

Personality pathology in a forensic setting: prevalence, assessment, and prognostic value for treatment Spaans, M.A.

Citation

Spaans, M. A. (2016, December 6). *Personality pathology in a forensic setting : prevalence, assessment, and prognostic value for treatment*. Retrieved from https://hdl.handle.net/1887/44736

Version: Not Applicable (or Unknown)

License: License agreement concerning inclusion of doctoral thesis in the

Institutional Repository of the University of Leiden

Downloaded from: https://hdl.handle.net/1887/44736

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle http://hdl.handle.net/1887/44736 holds various files of this Leiden University dissertation

Author: Spaans, Marleen

Title: Personality pathology in a forensic setting: prevalence, assessment, and prognostic

value for treatment **Issue Date:** 2016-12-06



Diagnosis of antisocial personality disorder and criminal

responsibility

Abstract

The present study empirically investigates whether personality disorders and psychopathic traits in criminal suspects are reason for diminished criminal responsibility or enforced treatment in high security hospitals. Recently, the tenability of the claim that individuals with personality disorders and psychopathy can be held fully responsible for crimes has been questioned on theoretical bases. According to some interpretations, these disorders are due to cognitive, biological and developmental deficits that diminish the individual's accountability. The current article presents two studies among suspects of serious crimes under forensic evaluation in a Dutch forensic psychiatric observation clinic. The first study examined how experts weigh personality disorders in their conclusions as far as the degree of criminal responsibility and the need for enforced forensic psychiatric treatment are concerned (n = 843). The second study investigated associations between PCL-R scores and experts' responsibility and treatment advisements (n = 108). The results suggest that in Dutch forensic practice, the presence of a personality disorder decreased responsibility and led to an advice for enforced forensic treatment. Experts also take characteristics of psychopathy concerning impulsivity and (ir)responsibility into consideration when judging criminal accountability. Furthermore, they deem affective deficiencies sufficiently important to indicate suspects' threat to society or dangerousness and warrant a need for forensic treatment.

Introduction

Full criminal responsibility implies that an individual who commits a crime was fully aware of the (illegal) nature, character and consequences of that crime. When an individual suffers from a severe mental disorder that leads to a crime, it is generally agreed in most jurisdictions that he or she cannot be held criminally responsible for it and should be exempt from its penal consequences. A number of countries, such as Canada and a number of U.S. states, use a dichotomy of options when it comes to criminal responsibility. An offender is viewed either as fully responsible and receives a prison sentence, or the crime was the result of a mental disorder, the offender is viewed as criminally insane, and the court imposes enforced treatment in a high security forensic psychiatric hospital. Elsewhere, a graded system is used, allowing for various possible grades of criminal responsibility.

Not all mental disorders are considered a potential cause for diminished criminal responsibility. In many jurisdictions the mere presence of a personality disorder is not viewed as sufficient grounds for criminal insanity and forensic treatment. This holds especially for antisocial personality disorder and psychopathy with crucial diagnostic criteria such as criminal versatility and repeated unlawful behaviors. Some authors have questioned, however, the tenability of the claim that individuals with personality disorders can be held fully responsible. They argue that personality disorders and psychopathy *can* be interpreted as serious mental disorders, based as they are on developmental disabilities or particular deficits such as cognitive deficiencies and biological impediments. Mei-Tal (2002), for instance, argued that the complete absence of empathy in persons with high psychopathy scores implies that they should never be regarded as responsible agents or blameworthy. Earlier, Herpertz and Sass (2000) concluded that violence in persons with high psychopathy scores is rooted in emotional deficiency. Due to deficient emotional learning they show poor conditioning processes, cannot be conditioned to avoid punishment, and are unable to evaluate the consequences their actions will have. They therefore make no effort to avoid harmful behavior or suppress violent

