

# An evaluation of behavioural and personality differences between native and non-native male adolescents in the Netherlands ordered into treatment in a forensic psychiatric outpatient clinic, and their non-violent peers

RUUD H. J. HORNSVELD<sup>1</sup>, HENRIËTTE CUPERUS<sup>2</sup>, EDZARD T. DE VRIES<sup>1,3</sup>  
AND FLOOR W. KRAAIMAAT<sup>4</sup>, <sup>1</sup>De Kijvelanden Forensic Psychiatric  
Centre, Poortugaal, The Netherlands; <sup>2</sup>Het Dok Forensic Psychiatric Outpatient  
and Day Treatment Centre, Rotterdam, The Netherlands; <sup>3</sup>Stroom-Lijn,  
Delft, The Netherlands; <sup>4</sup>Radboud University Nijmegen, Nijmegen, The  
Netherlands

## ABSTRACT

**Background** *In a previous study of the dynamic criminogenic needs of violent outpatients we did not differentiate between native and non-native adolescents, but differences between personality traits and problem behaviours may require adaptations to any treatment programme.*

**Aim** *To compare, in the Netherlands, native and non-native adolescents with and without a violence history on personality traits and problem behaviours.*

**Methods** *Forty-eight native and 71 non-native violent male adolescents were recruited from consecutive referrals to a forensic outpatient clinic after a violent offence and compared with randomly selected male youths in secondary vocational schools, but without a violent history, 82 of whom were from Dutch and 79 from non-Dutch descent. Each took part in an individual interview to complete a range of personality and behavioural rating scales.*

**Results** *Native and non-native adolescent outpatients did not differ from each other on any measure. Overall, the outpatients scored higher than the students on hostility*

but not aggressive behaviour, but there were differences within the student group according to descent, with the native students having higher agreeableness scores and lower hostility and aggressive behaviour scores than the students of non-Dutch descent.

**Conclusion** Our study suggested that any differences in behavioural or personality traits seen in the general adolescent population according to descent are not reflected in a violent offender group of similar age. It therefore seems unlikely to be necessary to run different treatment programmes for native and non-native adolescent offenders. Copyright © 2008 John Wiley & Sons, Ltd.

## Introduction

In the absence of a treatment programme for violent forensic psychiatric inpatients with an antisocial personality disorder in the Netherlands, in 2001, we developed the Aggression Control Therapy (ACT; Hornsveld et al., 2007a), based on Goldstein et al.'s (1998) Aggression Replacement Training. Forensic psychiatric patients in the Netherlands are defined as offenders for whom the court has established a connection between a psychiatric disorder on the one hand and a felony on the other hand. This ruling is based on an evaluation by a psychiatrist and/or psychologist.

Although originally meant for inpatients, after some time ACT was also made available to the increasing number of violent offenders with a conduct or an antisocial personality disorder who were referred to our outpatient clinic for obligatory treatment. Early evaluation of the therapy indicated that those outpatients receiving it reported significantly less aggressive behaviour at the end of the therapy, while they did not change during the waiting list condition (Hornsveld, Nijman, & Kraaimaat, 2008).

Especially in the four largest Dutch cities, the composition of the population has changed, mainly since the arrival of immigrants in the 1970s from Surinam, the Dutch Antilles, Turkey, Morocco and Cape Verde. As a result, an increasing number of violent adolescents of non-Dutch descent (second generation) are referred to a forensic psychiatric outpatient clinic for compulsory treatment. Junger-Tas (1997) concluded that in the Netherlands 'members of minority groups are overrepresented among offenders and that disparities result in part from behavioural differences when they find themselves in the criminal justice system' (p. 259). In addition, our clinical impression was that adolescent outpatients differed in their presentation: native outpatients could admit in general that they had anger problems, while most non-native outpatients denied that they feel socially incompetent.

Andrews and Bonta (2003) have developed the concept of dynamic criminogenic needs; these include antisocial personality pattern and substance abuse.

