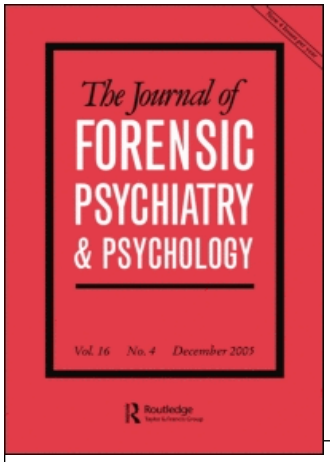

Journal of Forensic Psychiatry & Psychology
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t714592861

Violent forensic psychiatric inpatients and violent detainees in the Netherlands

Ruud H. J. Hornsveld [a]; Erik B. H. Bulten [bc]; Edzard T. de Vries [a]; Floor W. Kraaimaat [c]
[a] De Kijvelanden Forensic Psychiatric Centre, Poortugaal, the Netherlands
[b] Pompestichting Forensic Psychiatric Centre, Nijmegen, the Netherlands
[c] Radboud University Nijmegen, Nijmegen, the Netherlands

Online Publication Date: 01 September 2008

To cite this Article: Hornsveld, Ruud H. J., Bulten, Erik B. H., de Vries, Edzard T. and Kraaimaat, Floor W. (2008) 'Violent forensic psychiatric inpatients and violent detainees in the Netherlands', Journal of Forensic Psychiatry & Psychology, 19:3, 407 — 419

To link to this article: DOI: 10.1080/14789940802190145
URL: http://dx.doi.org/10.1080/14789940802190145

The Journal of Forensic Psychiatry & Psychology
Vol. 19, No. 3, September 2008, 407–419

RESEARCH ARTICLE

Violent forensic psychiatric inpatients and violent detainees in the Netherlands

Ruud H.J. Hornsveld[a]*, Erik B.H. Bulten[b,c], Edzard T. de Vries[a] and Floor W. Kraaimaat[c]

[a]*De Kijvelanden Forensic Psychiatric Centre, Poortugaal, the Netherlands;* [b]*Pompestichting Forensic Psychiatric Centre, Nijmegen, the Netherlands;* [c]*Radboud University Nijmegen, Nijmegen, the Netherlands*

(*Received 20 November 2007; final version received 12 January 2008*)

A group of 136 violent inpatients detained under hospital order and a group of 100 violent detainees with a prison sentence of at least four years were compared as regards individual criminogenic factors such as personality traits and problem behaviours. The inpatients appeared to score higher than detainees on antisocial lifestyle, neuroticism, and disposition to anger. No significant differences were found on other measures. Inpatients were all classified as having an antisocial personality disorder, but there were indications that this was also the case for a considerable percentage of the detainees. It seems advisable that the psychiatric and psychological criteria used in the decision to detain an offender under hospital order should be specified further.

Keywords: forensic psychiatric patients; detainment under hospital order; personality traits; problem behaviours

In the Netherlands, forensic psychiatric patients are those for whom the court has established a connection between a psychiatric disorder on the one hand and their felony on the other. Rulings are based on the evaluations of a psychiatrist and/or psychologist. Without care or treatment, recidivism is deemed probable. Those mentally disordered offenders that have committed an offence punishable by a minimum of four years (e.g., severe assault, manslaughter, or murder) are referred to as patients detained under hospital order, and are sentenced to forensic psychiatric treatment (so-called 'TBS patients').

Forensic psychiatric patients are judged by the court as being not accountable for their crime. However, accountability in the Netherlands is not a question of all or nothing. Five gradations are applied: accountable,

*Corresponding author. Email: r.hornsveld@tiscali.nl

ISSN 1478-9949 print/ISSN 1478-9957 online

DOI: 10.1080/14789940802190145
http://www.informaworld.com

slightly less accountable, less accountable, hardly accountable, and absolutely not accountable. 'Slightly less accountable' is related to a neurotic disorder in most cases, 'less accountable' to a personality disorder, 'hardly accountable' to a borderline personality disorder, and 'absolutely not accountable' to a psychotic disorder (De Ruiter & Hildebrand 2002). The degree of accountability determines whether or not imprisonment precedes the stay in a forensic psychiatric institution, and if this is the case, how long that imprisonment will last.