⁴ Spaans, M., Barendregt, M., Haan, B., Nijman, H., & De Beurs, E. (2011). Diagnosis of antisocial personality disorder and criminal responsibility. *International Journal of Law and Psychiatry*, 34, 374-378.

impulses. Emotional deficiency is also associated with a general under-arousal, which in turn may lead to sensation seeking and risk-taking in the form of violence or other illegal behavior (Herpertz & Sass, 2000). According to Ciocchetti (2003), punishment is inappropriate for persons with high psychopathy scores due to their failure to understand the significance and influence of their responses to the acts of others. They cannot appropriately interpret punishment because they cannot understand the wrongfulness of their actions or the significance of any punishment they are given. Fine and Kennett (2004) argued that psychopathic offenders are incapable of forming genuine moral concepts because they failed to pass through a crucial moral developmental stage in early childhood and therefore cannot meet the requirement of being criminally responsible. Palermo (2007) argued that under conditions of severe stress, individuals suffering from psychopathic or antisocial personality disorders may decompensate and experience either fleeting or short-term psychotic thinking and behavior that can severely impair the ability to reason or act rationally, to distinguish right from wrong, and to conform to the law. According to Palermo, the best legal option in such a case would be commitment to a mental forensic institution for suitable treatment.

Criminal responsibility in the Netherlands

Under current Dutch criminal law, a crime committed due to a disorder that rendered the offender unable to act differently and the offense unavoidable is not considered punishable. According to Barendregt (2006), this legal decision finds its origin in the traditional image of man, which includes the idea that individuals can, to a certain degree, take control over their actions. Without any such degree of freedom of will, individuals cannot be held responsible for their actions, either personally or criminally. Freedom of will exists in the ability of humans to self-reflect. Reflective understanding, or self-consciousness, allows for actions to be planned, controlled, inhibited, reviewed and revised. Hence, the ability to self-reflect indicates the freedom to perform an act or to refrain from it. Should this capacity have been affected by a mental disorder, an individual's actions are not completely planned or controlled. As a consequence, responsibility for that action may be diminished. The court may take the diminished responsibility into account and, for instance, decide for a mitigated sentence or compulsory treatment.

Dutch criminal practice distinguishes five possible degrees of criminal responsibility, as opposed to the sane-insane dichotomy used in some other jurisdictions. The 5-point scale ranges from complete responsibility, slightly diminished, diminished, severely diminished to total absence of responsibility. These grades of responsibility are related to the intensity of the role played by a psychiatric disorder, if found, in the crime. The more serious the disorder and the role it played in the crime, the less responsible an offender will be held. The Dutch dimensional approach to criminal responsibility fits in well with the dimensional nature of psychiatric or personality disorders. Mental illness is not an all-ornothing phenomenon, but symptoms wax and wane, sometimes reaching levels above disorder threshold (so-called syndromal states). This is especially the case in personality disorders which has led to the proposal of a dimensional model of classification (Widiger, 2000). Dimensional diagnoses reflect the differences in the number and severity of disorder criteria with the diagnostic groups of persons below the disorder threshold (Ullrich, Borkenau & Marneros, 2001). However, the fine grained categorization of criminal responsibility has also been criticized, as it suggests an accuracy and reliability of its assessment that cannot be guaranteed in practice. Nevertheless, it is firmly founded in Dutch forensic practice and in the judiciary system. In cases of diminished or severely diminished

criminal responsibility, courts in the Netherlands can impose an equivalently diminished prison sentence followed by enforced treatment in a high security forensic psychiatric hospital.