Such needs were studied recently among Dutch populations, including adolescent offenders. Vreugdenhil (2003), for example, studied 204 offenders between 12 and 18 years old and diagnosed conduct disorders in three-quarters of them, and substance abuse in 55%. Most of these youths (63%) had committed a non-sexually violent crime and ethnic minorities were overrepresented with 24% Surinamese boys, 4% Antilleans, 22% Moroccans, 7% Turks, and 19% boys with another ethnicity. Bulten (1998) carried out a study among a group of 200 Dutch male adolescent detainees. About one-third of them were violent offenders between 18 and 24 years old. Substance abuse was established in 75% and an antisocial personality disorder in 42% of the detainees. Compared to the general Dutch population, the adolescent detainees were more emotionally unstable, more extravert, more hostile and more dominant. They also had a greater need to seek thrills.

A few studies have also been carried out on the prevalence of crime among related populations of Dutch adolescents of different ethnicity. For example, on the basis of officially registered crime, self-report research and victim studies Junger et al. (2001) found that non-native adolescents, on average, displayed more serious and violent criminal behaviour than native Dutch youths. They found that the same factors contributed to an increased risk of recidivism for native and non-native adolescents, that is to say, socio-economic status, age, place of residence, home situation, behavioural problems at school, religiosity and leisure activities. However, these risk factors contributed in a different degree to an increased risk of recidivism according to ethnic group. Growing up in a single-parent family, for example, was related to violent behaviour with Surinamese, but not with native Dutch, Moroccan and Turkish adolescents.

Blom et al. (2005) investigated a group of 163,000 persons who, in 2002, were registered with the police as a suspect in a criminal investigation. Of these suspects, 37.5% were of non-native origin. Non-native youths were registered more frequently as a suspect than native youths. In particular Antilleans and Moroccans between 12 and 17 years old were suspected of 3.5 times as many violent offences as native youths. A national study among non-criminalized students of 12 to 20 years old revealed that the use of violence is frequent among them (Junger et al., 2001). Among students too, non-native boys were involved more frequently in violence than native boys. Of the native boys 24% indicated that they had used physical violence in the last 12 months, but among Surinamese boys this was 37%, among Antillean boys it was 40%, among Turkish boys 41% and among Moroccan boys 48%.

In our previous study of violent outpatients, we did not differentiate between adults and adolescents or between patients of native and non-native descent (Hornsveld et al., 2008). It may be, however, that there are differences in personality traits and problem behaviours between these groups, which may indicate different dynamic criminogenic needs possibly leading, in turn, to the necessity for modifications of targeted treatment programmes.

Our aim in this study, therefore, was to explore the traits and behaviours of native and non-native male adolescents on a forensic psychiatric outpatient clinic, and compare those with native and non-native adolescents at a similar level of education but who were not violent offenders. For these purposes, we defined adolescents as people of 15 to 21 years old. Non-native adolescents are defined as youngsters who are born in the Netherlands and who have at least one parent who was born in Surinam, the Dutch Antilles, Turkey, Morocco or Cape Verde, and were immigrants from there. Our hypothesis was that there would be different patterns of problem behaviour and adverse personality traits among the native and non-native patients, and thus that patients from each group could differ from their native and non-native community peers in different ways.

## Method

### *Participants*

One hundred and nineteen violent male adolescents were recruited from consecutive referrals for compulsory treatment in a forensic psychiatric outpatient clinic in Rotterdam, and 161 male students without such a criminal record were randomly selected from secondary vocational schools. In the Netherlands, the court can require offenders to undergo outpatient treatment as (a) an added condition with punishment for offences to which imprisonment for three years or less applies, (b) an alternative to punishment for offences to which an imprisonment for six months or less applies, (c) part of a penal programme, and (d) while under supervision by a youth protection agency.

### *Measures*

Measurement instruments were chosen according to whether a reliable and valid Dutch version was available and whether they had been designed or validated for persons of 15 years or older.