In contrast to countries such as the United States (Silver, 1995) or Canada (Quinsey, Harris, Rice, & Cormier, 1998), where forensic psychiatric patients are generally classified as having a (chronic) psychotic disorder, most forensic psychiatric inpatients in the Netherlands have an (antisocial) personality disorder. For instance, in van Emmerik's (2001) study, 72% had a personality disorder and 25% a psychotic disorder, sometimes in combination with substance dependence (30%). More recent research among TBS patients has produced more or less similar results: personality disorder in 61%, psychotic disorder in 23%, and unknown disorder in 16% of cases (Temporary Commission Study TBS, 2006). In 98% of the cases, patients were convicted of a violent offence (van Emmerik, 2001).

Although exact Dutch figures are lacking, there are indications that a substantial percentage of violent detainees in the Netherlands who are not detained under a hospital order also have an antisocial personality disorder. Fazel and Danesh (2002) reviewed 62 surveys of male and female detainees in Western Europe, the United States, and Australia. They concluded that among the male detainees (81% of the studied group), 65% had a personality disorder, which in 47% of the cases was an antisocial personality disorder. However, the analysed studies only included limited subsamples of violent detainees (26%). Schoenmaker and van Zessen (1997) studied Dutch adult male detainees at institutions with a standard regime and institutions providing 'special care'. They found an anxiety or mood disorder in 49%, substance abuse or substance dependence in 44%, an antisocial personality disorder in 28%, and a psychotic disorder in 1% of the cases. There was a combination of disorders in 22% of the cases. Unfortunately, the percentage of the sample that had committed a violent offence was not reported. Bulten (1998) found that 42% of a group of Dutch juvenile detainees had a personality disorder and 8% had a psychotic disorder as primary diagnosis; approximately one-third of this group consisted of male violent offenders.

Internal criminogenic factors (Andrews & Bonta, 2003) such as personality traits and problem behaviours were studied by Hornsveld, Nijman, and Kraaimaat (2008) in a group of 136 violent forensic psychiatric inpatients with an antisocial personality disorder (hereafter referred to as

'inpatients'). They found that scores significantly differed from those of the average Dutch population on two of the Big Five personality domains: neuroticism (higher) and agreeableness (lower). Compared with a norm group, inpatients scored higher on disposition to anger (as a trend). They also reported significantly less social anxiety than a norm group for situations in which criticism can be given, and more social anxiety for situations in which appreciation of another person can be expressed. Consequently, they gave criticism significantly more frequently and compliments less frequently than the norm group. Until now, internal criminogenic factors such as personality traits and problem behaviours have not been studied in Dutch detainees with long prison sentences.

Milton, Duggan, McCarthy, Costley-White, and Mason (2007) studied the characteristics of offenders with a personality disorder who consented to be referred to a medium secure unit. They compared patients who were accepted with those who were rejected and found that the accepted patients scored higher on three of the Big Five domains: extraversion, openness, and conscientiousness. In addition, patients who were rejected had a significantly higher mean score on the Psychopathy Checklist-Revised (PCL-R; Hare, 1991) than patients who were accepted (22.1 versus 18.7). For comparison, the non-voluntary inpatients in the study by Hornsveld et al. (2008) had an average PCL-R score of 21.8.

The purpose of this exploratory study was to find out whether violent detainees sentenced to imprisonment for four years or more (hereafter referred to as 'detainees') could possibly benefit from the treatment program developed for violent inpatients. Therefore, we investigated violent detainees' criminogenic factors such as personality traits and problem behaviours, and compared the traits and behaviours of the detainees with those of the inpatients. We did not investigate static criminogenic factors such as history of aggression and nature of offence, as far as this information was not necessary for the determination of a score on the PCL-R.

Method

Participants

The study was conducted among 136 forensic psychiatric inpatients and 100 detainees (all males), who had committed a violent offence punishable with a minimum of four years.

The inpatients were legally detained under a hospital order on the basis of a psychiatric and/or psychological evaluation. The inpatients were classified primarily as having an antisocial personality disorder, based upon the psychiatric and/or psychological evaluation on which the court had decided on forensic psychiatric treatment, and also upon the evaluation of a

psychiatrist during the first months of a patient's stay in a forensic psychiatric institution. Inpatient participants were drawn from a group indicated by a multidisciplinary team as suitable for cognitive-behavioural group therapy. PCL-R scores were calculated by an experienced psychologist on the basis of an interview and/or file research. Mean age was 33.24 years ($SD = 7.76$; range 21–56 years), and primary diagnosis was an antisocial personality disorder on Axis II (DSM-IV; American Psychiatric Association, 1994).