Prior to the trial the court can request a forensic psychiatric evaluation. Around 90% of all inpatient forensic assessments in the Netherlands are carried out by the Pieter Baan Center (PBC), the official forensic psychiatric observation clinic of the Dutch Ministry of Justice. These assessments cover roughly 5% of all forensic evaluations; the remaining 95% are regular outpatient evaluations that take place in a non-specialized forensic setting (usually where the defendant is being detained). Possible reasons for the court to order such a specialized inpatient assessment of defendants in the PBC include the severity of the crime, the severity of the assumed psychopathology, the maximum security level within the PBC, and potential societal disturbance or media attention associated with the defendant's case. As a result, the population of the PBC covers the more severe cases as far as criminological and psychiatric backgrounds are concerned. All defendants are evaluated during a seven-week period by a multidisciplinary team consisting of a psychiatrist, a psychologist, two social workers, and a lawyer who supervises the assessment process along with a second psychiatrist. One of the social workers investigates the life history and social background of the defendant through interviews with informants such as family members, the other is a supervisor on the defendant's ward whose task is to observe and describe the activities and behavior of the defendant during his or her stay in the institution. The psychologist and psychiatrist carry the final responsibility for the PBC's conclusion in its report concerning DSM-IV psychiatric diagnoses, if any, and criminal responsibility (based on structured instruments and clinical judgment). The latter two experts also advise the court whether forensic treatment of the defendant is indicated if convicted of the charge.

Existing research from the U.S. and Canada demonstrated that (antisocial) personality disorder decreased the chance that a defendant was judged insane, which is in line with current legislation in these countries (Warren et al., 2004; Rice & Harris, 1990). However, Barendregt, Muller, and colleagues (2008) found that in the expert opinion of Dutch forensic psychologists and psychiatrists, a personality disorder, while decreasing the chances of total absence of responsibility, was associated with a judgment of diminished responsibility as well as a higher chance of enforced forensic treatment in a high security hospital. These results suggested that the sane-insane dichotomy used in many jurisdictions around the world may be in need of revision. A more nuanced categorization, might better allow for the subtle role that psychopathy or personality disorders can play in matters such as criminal responsibility and freedom of will.

Research questions

This study aims to examine how, in pre-trial psychiatric forensic evaluations, Dutch experts weigh the presence of a personality disorder in their conclusions regarding criminal responsibility compared to other psychiatric conditions, and how they advise on the necessity of enforced treatment in a high security hospital for personality disorders. Furthermore, how do Dutch experts weigh various aspects of psychopathy as measured by the Psychopathy Checklist-Revised (PCL-R), in the above-mentioned judgment regarding criminal responsibility and how do they advise regarding the need for enforced treatment? To answer these questions, two studies using the files of the Pieter Baan Center were carried out.

STUDY 1: How do experts weigh personality disorder in their forensic evaluations?

Method

A total of 1209 reports of defendants, admitted to the PBC between January 1, 2002 and December 31, 2007, were examined to obtain information on the presence of psychiatric disorders, the conclusion regarding criminal responsibility and the experts' advice on possible forensic treatment in a high security hospital. Forty files could not be retrieved from the PBC's archive at the time of the study and in 319 reports the team of forensic experts was not able to carry out a full forensic evaluation due to the defendants' refusal to cooperate, which left 850 reports. After listwise removal of missing values a total of 843 complete cases remained for Study 1. The sample consisted of 89% men and 11% women with a mean age of 33.1 years (SD = 10.2). Ethnicity was primarily Dutch (53.3%), followed by Surinamese (10.9%), Moroccan (6.2%), Dutch Antillean (5.8%), and Turkish (5.3%). The sample also consisted of defendants of other (non-Dutch) European origin (2.1%) and those of other (non-European) origins than those mentioned above (16.5%).

Variables

The dependent variables were expert's opinion regarding (1) criminal responsibility according to the aforementioned 5-point scale and (2) their advice for enforced treatment in a high security psychiatric hospital as a dichotomous variable (yes/no). The five possible variations on the categorical scale of criminal responsibility are complete responsibility, slightly diminished responsibility, diminished responsibility, severely diminished responsibility, and total absence of responsibility. Independent variables were presence of a psychotic disorder, presence of a personality disorder, presence of a substance abuse disorder, co-morbidity of psychotic and personality disorder, and an IQ below 8o. All independent variables were dichotomous (yes/no).