The Psychopathy Checklist-Revised (PCL-R: Hare, 1991; Dutch version: Vertommen et al., 2002) is a checklist for measuring psychopathy and is completed on the basis of a structured interview and file study. The checklist has two factors: 'callous and remorseless use of others' (Factor 1) and 'chronically unstable and antisocial lifestyle' (Factor 2). We scored the PCL-R for patients younger than 18 according to the instructions of Forth et al. (1990).

The NEO-Five Factor Inventory (NEO-FFI: Costa and McCrae, 1992; Dutch version: Hoekstra et al., 1996) is a 60-item, self-report measure of the Big Five personality domains of neuroticism, extraversion, openness, agreeableness, and conscientiousness.

The Zelf-Analyse Vragenlijst (ZAV: Van der Ploeg et al., 1982) is a Dutch version of the Spielberger State-Trait Anger Scale (Spielberger, 1980). Ten trait items were used from this questionnaire to determine disposition to anger.

The Aangepaste Versie van de Picture-Frustration Study (PFS-AV: Hornsveld et al., 2007b) is an instrument for measuring hostility. For this, patients have to 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 1 = 'not at all hostile' to 7 = 'extremely hostile'.

The Agressie Vragenlijst (AVL: Meesters et al., 1996) is a Dutch version of Buss and Perry's (1992) Aggression Questionnaire with 29 items that measure various types of aggressive behaviour, i.e. physical aggression, verbal aggression, anger, and hostility.

The Novaco Anger Scale (NAS: Novaco, 1994) used in this study was a translation of a provisional version with 48 items in Part A and 25 items in Part B. Patients only had to complete Part A on situation specific anger.

The Inventarisatielijst Omgaan met Anderen [IOA: Van Dam-Baggen and Kraaimaat, 2000 (Inventory of Interpersonal Situations, IIS: Van Dam-Baggen and Kraaimaat, 1999)]. Patients evaluate 35 interpersonal situations, indicating how much anxiety they would experience (social anxiety) in these situations and then how often they would actually perform the behaviour described (social skills) if the situation occurred. The five subscales in this questionnaire, for both 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 giving criticism and giving someone a compliment were used, since it appeared from a previous study (Hornsveld, 2005) that only these subscales differentiate violent patients from healthy comparison subjects.

### *Procedure*

The questionnaires were submitted individually to the outpatients prior to the ACT. The outpatients received a fee of €5 for this. The students completed the questionnaires in class and received a fee of €10.

## **Results**

### *General characteristics*

The average age of the violent adolescents was 16.93 years (standard deviation, SD = 1.48; range 15–20 years). Forty-eight (40.3%) were native and 71 (59.7%) were non-native. In Rotterdam about 50% of all residents are of non-Dutch descent. Most of the patients were still in secondary vocational education. All had a main diagnosis of (oppositional-defiant) conduct disorder on Axis I or, if they were 18 years or older, an antisocial personality disorder on Axis II of the

DSM-IV (APA, 1994). These classifications were not only based on the psychiatric and/or psychological evaluation on which the court had decided on forensic psychiatric treatment, but also on the evaluation of an experienced clinical psychologist during the intake interview. During the study there was only one forensic psychiatric outpatient facility at Rotterdam, so we made the assumption that this studied group of adolescent outpatients is representative of the wider population of violent adolescents who are referred to a forensic psychiatric outpatient clinic for obligatory treatment in a major Dutch city.

The students attended schools for secondary vocational education in Rotterdam. Their average age was 17.35 years (SD = 1.08; range 16–20 years). They were, therefore, significantly older as a group than the offender-patients [ $F(3,276) = 5.45$ ;  $p < 0.001$ ]. Eighty-two (50.9%) were native and 79 (49.1%) were non-native.