The 100 detainees resided in three penitentiary institutions. These offenders were not detained under hospital order because the court had found no reason for a psychiatric and/or psychological evaluation, or because a link between an identified psychiatric disorder and the committed offence could not be established. For detainees who were interviewed using the PCL-R, particular scores on a number of items were used as criteria for a diagnosis of antisocial personal disorder. Specifically, a score of two on Item 12 (early behavioural problems), and on at least three out of Item 6 (lack of remorse or guilt), Item 10 (poor behavioural control), Item 14 (impulsivity), and Item 15 (irresponsibility), led to a diagnosis. Of the 50 detainees who were interviewed, 41 met these criteria. Therefore, the percentage of detainees in this sample who could be provisionally diagnosed as having an antisocial personality disorder was high, at 82%. The mean age of the detainees was 32.28 years ($SD = 9.42$; range 19–59 years).

Measures

The Psychopathy Checklist-Revised (PCL-R; Hare, 1991; for the Dutch version see Vertommen, Verheul, de Ruiter, & Hildebrand, 2002) is a checklist of 20 items measuring psychopathy with two factors: callous and remorseless use of others (Factor 1) and chronically unstable and antisocial lifestyle (Factor 2). Items are rated from 0 to 2 (where 0 = 'does not apply', 1 = 'applies to some extent', and 2 = 'applies').

The NEO Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992; for the Dutch version see Hoekstra, Ormel, & de Fruyt, 1996) has 60 items and measures the Big Five personality domains of neuroticism, extraversion, openness, agreeableness, and conscientiousness. Respondents score items on the NEO-FFI on a five-point Likert scale from 'entirely disagree' to 'entirely agree'. In a sample of 135 'normal' Dutch adults, test–retest reliabilities for the subscales after six months were .82, .87, .81, .75, and .80 respectively.

The Zelf-Analyse Vragenlijst (ZAV; van der Ploeg, Defares, & Spielberger, 1982) is a Dutch version of the Spielberger State-Trait Anger Scale (Spielberger, 1980). Ten trait items are used to determine disposition to anger. Respondents score items according to how they 'feel on the whole' using a four-point Likert scale (where 1 = 'entirely not', 2 = 'a bit',

3 = 'rather a lot', and 4 = 'very much'). Test–retest reliability for the 10 trait items was .78 in a sample of 70 'normal' Dutch adults.

The Adapted Version of the Picture-Frustration Study (PFS-AV; Hornsveld, Nijman, Hollin, & Kraaimaat, 2007) is an instrument for measuring hostility. Respondents write down their reactions to 12 pictures of ambiguous and provocative interpersonal situations. Answers are scored by a research assistant on a seven-point Likert scale ranging from 'not at all hostile' to 'extremely hostile'. Cronbach's α in this study was .76, test–retest reliability .66, and interrater reliability .77.

The Agressie Vragenlijst (AVL; Meesters, Muris, Bosma, Schouten, & Beuving, 1996) is a Dutch version of Buss and Perry's (1992) Aggression Questionnaire, with four subscales: physical aggression, verbal aggression, anger, and hostility. Respondents score the 29 items using a five-point Likert scale ranging from 'entirely disagree' to 'entirely agree'. Meesters et al. (1996) found a test–retest reliability of .76 in a sample of 71 Dutch university students. In this study we used the total score of the AVL.

The Novaco Anger Scale (NAS; Novaco, 1994) used in this study was a translation of a first version with 48 items in Part A and 25 items in Part B. Participants only had to complete Part A, where they indicate the extent to which an anger-inciting situation applies to them, using a three-point Likert scale (1 = 'never true', 2 = 'sometimes true', and 3 = 'always true'). Cronbach's α of Part A was found to be .95 and test–retest reliability .85.

