

The relations between personality traits and psychopathy as measured by ratings and self-report

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The objective of this study was to examine the relations between psychopathy – as assessed by ratings (PCL-R) and by self-report (SRP3) – on one side, and The Five-Factor personality Model – expanded to include the traits Amorality and Disintegration – on the other. Both methods examined four traits of psychopathy: interpersonal, affective, lifestyle and antisocial characteristics. Data were collected on a sample of 112 male convicts. The results show the absence of congruence between the two methods – self-report and rating – in case of interpersonal and affective psychopathic dispositions. This incongruence is also reflected in their relations with personality traits. The self-report measures and the ratings of Lifestyle and Antisocial tendencies are related to amorality, aggressiveness, schizotypy, Neuroticism and impulsivity. However, the ratings of affective and interpersonal style are related to the integrated, organized, and emotionally stable aspects of personality. The results are interpreted in the light of differences between the methods of assessment and in the light of the essential characteristics of the psychopathic phenomena.

Keywords: psychopathy, methods of measurement, Five-Factor Personality Model, schizotypy, Amorality

Psychopathy

There is a high level of agreement among researchers concerning the personality traits and behavioral forms that are labeled psychopathic. Psychopathic characteristics are defined by manipulativeness, grandiose self-perception, impulsivity, and emotional shallowness (Gretton, Hare, & Catchpole, 2004).

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Psychopathy is also described by superficial charm, dishonesty, and inability to establish stable relations with others (Poythress, Skeem, & Lilienfeld, 2006).

Such personality characteristics are often related to behaviors which are conflicted with legal and social norms. Because of this fact, one of the most frequently used instruments for the assessment of psychopathy is largely based on examining antisocial behavior and delinquency: Robert Hare's scales PCL, PCL-R (Hare, 2003) and PCL-YV (Forth, Kosson, & Hare, 2003). Empirically derived factor structure of the PCL instrument shows that the indicators of psychopathy group in two related latent entities (Hare, 2003): characteristics of personality and interpersonal style of psychopaths (Factor 1) and antisocial and criminal tendencies (Factor 2). Recent findings (Hare & Neumann, 2009) show that another level can be added to the hierarchic structure of PCL-R. Namely, the Factor 1 is expressed through two modalities: *Interpersonal* relationships (manipulative, deceitful and exploitative relationships with others) and *Affective* psychopathic traits (absence of fear, guilt and empathy) while the expression of Factor 2 is based on *Lifestyle* (parasitic, impulsive and irresponsible style of life) and *Antisocial* tendencies in a narrower sense. Hare's scales are based on rating measures. On the grounds of these scales an attempt was made to examine psychopathy by self-report method (Williams, Nathanson, & Paulhus, 2003). The instrument is named SRP (Self Report Psychopathy) and its latest version also contains four scales, parallel to the ones from PCL-R: *Interpersonal Manipulation*, *Callous Affect*, *Erratic Life Style* and *Criminal Tendencies* (Paulhus, Neumann, & Hare, 2012). The scores obtained on the instruments measuring the self-reported psychopathy are valid predictors of unethical and antisocial behavior (Nathanson, Paulhus, & Williams, 2006; Williams, Paulhus, & Hare, 2007). From the given description of the instruments, it can be seen that SRP3 and PCL-R represent the *operationalizations of the same construct of psychopathy, but based on different methods: self-report and rating* (Hare & Neumann, 2009).

Psychopathy and basic personality structure

As the concept of psychopathy was grounded in certain personality dispositions, its relations with basic personality traits were the subject of numerous studies. One of the structural personality models, whose relations with psychopathy were largely examined, was the model constituted of five comprehensive dimensions, therefore named Five Factor Model (FFM: Costa & McCrae, 2008). This model is composed of traits *Neuroticism* (tendency to experiencing of unpleasant emotional states like depression and anxiety), *Extraversion* (sociability, social self-confidence, general activity), *Openness* (esthetic sensitivity, intellectual curiosity, need for change) *Agreeableness* (gentle nature, cooperativeness, altruism), and *Conscientiousness* (pronounced motive for achievement, future action planning, good organizability). Recent research (Miller & Lynam, 2003) shows that the relations between psychopathy and the FFM traits are characterized predominantly by negative associations of