There were thus four subgroups of participants for comparison: 48 native patients, 71 non-native patients, 82 native students and 79 non-native students. These were compared with each other through ANCOVAs, because of the age differences. Considering the number of comparisons, a Bonferroni correction was applied with  $\alpha = 0.004$  (0.05 : 13 comparisons). When these ANCOVAs resulted in an interaction effect and subgroups were compared with each other, 0.006 was applied for the  $\alpha$  (0.05 : 8 comparisons).

### *Personality traits*

No significant major differences were found between the native and non-native patients on the NEO-FFI domains of neuroticism, agreeableness or on anger as a trait (ZAV). When comparing the native patients with native students, the native patients scored significantly higher on the disposition towards anger [ZAV:  $F(2,127) = 6.07$ ;  $p < 0.006$ ], and significantly lower on agreeableness [NEO-FFI:  $F(2,158) = 12.59$ ;  $p < 0.006$ ] (Table 1).

### *Problem behaviours*

When comparing the patients with the students, a significant major effect was established on hostility (PFS-AV). The patients scored higher on this than the students. Compared with the students, the patients reported significantly less social anxiety (IOA Social anxiety) in situations where a compliment can be made. In addition, they also reported more social skills (IOA Social skills) in situations where criticism can be given. When comparing native adolescents with non-native adolescents, a main effect was that the native patients reported significantly more social skills (IOA Social skills) than the non-native patients in situations where someone can be made a compliment.

Again, no significant differences were found between the native and non-native patients on any measure. The native patients scored higher on hostility

Table 1: Comparisons of traits between patients with students and native with non-native adolescents, controlled for age

Measurement instruments	Native persons (N = 130)		Non-native persons (N = 150)		ANCOVA (F)		
	M (SD)		M (SD)		Patients (N = 119) versus students (N = 161)	Native (N = 130) versus non-native adolescents (N = 150)	Interaction Age
PCL-R	Psychopathy Patients	18.72 (5.55)	18.40 (5.86)		0.04		0.13
	Use of others	9.26 (3.14)	10.40 (3.47)		3.46		0.58
	Antisocial lifestyle	9.09 (2.86)	7.73 (3.14)		5.19*		0.05
NEO-FFI	Neuroticism	30.05 (9.56)	29.58 (7.06)		0.48		2.68
	Agreeableness	30.24 (7.42)	31.00 (6.72)		0.97		10.60***
	Trait anger	38.50 (4.88)	40.51 (4.59)		4.28*		7.29**
ZAV	Patients	40.86 (4.80)	38.14 (4.44)		0.00		0.75
	Students	20.93 (7.78)	18.60 (6.43)				
	Patients	17.06 (4.50)	19.33 (6.22)				

Note: PCL-R, Psychopathy Checklist-Revised; NEO-FFI, NEO Five Factor Inventory; ZAV, Zelf-Analyse Vragenlijst. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.004$  (two-sided).

[PFS-AV:  $F(2,127) = 21.17$ ;  $p < 0.006$ ] and on the social skill giving criticism [IOA Social skills:  $F(2,127) = 6.46$ ;  $p < 0.006$ ] than the native students. A comparison of the non-native patients with the non-native students resulted in a significantly lower score on anger [NAS:  $F(2,147) = 5.70$ ;  $p < 0.006$ ] for the non-native students. Compared with the non-native students, the non-native patients also reported significantly less social anxiety [IOA Social anxiety:  $F(2,147) = 11.28$ ;  $p < 0.006$ ] and more social skills [IOA Social skills:  $F(2,147) = 5.91$ ;  $p < 0.006$ ] in situations where someone can be given a compliment (Table 2).

When comparing the native students with the non-native students, it appeared that the native students scored significantly lower on hostility [PFS-AV:  $F(2,158) = 7.30$ ;  $p < 0.006$ ] and lower on anger [NAS:  $F(2,158) = 7.41$ ;  $p < 0.006$ ] than the non-native students. Compared with the non-native students, the native students also reported significantly less social anxiety [IOA Social anxiety:  $F(2,158) = 7.88$ ;  $p < 0.006$ ] and more social skills [IOA Social skills:  $F(2,158) = 18.50$ ;  $p < 0.006$ ] in situations where someone can be given a compliment.