Patients evaluated 35 interpersonal situations in the Inventarisatielijst Omgaan met Anderen (IOA; van Dam-Baggen & Kraaimaat, 1999, 2000). Respondents indicate first how much anxiety they would experience (social anxiety) in each situation, and then how often they would actually perform the behaviour described (social skills) if the situation arose. The five subscales in this questionnaire, both for social anxiety and social skills, are: giving criticism, giving your opinion, giving someone a compliment, making contact, and appreciating yourself. In this study only the subscales for giving criticism and giving someone a compliment were used, since it appeared from a previous study that only these subscales differentiate between violent patients and 'normal' respondents (Hornsveld et al., 2008). Test–retest reliability of these subscales was studied in a group of 55 'normal' Dutch adults and appeared to be .84 and .55 for the social anxiety subscales, and .86 and .72 for the social skills subscales.

Norm groups

Norm groups were chosen which were as closely comparable as possible to the studied inpatients and detainees. Scores on the NEO-FFI were compared with those of men over the age of 17 from the norm group, derived from a broadly-based Dutch population sample

(Hoekstra et al., 1996). Scores on the ZAV were compared on disposition to become angry with a norm group of randomly selected male residents of Leiden between the ages of 16 and 71 (van der Ploeg et al., 1982). Scores on the IOA could be compared to a norm group ranging in age from 16 to 80 years (van Dam-Baggen & Kraaimaat, 2000). For the other measurement instruments, no Dutch norm groups were available.

Procedure

Inpatients completed the questionnaires voluntarily, just before the start of the cognitive-behavioural treatment program. Detainees completed questionnaires in a classroom setting, while the interviews were conducted individually. The questionnaires were presented in all three penitentiary institutions, but the PCL-R interview was conducted in only one institution. Detainees who completed only the questionnaires received €10; those who also participated in the PCL-R interview received €20. Questionnaires were scored by a research assistant. The PCL-R score for the detainees was calculated by an experienced clinical psychologist (first author) or research assistant (third author) on the basis of an interview and a file study. Detainees who were interviewed were significantly younger than those who were not interviewed ($t[99] = 4.80$; $p < 0.01$). However, when age was controlled, the subgroups of detainees did not differ in their scores on the other measurement instruments, except the PFS-AV ($F[2,98] = 5.67$; $p < 0.01$).

Results

The average scores of both groups were compared with the average scores of norm groups using related t tests (see Table 1). Given the number of comparisons, a Bonferroni correction was made and a value of .007 was used for α ($\alpha = .05$ / seven subscales). Detainees appeared to have significantly lower scores than the norm group for agreeableness (NEO-FFI). They reported significantly less social anxiety and more social skills than a norm group in situations where criticism can be given, and more social anxiety and fewer skills in situations where someone is complimented (IOA). The study by Hornsveld et al. (2008) had already demonstrated that, compared with norm groups, inpatients had significantly higher scores for neuroticism and lower scores for agreeableness (NEO-FFI). This time inpatients also scored significantly higher on disposition to anger (ZAV), because of the fewer number of comparisons (p value of .007 instead of .001).

It appeared that inpatients had significantly higher scores for antisocial lifestyle (PCL-R Factor 2), neuroticism (NEO-FFI), and disposition to anger (ZAV) than the detainees. As for agreeableness (NEO-FFI), a trend could be observed: inpatients had higher scores than detainees ($p = .005$),

Table 1. Comparison of detainees and inpatients with norm groups.

Instrument	Subscales	Norm groups *M* (*SD*)	Detainees *M* (*SD*)	Statistics	Inpatients *M* (*SD*)	Statistics
NEO-FFI	Neuroticism	29.6 (7.8)	29.9 (8.5)	$t(99) = 0.4$	33.21 (7.80)	$t(135) = 5.4$*
	Agreeableness	42.5 (5.1)	38.9 (5.4)	$t(99) = -6.7$*	40.74 (4.81)	$t(135) = -4.3$*
ZAV	Disposition	17.3 (5.4)	16.7 (6.3)	$t(99) = -0.9$	19.91 (8.68)	$t(135) = -3.3$*
IOA social anxiety	Giving criticism	19.0 (5.2)	14.2 (6.0)	$t(99) = -8.1$*	14.85 (5.43)	$t(135) = -8.8$*
	Giving a compliment	5.3 (2.2)	6.6 (3.5)	$t(99) = 3.7$*	6.43 (3.02)	$t(135) = 4.3$*
IOA social skills	Giving criticism	18.0 (4.6)	22.0 (5.8)	$t(99) = 6.7$*	22.48 (5.17)	$t(135) = 9.9$*
	Giving a compliment	16.2 (2.7)	14.4 (3.6)	$t(99) = -5.1$*	15.34 (2.90)	$t(135) = -3.4$*