psychopathy with Agreeableness and Conscientiousness. Low *Cooperativeness* is probably the best predictor of psychopathy from all the domains of the FFM, as evidenced in numerous studies (Lynam et al., 2005; Pereira, Huband, & Duggan, 2008; Roose et al., 2012; Miller, Gaughan, Maples & Price, 2011). The relations between Conscientiousness and psychopathy are based primarily on low *Deliberation* and *Dutifulness*, a finding revealed by a recent meta-analysis (Decyper, de Pauw, de Fryt, de Bolle, & de Clerq, 2009). Aspects of Neuroticism are connected to psychopathy in different ways: *Anxiety*, *Depression*, *Vulnerability* and *Self Consciousness* correlate negatively, but *Angry Hostility* and *Impulsivity* correlate positively with psychopathy (Miller & Lynam, 2003). Researchers that used measures of narrower psychopathic traits found that Neuroticism correlate negatively with affective/manipulative disposition, but positively with impulsive/antisocial traits (Ross, Benning, Patrick, Thompson, & Thurston, 2009; Gaughan, Miller, Pryor, & Lynam, 2009). This result is consistent with findings on a population of convicts that show that the Factor 1 negatively correlates with Agreeableness and Neuroticism, while Factor 2 correlates positively with Extraversion, and negatively with Agreeableness (Pereira et al, 2008). The relations of psychopathy with Extraversion and Openness – are also complex in their nature. There is some empirical evidence for negative correlations of these two FFM domains and psychopathy, based predominantly on low *Warmth* and low *Feelings* (Ross, Lutz, & Bailey, 2004). On the other hand, positive correlations were obtained between *Excitement Seeking*, as an aspect of Extraversion (Decyper et al., 2009), and *Actions* (from the Openness domain) with psychopathy (Gaughan et al., 2009). Examining the connections of the four-factor model obtained from self-reported psychopathy with basic dimensions of the FFM, Williams and collaborators (2007) ascertained the existence of low, but significant negative correlations of Agreeableness and Conscientiousness with psychopathy factors. In this way, the key associations between the FFM and psychopathy assessed by ratings were replicated.

There are some relevant personal dispositions which are not included in Five Factor Model, but which can be conceptually related to psychopathy. One of them is Amorality which represents the personal dispositions that participate in the production of manipulative behaviors – lying, frauds, as well as of direct violation of legal and social norms (Knežević, 2003). Amorality is a hierarchic construct exerted through three subordinate factors, each of which represents a deeper and more malicious form of Amorality: *Impulsivity-*, *Frustration-* and *Brutality-driven Amorality* (Knežević, Radović, & Peruničić, 2008). Research shows that the core aspects of Amorality can be located at the opposite pole of the lexically derived basic personality trait Honesty-Humility (Lee & Ashton, 2005), i.e., they represent markers of its negative pole (Medjedović, 2011). This domain is described by notions like rectitude, candidness, fair-mindedness, loyalty, and modesty, as opposed to fickleness, hypocrisy, vanity, cunningness, and greediness (Ashton et al., 2004). There is empirical evidence supporting the hypothesis that this newly recognized personality trait can be of exceptional importance for explaining psychopathy: it was shown that aspects of Honesty

have larger correlations with psychopathy than those that are usually reported in findings on the relations between the Five-Factor model and psychopathy (Lee & Ashton, 2005).

Another trait that could be conceptually related to psychopathy is schizotypy, a disposition representing a tendency toward psychotic experiences in general population (Lenzenweger, Maher, & Manschreck, 2005). Previous research showed that schizotypal personality traits correlate with psychopathy, to a greater extent with the characteristics of antisocial life style (Bonogofsky, 2007) than with manipulateness (Poythress et al., 2006). Furthermore, some recent research indicated that Factor 2 is positively correlated with schizotypy, but the relation between Factor 1 and schizotypy is negative (Ragsdale & Bedwell, 2013; Ragsdale, Mitchell, Cassisi, & Bedwell, 2013). This finding is very important because it suggests that at least some psychopathic traits could be associated with adequate and stable psychological functioning

