects, were "boring and uninteresting." Therefore the results confirm the thesis that the environment (home, school, educational institutions) was inefficient, and in the subjects' opinion provided little stimulation.

Control disorders were also demonstrated in these subjects, in the form of experimenting with alcohol, which confirms the literature on this subject (Dalteg et al., 1999; Pastwa-Wojciechowska, 2004, in press).

Analysing the correlation between psychopathy and ADHD in terms of impulsivity, we should conclude that the symptoms are located in psychopathy factor II, describing antisocial forms of behavior. Most frequently these are impulsivity, early behavioral problems, and failure to accept responsibility. The results correspond to the data found in the literature, as both psychopathic persons and those suffering with ADHD are characterized by fierceness of actions, lack of anticipation of consequences, which in the near environment causes frustration and sometimes even helplessness and negative opinions (Burns, 2000, Pastwa-Wojciechowska, 2004, in press). Lack of attention corresponds to such traits as the need for stimulation and the lack of realistic, long term goals. Those people act under the influence of strong

stimuli, looking for stimulation for their own behavior, which makes it difficult to plan and consistently pursue goals (Hare, 1991; Pastwa-Wojciechowska, 2004; Millon, Davis, 2005).

Discussing the coexistence of psychopathy and conduct disorders, particular attention should be drawn to the coexisting traits and symptoms of disorders. The most frequent traits are shallow affect, high self-esteem, and a lack of remorse or guilt. It is also assumed that conduct disorder and psychopathy constitute a continuum of development, involving different developmental periods – conduct disorder in childhood and adolescence, developing to psychopathy in adulthood (Pastwa-Wojciechowska, 2004). This assumption is also reflected in the diagnostic criteria for antisocial personality disorders included in DSM-IV. In other words, these persons do not experience emotional states that would stop them from behavior that is not compliant with current standards; by contrast, they focus on maintaining their high-self esteem. As far as symptoms of conduct disorder and psychopathy are concerned, the high scores on the lying scale are noteworthy. It is worth pointing out here that similar results were obtained by Hare (1991) and Burns (2000), as these persons lie mostly to maintain their high self-esteem and avoid being punished for their actions.

In terms of oppositional defiant disorder the following variables should be noticed:

- grandiose sense of self-worth;
- early behavioural problems;
- irresponsibility and recklessness.

However, it should be stated that oppositional defiant disorder is diagnosed relatively rarely, thus in Polish circumstances the diagnoses of criminal offenders are often purely theoretical, rather than empirical.

CONCLUSIONS

The necessity to diagnose children routinely for ADHD, CD or ODD should be stressed, since the present study confirms the thesis found in the literature, that these childhood disorders develop into psychopathic disorders and addictions in later years.

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