Note: NEO-FFI = NEO Five Factor Inventory; ZAV = Zelf-Analyse Vragenlijst; IOA = Inventarisatielijst Omgaan met Anderen; *$p < .007$ (two-tailed).

but the difference was not significant. The two groups did not differ significantly from each other regarding social anxiety and social skills in situations where criticism can be given or where someone can be given a compliment (Table 2).

Discussion

Compared with the average Dutch male, detainees and inpatients scored significantly lower on agreeableness. Inpatients also had significantly higher scores on neuroticism and on disposition to anger. Both groups reported less social anxiety when criticism can be given and they appeared to exhibit this behaviour more frequently than the norm group. In situations where somebody can be complimented, both groups reported more social anxiety and less frequently exhibited skills than the norm group.

When the detainee and inpatient groups were compared with each other, inpatients appeared to have higher scores for antisocial lifestyle, neuroticism, and disposition to anger. Detainees seem to be characterised by an antisocial attitude and inadequate social skills, while inpatients distinguish themselves more from the average Dutch male by impulsivity, antisocial attitudes, a tendency to experience anger, and inadequate social skills. Hornsveld et al. (2008) found that inpatients with an antisocial personality disorder did benefit from a treatment program that taught anger management, social skills, and prosocial norms and values. However, this study

Table 2. Detainees compared with inpatients.

Instrument	Factors or subscales	Detainees *M* (*SD*)	Inpatients *M* (*SD*)	Statistics
Age		32.28 (9.42)	33.24 (7.76)	$t(234) = 0.82$
PCL-R	Total	20.88 (6.60)	21.78 (7.27)	$t(184) = 0.57$
	Factor 1	10.14 (3.09)	9.02 (3.65)	$t(184) = -1.88$
	Factor 2	9.02 (3.71)	10.83 (3.42)	$t(184) = 2.55$*
NEO-FFI	Neuroticism	29.93 (8.52)	33.21 (7.80)	$t(234) = 3.07$*
	Agreeableness	38.85 (5.47)	40.74 (4.81)	$t(234) = 2.82$
ZAV	Disposition to anger	16.74 (6.27)	19.91 (8.68)	$t(234) = 3.04$*
PFS-AV	Total	43.70 (13.77)	43.74 (13.99)	$t(234) = 0.02$
AVL	Total	80.60 (17.64)	77.15 (15.59)	$t(234) = -1.55$
NAS	Part A	87.90 (16.79)	83.05 (13.26)	$t(234) = -2.38$
IOA social anxiety	Giving criticism	14.15 (5.96)	14.85 (5.43)	$t(234) = 0.93$
	Giving a compliment	6.59 (3.53)	6.43 (3.02)	$t(234) = -0.38$
IOA social skills	Giving criticism	21.95 (5.83)	22.48 (5.17)	$t(234) = 0.73$
	Giving a compliment	14.35 (3.64)	15.34 (2.90)	$t(234) = 2.30$

Note: PCL-R = Psychopathy Checklist-Revised; NEO-FFI = NEO Five Factor Inventory; ZAV = Zelf-Analyse Vragenlijst; PFS-AV = Aangepaste Versie van de Picture-Frustration Study; AVL = Agressie Vragenlijst; NAS = Novaco Anger Scale; IOA = Inventarisatielijst Omgaan met Anderen; *$p < .004$ (two-tailed).

seems to indicate that anger management need not generally be part of such a program for violent detainees with a long prison sentence. Since the present study included a relatively small sample of violent detainees, we endorse the conclusion of Polaschek (2006) that there is 'a need for more research on the criminogenic needs and responsivity characteristics of serious violent offenders in general' (p. 145).