Research aims

The intention of this study is to advance an understanding of the relations between psychopathy and personality in convict population. Firstly, the relations between psychopathy measures assessed by different methods – rating and self-report – will be examined. Next, the connections between aspects of psychopathy and personality traits will be analyzed, using, in the first place, multivariate statistical techniques (the principal component analysis and canonical correlation analysis). The design of this research carries two novelties: 1) two methods of psychopathy assessment (rating and self-report) were compared; 2) personality space to be examined in this study is expanded in comparison with the previous research. Beside the traits from the Big Five model, personality is operationalized by two additional dispositions. The first is *Amorality*, a tendency towards violation of legal and social norms (Knežević, 2003). The second is *Disintegration* (Knežević, Opačić, Kutlešić, & Savić, 2005), empirically derived operationalization of a predisposition toward psychotic experiences (Claridge, 2009).

Method

Sample and procedure

The subjects in this study were convicts that served their sentence in the Correctional Facility of Belgrade – Padinska Skela. A hundred and twelve male subjects (average age 35.7, SD=10.49; average years of education 11, SD=2.08) participated in the study on voluntary basis. All participants had basic reading skills. The questionnaires were filled out in groups, which took 75 minutes on average. After that, each subject was interviewed individually. Relevant data were taken from the convicts' files. The collecting of data lasted two months altogether.

Measures

The Psychopathy Check List-Revised (PCL-R) is an instrument for examining the two factors that most frequently emerge in empirical studies of psychopathy (Hare, 2003). For the sake of preciseness of assessment, the scores on four modalities of psychopathy were used:

Factor 1 is reflected in *Interpersonal* ($\alpha=.70$) and *Affective* ($\alpha=.68$) traits, while the Factor 2 is exerted through *Lifestyle* ($\alpha=.75$) and *Antisocial* ($\alpha=.78$) characteristics. The calculations of scores were done on the basis of the structure of these two psychopathy factors that was described by Hare and Neumann, (2009). The total scale has 20 items, two of which do not belong to any of the four aspects: Many short-term marital relationships (marital or non-marital) and Promiscuous sexual behavior. Based on the mentioned structure, the Interpersonal scale consists of items measuring *Superficial Charm*, *Grandiose Self-worth*, *Pathological Lying*, and *Conning/Manipulation* (4 indicators); Affective scale is assessed through the *Lack of Remorse and Empathy*, *Shallow affect*, and *Nonacceptance of responsibility* for one's own acts (4 indicators); Lifestyle is operationalized through *Need for stimulation*, *Lack of goals*, *Impulsivity*, *Irresponsibility*, and *Parasitic lifestyle* (5 indicators); finally, Antisocial tendencies are measured by indicators of *Poor behavioral controls*, *Early behavioral problems*, *Juvenile delinquency*, *Revocation of conditional release*, and *Criminal versatility* (5 indicators). The magnitude of each indicator was assessed on a scale from 0 to 2, based on a semi-structured interview carried out with each subject individually, as well as on the data from convicts' files.

The instrument SRP3 (Paulhus et al., 2012) was used for self-report exploration of psychopathy. To emphasize again, this instrument represents an operationalization of the psychopathy concept suggested by Hare (2003). The instrument examines four aspects of psychopathy: *Interpersonal Manipulation* ($\alpha=.67$), *Callous Affect* ($\alpha=.66$), *Erratic Life Style* ($\alpha=.76$), and *Criminal Tendencies* ($\alpha=.74$). The questionnaire consists of 64 items, wherein each of the psychopathy modalities is operationalized through 16 items.

The NEO-FFI instrument (Costa & McCrae, 1992) was used to examine five comprehensive personality traits. It comprises 60 items, 12 for each of the domains of the FFM: *Extraversion*, *Neuroticism*, *Openness*, *Agreeableness*, and *Conscientiousness*. Cronbach's internal consistency coefficients for the scales measuring these factors are in the range of $\alpha=.55$ (Agreeableness) to $\alpha=.81$ (Conscientiousness).