Statistical analyses

Chi-square tests were carried out to determine whether there were significant differences between the responsibility categories and the presence of a psychotic disorder, personality disorder, substance abuse disorder, co-morbidity of psychotic and personality disorder, and an IQ below 80. Also, the association between advice for enforced treatment and the presence of these disorders was tested with a chi-square test. A multinomial logistic regression was carried out to verify whether the presence of these disorders predicts the degree of criminal responsibility (a categorical variable with five levels). A binary logistic regression was carried out using a forced entry model to determine the relationship between the presence of the disorders and advice for enforced treatment in a high security hospital, using the advice for enforced treatment as a dependent binary variable. P-values below .05 are reported as statistically significant.

Results

Descriptive statistics

Statistically significant differences between the responsibility categories were found for the presence of a psychotic disorder, substance use disorder, personality disorder, and co-morbidity of these disorders, as shown in Table 1. For the 150 subjects who were deemed fully responsible for their indicted crime, 51 had a personality disorder (and 99 had no personality disorder). For the 70 subjects who were deemed not responsible for their indicted crime, 9 had a personality disorder (and 61 did not). Inspection of the remaining frequencies showed that the presence of a psychotic disorder was primarily associated with severely diminished criminal responsibility (n = 62, 55%) and full absence of responsibility (n = 66, 94%). In contrast, the presence of a personality disorder was especially frequent in the category of diminished responsibility (n = 289, 79%) and slightly diminished (n = 87, 61%).

Table 1. Chi-square tests for diagnostic variables compared to degrees of criminal responsibility

	Criminal responsibility						
	FR	Sl. Dim	Dim	Sev. Dim.	NR	X ²⁽¹⁾	Р
n	150	141	369	113	70		
Personality disorder	51	87	289	46	9	170.13	<.000***
Psychotic disorder	10	11	50	62	66	319.24	<.000***
Substance abuse	41	61	187	54	33	24.37	<.000***
Co-morbidity	2	5	24	19	7	26.64	<.000***
IQ < 80	4	19	51	16	9	14.59	.006**

FR = Full responsibility; SI. Dim = Slightly diminished responsible; Dim = Diminished responsible; Sev. Dim = Severely diminished responsible; NR = Not responsible. (1) df = 4; ** = p < .001

A multinomial logistic regression was conducted using diagnostic variables as predictors for the responsibility category (see Table 2). The presence of a personality disorder predicted slightly diminished, diminished and severely diminished responsibility but not complete absence of responsibility

(as compared to full responsibility). Inspection of the effect-sizes demonstrates that the presence of a personality disorder was most important for the middle of the spectrum (diminished responsibility) gradually losing impact towards both extremes. The presence of a psychotic disorder predicted all categories except slightly diminished responsibility when compared to full responsibility. Like poor intellectual functioning (IQ < 80), the presence of a psychotic disorder was a straightforward predictor forcriminal responsibility within creasing effect-sizes towards the not responsible endpoint. The presence of a substance use disorder differentiated only for the diminished responsibility category.

Table 2. Multinomial Logistic Regression Analysis of 843 Criminal Responsibility Opinions