The lack of a significant difference in psychopathy scores between the groups may indicate that their risks of recidivism are approximately equivalent. Hildebrand, Hesper, Spreen, and Nijman (2005) found that the PCL-R predicted recidivism just as well as the Historical/Clinical/Risk Management scale (HCR-20; Webster, Douglas, Eaves, & Hart, 1997). However, inpatients have a number of years of care or treatment ahead of them. Wartna, el Harbachi, and Essers (2006) found that two years after a court decision that supervision by a forensic psychiatric institution was no longer necessary ('termination of the measure'), 19% of all Dutch patients who were detained under hospital order (TBS patients) committed an offence for which a sentence of four years or more applies. On the other hand, one study found that 43% of all Dutch detainees who were sentenced to four years or more recidivated within two years after release (Wartna, Kalidien, Tollenaar, & Essers, 2006). Although the recidivism figures for TBS patients seem to be lower than those for 'normal' offenders with a long imprisonment, public opinion in the Netherlands judges the first group to be far more dangerous after release than the second group (Feldbrugge, 2002).

Although the number of detainees interviewed in this study was rather small ($n = 50$), scores on a number of PCL-R items seem to indicate that a rather high percentage were suffering from an antisocial personality disorder (82%). Fazel and Danesh (2002) found a prevalence of antisocial personality disorder among male prisoners ranging from 28% to 65%, but they did not report upon the seriousness of the crimes for which the prisoners were convicted or the length of imprisonment. In view of the fact that the detainees in our study were convicted for severe violent crimes and sentenced to imprisonment of at least four years, we consider our preliminary finding as not surprising. A much lower percentage would still demonstrate that the classification of an antisocial personality disorder does not discriminate between detainees and inpatients.

This study has several limitations. First of all, the inpatients in this study were indicated as suitable for cognitive-behavioural group therapy. Although the PCL-R score of the patients in one institution (61% of the studied group) did not differ significantly from the scores of all patients with an antisocial personality disorder in that institution during the same period, the representativeness of the studied group of inpatients can be questioned. Second, the PCL-R interview was conducted with only 50 of the 100 detainees, because of the limited budget that was available for this part of the study. The interviewed detainees proved to be significantly younger and

more hostile than the subgroup of detainees who were not interviewed. In addition, detainees participated on a voluntary basis in the study. No information was available about whether these detainees were representative of all detainees with an imprisonment of four years or more in the three penitentiary institutions under study. A third limitation was that the possible presence of an antisocial personality disorder in the detainees was based on scores on a number of PCL-R items and not on a semi-structured interview for DSM-IV classification; additionally, although inpatients had been classified by experienced psychiatrists, no structured interview was used in most cases. Fourth, self-report questionnaires were used for most measures, which has the disadvantage that scores can be influenced by the tendency to give socially desirable answers (Bech & Mak, 1995) and/or by the limited insight of the respondents into their own social functioning (Hollin & Palmer, 2001).

Although this study has its limitations, it has demonstrated that inpatients have higher scores than detainees on antisocial lifestyle, impulsivity, and disposition to anger. Differences were significant, and therefore could justify the fact that inpatients were offered a treatment program while detainees were not. On the other hand, in absolute terms the differences were rather small, and groups did not differ from each other with regard to psychopathy, agreeableness, hostility, aggressive behaviour, social anxiety, or social skills. In particular, the facts that a substantial percentage of the detainees appeared to suffer from an antisocial personality disorder and that there was no difference in PCL-R score between groups raises the question: How can the difference in legal status be explained? One possible explanation is that the groups differ on external criminogenic factors such as antisocial associates, problematic circumstances at home, problematic circumstances at school or work, and problematic leisure circumstances (Andrews & Bonta, 2003). If inpatients do score higher on these factors, treatment programs should focus on education, getting a job, and getting a home in a non-criminal neighbourhood.

We believe that the psychiatric and psychological criteria used in making the decision to detain an offender under hospital order need to be specified further. On the basis of these criteria, it should be possible to determine whether a treatment program is indicated for the psychological needs of an offender. To begin with, all Dutch offenders who qualify for a prison sentence of at least four years because of a violent offence should be evaluated with a standardised set of psychiatric and psychological measurement instruments. This may shed more light on the criteria that are currently applied in the Netherlands with regard to the decision to detain an offender under hospital order or not. There are indications that tests to measure personality traits discriminate better between detainees and inpatients than do psychiatric classifications on Axis II of the DSM-IV (Ullrich, Borkenau, & Marneros, 2001).