Amorality was assessed using the AMORAL 9 questionnaire (Knežević et al., 2008). This questionnaire consists of 115 items for nine Amorality modalities: Low Control, Hedonism, Laziness, Projection of amoral impulses, Machiavellianism, Resentment, Sadism, Brutal modulation of resentment, and Passive Amorality. Only the total score obtained from all scale items were used. The reliability of this measure is $\alpha=.93$.

Disintegration was measured using the DELTA 10 instrument (Knežević et al., 2005). For the sake of illustrating of the contents of this instrument, an exemplary item for each of the ten Disintegration modalities is given: *General Executive Impairment* – "Occasionally, while doing something, I suddenly get blocked, because everything is deleted", *Perceptual Distortions* – „Sometimes I have a feeling as if I were someone else“, *Paranoia* – „I have a feeling that someone is watching me“, *Depression* – "I am often unhappy and sad", *Flattened Affect* – "I don't care too much about anything", *Somatoform Dysregulation*– "Sometimes my body, or a part of it, is totally insensitive and numb", *Enhanced Awareness*– "For me different odours have different colors", *Magical Thinking*– "Some people have the power to cast evil spells", *Mania* – "I often have such an excess of energy that I practically do not feel the need for night's sleep", and *Social Anhedonia*– "I feel the best when I'm alone". The Disintegration dimension is to some extent similar to the schizotypy construct, and the key difference lies in the fact that the theoretical articulation of Disintegration as a continuum of psychotic diathesis encompasses a much wider behavioral domain. In this study, a short scale of twenty items was used, a version that does not examine the individual modalities of this wide trait, but renders only a general score. The scale was constructed by selecting two items from each of the Disintegration modalities, so it can be considered representative of the whole instrument. The reliability of the whole scale is $\alpha=.80$.

These four instruments are based on the self-report method. The responses to the items are done by five-point Likert scale, wherein '1' denotes a response "I do not agree at all," and '5' denotes "I agree fully".

Results

The interrelations of the psychopathy measures

In order to analyze mutual congruence of the used measures, Pearson's linear correlation coefficients between all aspects of psychopathy examined in the study were calculated. The interrelations of these measures are shown in Table 1.

Table 1
Pearson's correlation coefficients between the examined psychopathy measures

	1.	2.	3.	4.	5.	6.	7.	8.
1. Interpersonal Manipulation (self)	1							
2. Callous Affect (self)	0.52**	1						
3. Erratic Life Style (self)	0.60**	0.54**	1					
4. Criminal Tendencies (self)	0.21*	0.36**	0.47**	1				
5. Interpersonal (rating)	-0.07	-0.07	0.07	0.17	1			
6. Affective (rating)	0.09	-0.01	0.20*	0.34**	0.45**	1		
7. Lifestyle (rating)	0.23*	0.37**	0.55**	0.49**	0.14	0.27**	1	
8. Antisocial (rating)	0.22*	0.31**	0.48**	0.54**	0.23*	0.35**	0.74**	1

Notations: * $p < 0.05$; ** $p < 0.01$

The results of the correlation analysis show a striking absence of congruence of self-reports and ratings of the aspects of Factor 1: Interpersonal Manipulation and Callous Affect with Interpersonal and Affective measures. Self-reports of Interpersonal Manipulation have significant, although low correlations with ratings of Lifestyle ($r=0.23$; $p < 0.05$) and Antisocial tendencies ($r=0.22$; $p < 0.05$), while the correlations of Callous Affect with these rating measures are a little larger ($r=0.37$; $p < 0.01$ and $r=0.31$; $p < 0.01$, respectively). Inter-correlations of the measures obtained by the same method are statistically significant, although congruence is higher in the self-report measures compared to the ratings, in which the relation between the Interpersonal and Lifestyle scales practically does not exist ($r=0.14$; $p > 0.05$).