Dependent category	b	SE b	Wald's χ²	Р	OR		
Predictor			(df=1)				
Slightly diminished responsible							
Constant	960	.201					
Psychotic disorder	.435	.573	.575	ns	1.545		
Substance use disorder	.476	.261	3.331	ns	1.610		
Personality Disorder	1.182	.263	20.264	< .000	3.261		
Co-morbidity	107	1.031	.011	ns	.899		
IQ < 80	1.985	.573	12.016	.001	7.267		
Diminished responsible							
Constant	935	.194					
Psychotic disorder	1.803	.446	16.351	< .000	6.066		
Substance use disorder	.603	.230	6.869	.009	1.828		
Personality Disorder	2.239	.242	85.659	< .000	9.368		
Co-morbidity	-1.096	.877	1.564	ns	.334		
IQ < 80	2.217	.551	16.194	.000	9.180		
Severely diminished responsible							
Constant	-1.756	.260					
Psychotic disorder	3.139	.458	46.971	< .000	23.081		
Substance use disorder	.563	.292	3.719	ns	1.757		
Personality Disorder	.786	.343	5.255	.022	2.195		
Co-morbidity	-3.79	.907	.175	ns	.685		
IQ < 80	2.304	.598	14.843	< .000	10.012		
Not responsible							
Constant	-4.354	.746					
Psychotic disorder	6.035	.826	53.443	< .000	417.806		
Substance use disorder	.522	.370	1.984	ns	2.1.685		
Personality Disorder	.740	1.024	.521	ns	2.095		
Co-morbidity	-1.673	1.360	1.514	ns	.188		
IQ < 80	2.710	.715	14.348	< .000	15.025		

Note. Reference Category = Fully responsible. Model: $\chi 2$ (20) = 459.374, p < .000. Deviance Goodness of Fit: $\chi 2$ (40) = 42.581, p = .361. Cox and Snell R2 = .420. Nagelkerke R2 = .445.

Need for enforced treatment

As shown in Table 3, enforced treatment in a high security hospital was advised in slightly over half of all cases. All diagnostic variables but intellectual functioning differed significantly between the groups that did and did not receive such an advice. Inspection of the frequencies showed that the presence of a personality disorder was associated with an advice for enforced treatment. The same held true for the presence of a psychotic disorder, the presence of a substance use disorder, and co-morbidity of these disorders.

Table 3. Chi-square tests for diagnostic variables compared to advice for enforced treatment

ссс	Enforced treatment					
	No	No Yes χ ²⁽²⁾				
n	433	410				
Personality disorder	228	254	7.43	.006**		
Psychotic disorder	51	148	69.07	< .000***		
Substance abuse	164	212	16.31	< .000***		
Co-morbidity	15	42	15.35	< .000***		
IQ < 80	44	55	2.15	.143		

⁽²⁾ df = 1; ** = p < .01; *** = p < .001

A binary logistic regression analysis was conducted using the advice for enforced treatment as dependent variable. The results in Table 4 show that when controlled for the other variables, the presence of a personality disorder was also positively related to an advice for enforced treatment in a high security hospital.

Table 4. Logistic Regression Analysis of 843 assessments for expert's advice of enforced intramural treatment

Predictor	b	SE b	Wald's χ² (df = 1)	Р	OR
Constant	-1,406	.174	65.383		
Psychotic disorder	2.297	.255	81.229	< .000	9.943
Substance use disorder	.344	.152	5.137	.023	1.411
Personality Disorder	1.173	.193	36.952	< .000	3.231
Co-morbidity	-1.310	.407	10.346	.001	.270
IQ < 80	.512	.236	4.720	.030	1.669

Note. Reference Category = no advice for enforced treatment. Model: χ_2 (4) = 107.504, p < .000. Deviance Goodness of Fit: Chi-square: 1.471(3), p = .689. Cox and Snell R2 = .166. Nagelkerke R2 = .221.

STUDY 2: How do experts weigh psychopathy in their forensic evaluations?

Method

To answer the question how experts weigh various aspects of a psychopathic personality in their evaluations, the Psychopathy Checklist-Revised (PCL-R) was administered on file information of a subsample of the sample in Study I. Criminal responsibility assessments reported within one selected year (from September 1, 2006 to August 31, 2007) were selected, excluding reports on female suspects as the PCL-R is not well suited for women. This resulted in a sample of 108 reports on male suspects with a mean age of 33.2 years (SD = 10.6). Ethnicity was primarily Dutch (57.1%), followed by Surinamese (10.2%), Moroccan (7.1%), Dutch Antillean (1.0%), Turkish (5.1%), other European (1.0%), and other non-European (18.3%).