In recent years, interest from other countries in the Dutch TBS system has increased. It appears that the issue of which psychiatric and psychological criteria apply to the decision whether or not to offer violent offenders with an antisocial personality disorder a treatment program is increasingly pertinent in other countries. However, it would not be surprising if these criteria are different when offenders can follow a program voluntarily, as is the case for instance in the UK (Duggan, Mason, Banerjee, & Milton, 2007), rather than being obliged by the court to follow inpatient treatment, as is the case in the Netherlands.

Acknowledgements

The research among patients detained under hospital order was made possible by the Research and Documentation Centre (WODC) of the Dutch Ministry of Justice, and the research among detainees with long prison sentences by the De Kijvelanden Forensic Psychiatric Centre.

References

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Andrews, D.A., & Bonta, J. (2003). *The psychology of criminal conduct* (3rd ed.). Cincinnati, OH: Anderson.

Bech, P., & Mak, M. (1995). Measurements of impulsivity and aggression. In E. Hollander & D.J. Stein (Eds.), *Impulsivity and aggression* (pp. 25–42). Chichester, UK: Wiley.

Bulten, B.H. (1998). *Gevangen tussen straf en zorg: Psychische stoornissen bij jeugdige kortgestrafte gedetineerden [Between punishment and care: Mental disorders in juvenile delinquents]*. Amsterdam, the Netherlands: Vrije Universiteit.

Buss, A.H., & Perry, M. (1992). The Aggression Questionnaire. *Journal of Personality and Social Psychology*, *63*, 452–459.

Costa, P.T. Jr., & McCrae, R.R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional manual*. Odessa, FL: Psychological Assessment Resources.

Dam-Baggen, C.M.J.van, & Kraaimaat, F.W. (1999). Assessing social anxiety: The Inventory of Interpersonal Situations (IIS). *European Journal of Psychological Assessment*, *15*, 25–38.

Dam-Baggen, C.M.J.van, & Kraaimaat, F.W. (2000). *Inventarisatielijst Omgaan met Anderen (IOA): Handleiding [Inventory of Interpersonal Situations (IOA): Manual]* (2nd rev. ed.). Lisse, the Netherlands: Swets Test Services.

Duggan, C., Mason, L., Banerjee, P., & Milton, J. (2007). Value of standard personality assessments in informing clinical decision making in a medium secure unit. *British Journal of Psychiatry*, *190*(suppl. 49), 15–19.

Emmerik, J.L.van (2001). *De Terbeschikkingstelling in Maat en Getal [The TBS measure (detainment under hospital order) in measures and numbers]*. The Hague: Ministry of Justice.

Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23,000 prisoners: A systematic review of 62 surveys. *The Lancet*, *359*, 545–550.

Feldbrugge, J. (2002). *Wat iedere Nederlander zou moeten weten over TBS [What every Dutchman should know about the TBS system]*. Nijmegen, the Netherlands: Valkhof Pers.

Hare, R.D. (1991). *The Hare Psychopathy Checklist-Revised*. Toronto, CA: Multi-Health Systems.

Hildebrand, M., Hesper, B.L., Spreen, M., & Nijman, H.L.I. (2005). *De waarde van gestructureerde risicotaxatie en van de diagnose psychopathie: Een onderzoek naar de betrouwbaarheid en predictieve validiteit van de HCR-20, HKT-30 en PCL-R [The value of structured risk assessment and of a diagnosis of psychopathy: A study of the reliability and predictive validity of the HCR-20, HKT-30, and PCL-R]*. Utrecht, the Netherlands: Centre for Expertise on Forensic Psychiatry.

Hoekstra, H.A., Ormel, J., & Fruyt, F. de (1996). *Handleiding NEO Persoonlijkheidsvragenlijsten [Manual for the NEO Personality Questionnaires]*. Lisse, the Netherlands: Swets Test Services.

Hollin, C.R., & Palmer, E.J. (2001). Skills training. In C.R. Hollin (Ed.), *Handbook of offender assessment and treatment* (pp. 269–280). Chichester, UK: Wiley.

Hornsveld, R.H.J., Nijman, H.L.I., Hollin, C.R., & Kraaimaat, F.W. (2007). An adapted version of the Rosenzweig Picture-Frustration Study for the measurement of hostility in violent forensic psychiatric patients. *Criminal Behaviour and Mental Health*, *17*, 45–56.