Latent structure of the common space of psychopathy and personality traits

The first performed analysis used for the exploration of the latent space of all examined variables was principal component analysis (PCA). Latent space was inspected because we assumed that bivariate correlations could not reveal the full complexity of the relations between analyzed variables. Parallel analysis (Hayton, Allen, & Scarpello, 2004) was used as a criterion for the number of factors analyzed in PCA. Based on this method, three components were extracted explaining 32%, 16%, and 9% of variance, respectively. The components were rotated using a Promax criterion ($kappa=4$). The pattern matrix of the extracted components is shown in Table 2.

Table 2
The pattern matrix of the extracted components

	Self-reported psychopathy	Personality	Rated psychopathy
Neuroticism		-0.80	
Extraversion	0.57	0.69	
Openness		0.18	
Agreeableness	-0.52		
Conscientiousness		0.81	
Disintegration		-0.85	
Amorality	0.73		
Interpersonal Manipulation (self)	0.83		
Callous Affect (self)	0.67		
Erratic life style (self)	0.57		0.41
Criminal tendencies (self)			0.72
Interpersonal (rating)		0.42	0.61
Affective (rating)		0.52	0.70
Lifestyle (rating)			0.76
Antisocial (rating)			0.86
Self-reported Psychopathy	$\alpha=0.88$		
Personality	-0.46**	$\alpha=0.90$	
Rated Psychopathy	0.30**	-0.28*	$\alpha=0.89$

Note: loadings under 0.30 are not shown in the tables. The correlations of the extracted factors are shown at the bottom of the table. * $p<0.05$; ** $p<0.01$; α —factor reliability

The first isolated component consists of three out of four self-reported psychopathy measures (Interpersonal Manipulation, Callous Affect, and Erratic Life Style) together with Amorality, Extraversion, and Agreeableness (which has a negative loading). Based on its dominant content, this component is named *Self-reported Psychopathy*. The second component is defined primarily by personality measures: Extraversion, Openness, and Conscientiousness participated with positive, and Neuroticism and Disintegration with negative loadings. It is important to note that the rating measures of Interpersonal and Affective traits had secondary loadings on this component, named *Personality*. Component was labeled in this manner because it is comprised mostly of personality traits and it's content describes well functioning personality. Finally, the third component is constituted of all aspects of psychopathy assessed by rating, together with self-reported Criminal Tendencies and secondary loading of Erratic Life Style. Based on its contents, this component is named *Rated Psychopathy*. All correlations between the extracted components were significant. Both psychopathy components correlate negatively with Personality and positively between themselves. The reliability estimations of all components were high.

To further explore the relations of psychopathy measures and personality traits, the canonical correlation analysis was performed, wherein the measures of personality constituted the first set of variables, and psychopathy factors constituted the second set. Two significant canonical correlations were isolated,

with the level of significance $p < 0.01$. The parameters of the first isolated canonical correlation were: $R = 0.78$, $\lambda = 0.19$, $X^2 = 171.02$, $df = 56$, $p < 0.01$; and the characteristics of the second canonical correlation were: $R = 0.52$, $\lambda = 0.49$, $X^2 = 74.21$, $df = 42$, $p < 0.01$. The structure matrix of the isolated canonical factors is shown in Table 3.

Table 3
The structure matrix of the isolated canonical factors

The structure of canonical factors of the first set of variables:	1	2
Neuroticism	0.51	-0.38
Extraversion	0.13	0.26
Openness	-0.05	0.14
Agreeableness	-0.62	-0.16
Conscientiousness	-0.43	0.45
Disintegration	0.54	-0.78
Amorality	0.93	-0.08
The structure of canonical factors of the second set of variables:	1	2
Interpersonal manipulation (self)	0.85	0.32
Callous Affect (self)	0.70	-0.06
Erratic life style (self)	0.87	-0.20
Criminal tendencies (self)	0.41	-0.01
Interpersonal (rating)	-0.08	0.44
Affective (rating)	0.19	0.64
Lifestyle (rating)	0.46	-0.17
Antisocial (rating)	0.30	0.16

The structure of canonical factors showed that the first factor predominantly consisted of Amorality (0.93), low Agreeableness (-0.62), Disintegration (0.54), Neuroticism (0.51), and low Conscientiousness (-0.43) from the set of personality measures. These traits were associated with all aspects of psychopathy measured by self-report, as well as with Lifestyle and Antisocial aspects of psychopathy measured by ratings. The measures with the highest loadings in the set of psychopathy were self-reported Interpersonal Manipulation (0.85), Erratic Life Style (0.87), and Callous Affect (0.70), and to a lesser extent, self-reported Criminal Tendencies (0.46), as well as Lifestyle (0.46) and Antisocial (0.30). The second canonical pair is based on the relation of low Disintegration (-0.78), low Neuroticism (-0.38), and Conscientiousness (0.45) with Affective (0.64) and Interpersonal (0.44) ratings of the psychopathy.