## Discussion and summary

Against prediction, there were no significant differences between the native and non-native patients in any of the problem behaviours or personality traits measured. There were, however, some differences between native and non-native students, generally in the direction of the native students being more sociable (more agreeable, and with less social anxiety and more social skills than the non-natives). This latter finding may be explained by the low socio-economic status of the non-native students compared with the native students, and most immigrants in the Netherlands fall into the lower socio-economic groups (Hawkins et al., 1998; Junger-Tas, 1997).

Overall, the outpatients scored higher on hostility, although not aggressive behaviour, than the students and also indicated that they experienced less anxiety in situations where criticism can be given. These findings suggest that a cognitive-behavioural treatment programme should focus on managing hostility and improving social confidence and skills, regardless of native or non-native status. A comparison between the native and non-native students revealed that the native students scored higher on agreeableness, lower on hostility and lower on aggressive behaviour than the non-native students. Therefore, we advocate cognitive-behavioural programmes such as Aggression Replacement Training (Goldstein et al., 1998) or ACT (Hornsveld et al., 2008) for students at those schools (natives and non-natives) who have anger control problems or who lack adequate social skills.

Differences elicited between native patients and students compared with the differences between non-native patients and non-native students reflect the differences among the students. Native patients were more angry, hostile and critical



Table 2: Comparisons of problem behaviours between patients with students and native with non-native adolescents, controlled for age

Measurement instruments	Factors or subscales		Non-native persons (N = 150)		ANCOVA (F)		Interaction	Age
	Native persons (N = 130)	M (SD)	M (SD)	Patients (N = 119) versus students (N = 161)	Native (N = 130) versus non-native adolescents (N = 150)			
PFS-AV	Hostility							
	Patients	37.44 (12.41)	33.37 (11.06)	10.14***	0.08	34.43***	0.30	
AVL	Students	27.28 (4.72)	30.65 (6.56)					
	Aggression			1.62	0.66	5.03*	4.13*	
NAS	Patients	89.19 (22.20)	81.19 (17.77)					
	Students	80.70 (15.78)	84.70 (16.25)					
	Anger			0.15	0.03	9.22***	3.68	
	Patients	91.73 (18.09)	84.93 (19.17)					
	Students	85.85 (12.26)	93.04 (15.10)					

Table 2: Continued

Measurement instruments	Factors or subscales		Native persons (N = 130)		Non-native persons (N = 150)		ANCOVA (F)		Interaction	Age
	M (SD)		M (SD)		M (SD)		Patients (N = 119) versus students (N = 161)	Native (N = 130) versus non-native adolescents (N = 150)		
IOA, Social anxiety	Giving criticism									
	Patients	13.88 (6.11)	Patients	13.89 (5.65)			26.19***	1.54	1.19	0.21
	Students	16.43 (4.29)	Students	18.00 (4.59)						
	Giving compliment						13.98***	5.58*	4.04*	0.71
IOA, Social skills	Giving criticism									
	Patients	7.42 (3.95)	Patients	7.47 (4.22)						
	Students	8.23 (4.30)	Students	10.57 (3.56)			8.60***	0.93	4.04*	0.62
	Giving compliment									
	Patients	22.56 (5.22)	Patients	20.89 (5.49)						
	Students	19.65 (3.78)	Students	20.22 (4.41)						
	Patients	14.23 (3.42)	Patients	14.35 (3.58)			1.47	12.11***	13.01***	0.12
	Students	15.28 (2.68)	Students	12.26 (3.52)						

Note: PFS-AV, Aangepaste Versie van de Picture-Frustration Study; AVL, Aggressive Vragenlijst; NAS, Novaco Anger Scale; IOA, Inventarisatielijst Omgang met Anderen.