Hornsveld, R.H.J., Nijman, H.L.I., & Kraaimaat, F.W. (2008). Aggression control therapy for violent forensic psychiatric patients: First results. *Psychology, Crime and Law*, *14*, 1–18.

Meesters, C., Muris, P., Bosma, H., Schouten, E., & Beuving, S. (1996). Psychometric evaluation of the Dutch version of the Aggression Questionnaire. *Behaviour Research and Therapy*, *34*, 839–843.

Milton, J., Duggan, C., McCarthy, L., Costley-White, A., & Mason, L. (2007). Characteristics of offenders referred to a medium secure NHS personality disorder service: The first five years. *Criminal Behaviour and Mental Health*, *17*, 57–67.

Novaco, R.W. (1994). Anger as a risk factor for violence among the mentally disordered. In J. Monahan & H.J. Steadman (Eds.), *Violence and mental disorder* (pp. 21–59). Chicago: University of Chicago Press.

Ploeg, H.M.van der, Defares, P.B., & Spielberger, C.D. (1982). *Handleiding bij de Zelf-Analyse Vragenlijst, ZAV [Manual for the Self-Analysis Questionnaire, ZAV]*. Lisse, the Netherlands: Swets & Zeitlinger.

Polaschek, D.L.L. (2006). Violent offender programmes: Concept, theory, and practice. In C.R. Hollin & E.J. Palmer (Eds.), *Offending behaviour programmes: Development, application and controversies* (pp. 113–154). Chichester, UK: Wiley.

Quinsey, V.L., Harris, G.T., Rice, M.E., & Cormier, C.A. (1998). *Violent offenders: Appraising and managing risk*. Washington, DC: American Psychological Association.

Ruiter, C.de, & Hildebrand, M. (2002). Over toerekeningsvatbaarheid [About accountability]. In P.J. van Koppen, D.J. Hessing, H.L.G.J. Merckelbach & H.F.M. Crombag (Eds.), *Het recht van binnen: Psychologie van het recht [Inside the law: Psychology of the law]* (pp. 688–698). Deventer, the Netherlands: Kluwer.

Schoenmaker, C., & Zessen, G.van (1997). *Psychische stoornissen bij gedetineerden [Mental disorders in detainees]*. Utrecht, the Netherlands: Trimbos-institute.

Silver, E. (1995). Punishment or treatment? Comparing the lengths of confinement of successful and unsuccessful insanity defendants. *Law and Human Behavior*, *19*, 375–388.

Spielberger, C.D. (1980). *Preliminary manual for the State-Trait Anger Scale (STAS)*. Tampa, FL: University of South Florida.

Temporary Commission Study TBS (2006). *TBS: Vandaag over gisteren en morgen [TBS measure (detainment under hospital order): Today about yesterday and tomorrow]*. The Hague: Sdu Publishers.

Ullrich, S., Borkenau, P., & Marneros, A. (2001). Personality disorders in offenders: Categorical vs. dimensional approaches. *Journal of Personality Disorders*, *15*, 442–449.

Vertommen, H., Verheul, R., Ruiter, C.de, & Hildebrand, M. (2002). *De herziene versie van Hare's Psychopathie Checklist (PCL-R) [The revised version of Hare's Psychopathy Checklist (PCL-R)]*. Lisse, the Netherlands: Swets Test Publishers.

Wartna, B.S.J., Harbachi, S.el, & Essers, A.A.M. (2006). *Strafrechtelijke recidive van ex-terbeschikkinggestelden [Criminal recidivism of TBS patients]*. The Hague: WODC, Ministry of Justice.

Wartna, B.S.J., Kalidien, S.N., Tollenaar, N., & Essers, A.A.M. (2006). *Strafrechtelijke recidive van ex-gedetineerden [Criminal recidivism of former detainees]*. The Hague: WODC, Ministry of Justice.

Webster, C.D., Douglas, K.S., Eaves, D., & Hart, S.D. (1997). Assessing risk of violence to others. In C.D. Webster & M.A. Jackson (Eds.), *Impulsivity: Theory, assessment, and treatment* (pp. 251–277). New York: Guilford Press.