Discussion

Congruence of the psychopathy measures

Prior to analyzing the common latent space of psychopathy and personality, the interrelations of psychopathy measures were examined. Bearing in mind that these are the operationalizations of one and the same construct by different

measuring methods, the correlations were expected to be statistically significant, positive and of moderate intensity. This hypothesis was confirmed for two aspects of behavioral psychopathic dispositions: Erratic Life Style and Criminal Tendencies exhibit expected relations with Lifestyle and Antisocial scales (Table 1). However, the relations between the measures of manipulateness and shallow affect were missing: the correlations between self-report measures of Interpersonal Manipulation and Callous Affect with Interpersonal and Affective ratings were almost zero. There are three possible explanations for this result: 1) the lack of the introspective skills in participants with high psychopathic traits or presenting themselves in a socially desirable manner, which would invalidate the self-report measures of Interpersonal Manipulation and Callous affect; 2) some kind of systematic bias generated by the rater, which invalidates the PCL-R measures of these traits and 3) rating and self-report measures of interpersonal and affective characteristic measure different constructs which results in the lack of their congruence. Further results should shed some light on this problem.

Relations between the measures of psychopathy and personality

Principal component analysis has shown the existence of three relatively clearly defined latent components in the space of personality and psychopathy (Table 2). The first component is defined by measures of psychopathy obtained by self-report (all except Criminal Tendencies), Amoralism, Extraversion, and low Agreeableness. The existence of a separate latent component, constituted predominantly by self-reported psychopathy and Amoralism, is in line with the findings that dispositions towards ethically relevant behavior can not be adequately located in the space of the Five-factor model (Međedović, 2011; Ashton et al., 2004) in spite of their high connectedness with the domain of Agreeableness (Ashton & Lee, 2005). The participation of low Agreeableness in this constellation of characteristics is probably based on aggressiveness, because numerous findings show that aggressiveness is a personality trait dominantly describing the negative pole of the Agreeableness dimension (Gleason, Jensen-Campbell, & Richardson, 2004; Sanz, Garcia-Vera, & Magan, 2010). Positive contribution of Extraversion might be explained by its *Sensation Seeking* aspect which correlates with dominance tendency (Gaughan et al., 2009), impulsivity, and irresponsibility, all of which are a part of psychopathic characteristics (Roose et al., 2012).

The second component describing the latent structure of the personality and psychopathy space consists of lexical personality traits accompanied by Disintegration. The ratings of Interpersonal and Affective psychopathic traits have the secondary loadings on this component, whose contents clearly indicate a latent dimension describing an adapted, functional personality: low Neuroticism and Disintegration, and high Extraversion and Conscientiousness. The position of the secondary loadings of psychopathy on this component is noteworthy: it has a positive sign, meaning that a part of Interpersonal and Affective traits variance, actually correlate with stable and integrated aspects of personality consisting of

emotional stability, sociability, self-control, and integrated regulative functions. The presence of two rating measures on this component constituted mostly of self-report traits suggests that this component is not an artifact of socially desirable self presentation.

The dominant loading of these aspects of psychopathy is, however, on the third component, together with lifestyle antisocial traits measured with both methods. When examined by self-report, Interpersonal Manipulation and Callous Affect are dominantly related to Amorality, low Agreeableness, and Extraversion (the first component), while the other two measures of psychopathy obtained by self-report have loadings on the third component, meaning that their congruence with ratings of psychopathy is higher. On the other hand, when examined by ratings, Interpersonal and Affective traits, besides dominant loading on the third component, correlate with the integrated and functional aspects of personality (the second component).