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.004$  (two-sided).

than native students, but non-native patients were more agreeable and less aggressive than non-native students. Perhaps there is a higher threshold for taking native adolescents into compulsory treatment than there is for non-native adolescents. It has also been suggested that non-native patients cope with the criminal justice system by making a favourable impression on the officials or professionals they have to deal with (e.g. Kayser, 1999).

There were a number of limitations on our study. First, the data from the patients were obtained during a base-line evaluation trial of a cognitive-behavioural group therapy, and mainly self-report questionnaires were used. This may have biased responses, for example if the participants thought they had to present themselves in certain ways in order to be able to show benefit from the treatment programme. Alternatively, they may have preferentially chosen socially desirable answers (Bech and Mak, 1995) or had a limited understanding of their own behaviour by the investigated persons (Hollin and Palmer, 2001). If so, within the patient group at least, any biases seem to have been operating in the same direction for the native and non-native participants. A second limitation was that this evaluation was not primarily designed to investigate dynamic needs, and extrapolation from self-reported behaviour or personality traits may not be entirely justified. Again, however, this problem would have affected native and non-native participants equally. Thirdly, the non-native patients came from different ethnic population groups, individually too small for separate analysis. It may be that some features which would have potentially distinguished the native and non-native participants cancelled each other out within the over-arching non-native grouping.

We came to the preliminary conclusion that different treatment programmes for native and non-native violent outpatients are not necessary, since we did not find any differences in traits and behaviours between native and non-native outpatients. However, it is in our opinion still advisable to pay special attention to the influence of ethnic and cultural factors on need for treatment during intake interviews with violent adolescents (Borra et al., 2002). Information from the intake interview will make a more individual approach possible for each patient if necessary.

## Acknowledgements

The study among the outpatients was made possible by the Scientific Research and Documentation Centre of the Dutch Ministry of Justice and the study among the students by the De Kijvelanden Forensic Psychiatric Centre.

## References

- American Psychiatric Association (APA) (1994) *Diagnostic and Statistical Manual of Mental Disorders* (4th edition). Washington, DC: APA.