The PCL-R was administered by two trained individuals based on the report as well as other file information (such as detailed description of the crime provided by the police and criminal investigators, (psycho)medical correspondence, and psychological test results). The files provided sufficient information for reliable administration of the PCL-R; intra-class correlation coefficient (ICC) based on 50 assessments was .85 for PCL-R total score, .72 for Factor 1, .82 for Factor 2, .67 for Facet 1, .62 for Facet 2, .74 for Facet 3, and .87 for Facet 4 scores.

The PCL-R

The PCL-R consists of twenty items which are each allocated a score of o-2 making the highest possible total score 40. In Europe, psychopathy is considered present at a score of 26 or higher (Grann, Långström, Tengström & Stålenheim, 1998). Seventeen of the twenty items are divided over two factors. The PCL-R was scored according to Hare's two-factor/four-facet model. Factor one is characterized by selfish, callous, and remorseless use of others (an egotistical interpersonal style and shallow affective features), and factor two measures a chronically unstable and antisocial lifestyle. Facet 1 comprises an arrogant and deceitful interpersonal style, facet 2 deficient affective experience, facet 3 an impulsive and irresponsible behavior style, and facet 4 antisocial behavior (Hare, 2006).

Variables

Expert's opinion on criminal responsibility was operationalized according to the aforementioned 5-point scale (see Study 1). Expert advice for enforced treatment in a high security psychiatric hospital was a dichotomous variable (yes/no). PCL-R total, factor, and facet scores were collected based on file information from PBC assessments.

Statistical analyses

Statistical analyses included a one-way ANOVA to compare the PCL-R item, facet, and total scores to the five criminal responsibility categories. A t-test was carried out on PCL-R item, facet, and total scores to ascertain statistically significant differences between reports with and without a positive advice for enforced treatment. P-values below .05 are reported as statistically significant.

Results

Criminal responsibility

No significant differences were found between the five levels of criminal responsibility for the facet or total score on the PCL-R (see Table 5). At an item-level, high scores on three PCL-R items yielded statistically significant results: impulsivity (F(4,103) = 5.287, p = .001), irresponsibility (F(4,106) = 2.517, p = .046), and failure to accept responsibility for one's own actions (F(4,107) = 2.723, p = .033) (data not presented in the table; results for remaining items available on request).

Table 5. ANOVA for 108 PCL-R facet and total scores

Criminal responsibility								
	FR	Sl. Dim	Dim	Sev. Dim.	NR	F	Р	
n	20	20	41	14	13			
Facet 1	2.23 (2.2)	2.30 (1.6)	2.38 (2.1)	2.36 (1.6)	1.85 (1.7)	.198	.939	
Facet 2	4.60 (2.7)	5.03 (2.0)	5.84 (1.8)	5.55 (1.9)	4.62 (1.9)	1.740	.147	
Facet 3	3.93 (2.8)	4.31 (2.0)	4.87 (2.4)	5.89 (2.1)	5.71 (3.0)	1.977	.104	
Facet 4	2.40 (2.7)	3.20 (2.9)	3.65 (2.8)	3.79 (2.0)	3.04 (2.0)	.917	.457	
Total	13.98 (8.4)	15.96 (7.3)	17.74 (7.6)	18.55 (5.8)	15.63 (6.4)	1.210	.311	

Mean scores (SD) for PCL-R Facets and Total. FR = Full responsibility; Sl. Dim = Slightly diminished responsible; Dim = Diminished responsible; Sev. Dim = Severely diminished responsible; NR = Not responsible.