It can be noted, off course, that one of the reasons for the obtained factor solution is a method covariance: measures explored by the same method have additional covariance that makes them mutually more congruent (Blonigen et al., 2010). However, the finding that self-reported personality and psychopathy traits constituted two components with some personality measures loadings on psychopathy-amorality component goes beyond method covariance and demand a conceptual interpretation. The same implies for the Rated psychopathy component because two self-report measures loaded on it.

For a more precise examination of the nature of aspects of psychopathy, canonical correlation analysis was performed, in which the aspects of psychopathy were explained through their relations with personality traits. Two canonical factors were extracted. The analysis of the structure of these factors revealed that the first factor was constituted from a combination of personality traits that unambiguously indicates pro-criminal and dysfunctional personality (Table 3) – high Amorality, low Agreeableness, high Neuroticism, and high Disintegration. This constellation of personality traits is connected with all self-report measures of psychopathy, together with lifestyle and antisocial aspects measured by ratings. The specific position of Interpersonal and Affective psychopathy traits measured by ratings can be seen in their connections with personality represented in the second canonical factor. Namely, these are the only members of the set of psychopathy measures that are related to functional, stable aspects of personality reflected in the absence of psychotic-like dispositions, emotional stability, and high self-control. It is obvious that this canonical factor (Table 3) replicates the relations between psychopathy measures and personality appearing in the second factor in Principal component analysis (Table 2).

The participation of psychopathy measures in the first isolated canonical pair of variables shows that rating measures of Lifestyle and Antisocial tendencies share the same object of measurement with all aspects of self-reported psychopathy to a significant extent. It is based on the constellation of traits above all determined by Amorality, then low Agreeableness, and finally Disintegration and Neuroticism. This constellation of traits indicates a personality structure that

is prone to commit offenses, as evidenced by numerous empirical findings. First of all, the essential components of Amorality are significantly more pronounced in adult convicts than in the control group (Međedović & Stojiljković, 2008). It was also found that Amorality, particularly its brutal modalities, significantly predict criminal recidivism (Međedović, Kujačić, & Knežević, 2012). Schizotypal traits are also connected to criminality (Poythress et al., 2006). Low Agreeableness from the Five-factor model represents the most stable predictor of criminal behavior (Miller & Lynam, 2003) from the Five Factor Model. Earlier findings showed that Neuroticism, which also participates in the first canonical factor in the personality space, can figure in the production of stable criminal behavior (van Dam, Janssens, & De Bruyn, 2005), most probably due to the aspects *Angry Hostility* and *Impulsivity* that are considerably present in delinquents (Le Corff & Toupin, 2009).

However, rating measures of Factor 1 showed distinctive characteristics in their relations with the personality dimensions. Their location in the personality space was different from all the other measures of psychopathy. The structure of canonical factors shows that rating measures of Interpersonal and Affective traits are connected with the personality traits related to psychological stability and adequate functioning (Table 3). Low Neuroticism is conceptually related to psychopathy because the superficial and flattened affectivity can actually be the expression of emotional stability as the opposite pole of the Neuroticism dimension. And indeed, some previous research also found that Neuroticism has negative correlations with psychopathic traits that depict emotional shallowness and manipulation (Ross et al., 2009; Gaughan et al., 2009). Low Disintegration describes an integrated personality, without psychotic-like experiences and with functional conation. The positive participation of the Conscientiousness domain suggests that the individuals with higher scores on ratings of Interpersonal and Affective traits are capable to adequately control their impulses (Egan & Beadman, 2011), they are cautious and capable to behave goal-directedly (MacCann, Duckworth, & Roberts, 2009). Structure of these three traits clearly indicates well functioning personality. Results obtained by CCA directly replicated the findings of previous studies regarding differential associations of manipulative/affective and lifestyle/antisocial traits with external constructs. Unlike the latter one, manipulativeness and emotional shallowness correlate negatively with emotional instability (Ross et al., 2009; Gaughan et al., 2009), schizotypy (Ragsdale & Bedwell, 2013; Ragsdale et al., 2013) and impulsiveness (Snowden & Gray, 2011).