Need for enforced treatment

The results of the t-test, carried out on PCL-R item, facet, and total scores to ascertain statistically significant differences in the advice for enforced treatment, show that high scores on Facet 2 predicted an advice for enforced treatment (t = -2.523, p = .013), as did high scores on Facet 3 (t = -2.361, p = .020) and a high total score (t = -2.293, p = .024) (see Table 6). High scores on a number of items also yielded statistically significant differences: lack of remorse or guilt (t = -2.382, p = .019), callousness and lack of empathy (t = -2.265, p = .026), poor behavioral controls (t = -2.961, p = .004), early behavior problems (t = -1.99, p = .049), and impulsivity (t = -4.769, p < .000) (data not presented in the table; results for remaining items available on request).

Table 6. T-test for PCL-R, total and facet scores

	Enforced treatment							
	No	Yes	t	Р				
n	53	55						
Facet 1	2.24 (2.0)	2.30 (1.8)	173	.863				
Facet 2	4.77 (2.3)	5.76 (1.8)	-2.523	.013*				
Facet 3	4.26 (2.5)	5.37 (2.4)	-2.361	.020*				
Facet 4	2.82 (2.9)	3.72 (2.30)	-1.804	.074				
Total	14.93 (8.0)	18.14 (6.5)	-2.293	.024*				

Mean scores (SD) for PCL-R facets and total. * p < .5.

Discussion

Our results show that in Dutch forensic practice, where criminal responsibility is expressed on a five point scale, the presence of antisocial personality disorder did not lead to a ruling by the investigating team of complete absence of responsibility, but it did decrease responsibility up to a degree of diminished responsibility and lead to an advice for enforced forensic treatment. The role that a personality disorder plays cannot be completely attributed to comorbid Axis I psychopathology as personality disorders remained a predictor for diminished criminal responsibility in a regression analysis that corrected for other pathology. This means that Dutch forensic experts consider a personality disorder by itself to impair an individual's freedom of will. Although PCL-R total and facet scores did not differ between degrees of responsibility, results did show certain relevant items (Study 2). These three items concerned impulsivity and (ir)responsibility, suggesting that it is mostly deficiency in behavioral control that is taken into consideration by forensic experts in judging criminal accountability.

In contrast to the claims of Mei-Tal (2002) and Herpertz and Sass (2000), we did not find evidence that affective components such as lack of empathy or emotional deficiency are embraced by forensic experts as important factors in their assessments of criminal responsibility. Interestingly though, not only the presence of a personality disorder (Study 1) but also high PCL-R facet 2 and facet 3 scores (Study 2) turned out to be statistically significant predictors for advises of enforced treatment. Thus, despite the finding that affective deficiencies are not considered reason for diminished responsibility, such deficiencies are deemed sufficiently important by Dutch experts to indicate suspects' threat to society or dangerousness in combination with a need for treatment. In other words, both level of behavioral control and emotional functioning in individuals with a personality disorder seem to be relevant psychopathological conditions for forensic evaluations.

It should be noted that the results in both studies, although statistically significant and insightful into which factors experts take into account in their forensic pre-trial assessments, did not have very large effect-sizes. There was no one-to-one relationship between the presence of a personality disorder or characteristics of psychopathy on the one hand and diminished responsibility or advice for enforced treatment in a high security hospital on the other. It is therefore not warranted to conclude that the mere presence of a personality disorder or a high PCL-R score is sufficient cause for a ruling of diminished responsibility or an advice for enforced treatment. Nonetheless, the results of this study show that Dutch forensic clinicians take the diagnosis of a personality disorder or a high PCL-R score into careful consideration when making recommendations for diminished responsibility or the need for enforced treatment and for that reason should continue to be included in psychological and psychiatric assessments of suspects in criminal cases.

It should be noted that the Dutch legal system of deciding criminal responsibility differs substantially from that in other jurisdictions, and that the results in this study are difficult to generalize to the U.S., Canada, or some European countries. Also, while the inpatient records of the PBC, the specificity of this sample makes that the results might not generalize to outpatient forensic examinations in the Netherlands or other countries. Nonetheless, the PBC provided a sample with great variability in psychopathy scores and rates of personality disorders.