There are similarities between the structure of traits related to PCL-R ratings on Interpersonal and Affective measures and the concept of a “successful psychopathy” (Hall & Benning, 2006). Namely, experts’ estimations show that the psychopaths successfully adapted to environmental conditions and social norms probably have core aspects of psychopathy (such as emotional insensitivity and manipulativeness), but it is the higher Conscientiousness that distinguishes them from the psychopaths that get involved in criminal activities, or at least from those that get arrested (Mullins-Sweatt, Glover, Derefinko,

Miller, & Widiger 2010). Low Disintegration implies an adequate functioning of prefrontal and frontal parts of cortex, which is reflected in integrated executive functions, and even wider, integrated cognition, which are also the features of a successful psychopathy (Gao & Raine, 2010). There are findings suggesting that emotionally stable psychopaths have significantly higher scores on tests of emotional intelligence, they are more successful in cognitive inhibition, and they have larger capacities for adaptation (Vidal, Skeem, & Camp, 2010).

Concluding Remarks

Data obtained in present study show that a certain degree of incongruence exists between the self-report and rating methods concerning the measurement of the first factor of psychopathy as defined by Hare (2003). The indicators of lifestyle and antisocial behavior mutually converge satisfyingly, but a discrepancy emerges between the markers of manipulative and affectivity traits examined by the two methods. This discrepancy reflects also in the relation between the self-reported and rated aspects of those psychopathic characteristics and personality traits. All measures obtained by subjects' self-report, as well as the ratings of psychopathic lifestyle and antisocial tendencies, can be explained by a constellation of personality traits that undoubtedly describes a disposition toward criminal and delinquency. Such a structure of relations has been obtained in previous research as well (Miller & Lynam, 2003; Lee & Ashton, 2005). However, the ratings of core indicators of psychopathy (i.e. markers of the Factor 1) – Interpersonal and particularly Affective traits – exhibit completely different relations with personality traits. They are explained, at least partially, by a combination of traits that clearly describes an adapted, integrated, i.e. well functioning personality. In conceptual sense, these findings are congruent with concepts of a successful psychopathy (Hall & Benning, 2006).

The findings obtained in this study open many questions about psychopathy and the methods of its assessment. In the first place, there is the question of the *cause* of discrepancy between interpersonal and affective features of psychopathy measured by self-report and rating. One of the possibilities is that it is based on inability or reluctance of persons with pronounced psychopathic features to adequately describe their own personality characteristics (Jackson & Richards, 2007). However, empirical findings show that the congruence of self-descriptions and ratings of psychopathy is quite satisfactory when *identical* instruments are used (Miller, Jones, & Lynam, 2011). Such a finding should exclude incapability of insight and low introspectiveness of psychopathic individuals as causes of discrepancies between measures. The second possibility is that there exists a systematic bias by rater in PCL-R interview and that this bias generates the mentioned discrepancy. However, this explanation can not be addressed here, because it can be confirmed only if this result could be replicated with other raters on PCL-R scale. Finally, there is a possibility that the indicators of the first Hare's factor in the PCL-R and SRP3 instruments are not mutually congruent, or, in other words, that they do not share the same object of measurement although

they are constructed with that intention. The results of distinct relations between these psychopathic features and personality traits support this hypothesis. While self-report measures of interpersonal and affective psychopathic traits capture mainly pro-criminal dispositions in personality, rating measures of these traits depict functional and adaptive potentials too.

This study has several limitations. Probably the most serious one is a small sample size. Small sample size could decrease the possibility to find significant correlations between the self-report and ratings measures of psychopathy. Second limitation is that somewhat lower reliabilities of some scales obtained in this research. This refers primarily to NEO-FFI Agreeableness scale. These limitations call for a replication of these findings. The most optimal design would include measures of objective behavior (e.g. criminal recidivism) beside self-report and rating measures, because they could be very important for further understanding of something that could be a “dual differentiation” of psychopathy measures: conceptual difference between the interpersonal/affective and lifestyle/antisocial traits of psychopathy and methodological difference between self-report and ratings measures of these dispositions.

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