- Andrews DA, Bonta J (2003) *The Psychology of Criminal Conduct* (3rd edition). Cincinnati, OH: Anderson.
- Bech P, Mak M (1995) Measurements of impulsivity and aggression. In Hollander E, Stein DJ (eds) *Impulsivity and Aggression*. Chichester: Wiley pp. 25–42.
- Blom M, Oudhof J, Bijl RV, Bakker BFM (2005) *Verdacht van criminaliteit: Allochtonen en autochtonen nader bekeken* [Suspected of Crime: A Closer Look at Natives and Non-natives]. The Hague: WODC-cahier 2005-2.
- Borra R, Dijk R van, Rohlf H (2002) *Cultuur, classificatie en diagnose. Cultuursensitief werken met de DSM-IV* [Culture, Classification and Diagnosis. Being Culture Sensitive in Using the DSM-IV]. Houten: Bohn Stafleu Van Loghum.
- Bulten BH (1998) *Gevangen tussen straf en zorg: Psychische stoornissen bij jeugdige kortgestrafte gedetineerden* [Between Punishment and Care: Mental Disorders in Juvenile Delinquents with Short Imprisonment]. Amsterdam: Vrije Universiteit.
- Buss AH, Perry M (1992) The aggression questionnaire. *Journal of Personality and Social Psychology* 63: 452–459.
- Costa PT Jr, McCrae RR (1992) *Revised NEO Personality Inventory (NEO-PI-R) and the Five Factor Inventory (NEO-FFI): Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Dam-Baggen CMJ van, Kraaimaat FW (1999) Assessing social anxiety: the Inventory of Interpersonal Situations (IIS). *European Journal of Psychological Assessment* 15: 25–38.
- Dam-Baggen CMJ van, Kraaimaat FW (2000) *Inventarisatielijst Omgaan met Anderen (IOA). Handleiding (2<sup>e</sup> geheel herziene druk)* [Inventory of Interpersonal Situations (IOA). Manual (2nd revised edition)]. Lisse: Swets Test Services.
- Forth AE, Hart SD, Hare RD (1990) Assessment of psychopathy in male young offenders. *Psychological Assessment: A Journal of Consulting and Clinical Psychology* 2: 342–344.
- Goldstein AP, Glick B, Gibbs JC (1998) *Aggression Replacement Training: A Comprehensive Intervention for Aggressive Youth*. Champaign, IL: Research Press.
- Hare RD (1991) *The Hare Psychopathy Checklist-Revised*. Toronto, CA: Multi-Health Systems.
- Hawkins DF, Laub JH, Lauritsen JL (1998) Race, ethnicity, and serious juvenile offending. In Loeber R, Farrington DP (eds) *Serious & Violent Juvenile Offenders. Risk Factors and Successful Interventions*. Thousand Oaks, CA: Sage pp. 30–46.
- Hoekstra HA, Ormel J, Fruyt F de (1996) *Handleiding NEO-Persoonlijkheidsvragenlijsten* [Manual NEO Personality Questionnaires]. Lisse: Swets Test Services.
- Hollin CR, Palmer EJ (2001) Skills training. In Hollin CR (ed.) *Handbook of Offender Assessment and Treatment*. Chichester: Wiley pp. 269–280.
- Hornsveld RHJ (2005) Evaluation of Aggression Control Therapy for violent forensic psychiatric patients. *Psychology, Crime and Law* 11: 403–410.
- Hornsveld RHJ, Nijman HLI, Kraaimaat FW (2008) Aggression Control Therapy for violent forensic psychiatric patients: first results. *Psychology, Crime and Law* 14: 1–18.
- Hornsveld RHJ, Nijman HLI, Hollin CR, Kraaimaat FW (2008) Aggression Control Therapy for violent forensic psychiatric patients: method and clinical practice. *International Journal of Offender Therapy and Comparative Criminology* 52: 222–233. DOI:10.1177/0306624X07303876.
- Hornsveld RHJ, Nijman HLI, Hollin CR, Kraaimaat FW (2007) An adapted version of the Rosenzweig Picture-Frustration Study (PFS-AV) for the measurement of hostility in violent forensic psychiatric patients. *Criminal Behaviour and Mental Health* 17: 45–56.
- Junger M, Wittebrood K, Timman R (2001) Etniciteit en ernstig en gewelddadig crimineel gedrag [Ethnicity and serious and violent criminal behaviour]. In Loeber R, Slot NW, Sergeant JA (eds) *Ernstige en gewelddadige jeugddelinquentie: Omvang, oorzaken en interventies* [Serious and Violent Delinquency in Juveniles: Prevalence, Causes and Interventions]. Houten: Bohn Stafleu Van Loghum pp. 97–127.
- Junger-Tas J (1997) Ethnic minorities and criminal justice in the Netherlands. *Crime and Justice* 21: 257–310.

- Kayser DR (1999) Sociale vaardigheden van jongeren in intercultureel perspectief [Social skills in intercultural perspective]. In Collot d'Escury-Koenigs A, van der Linden A, Snaterse T (eds) *Van Preventie tot straf: Naar meer sociale vaardigheden bij jongeren [From Prevention to Punishment: To More Social Skills for Juveniles]*. Lisse: Swets & Zeitlinger.
- 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.
- Novaco RW (1994) Anger as a risk factor for violence among the mentally disordered. In Monahan J, Steadman HJ (eds) *Violence and Mental Disorder*. Chicago: University of Chicago Press pp. 21–59.
- Ploeg HM van der, Defares PB, Spielberger CD (1982) *Handleiding bij de Zelf-Analyse Vragenlijst, ZAV [Manual for the Self-Analysis Questionnaire, ZAV]*. Lisse: Swets and Zeitlinger.
- Spielberger CD (1980) *Preliminary Manual for the State-Trait Anger Scale (STAS)*. Tampa, FL: University of South Florida.
- Vertommen H, Verheul R, Ruiters 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: Swets Test Publishers.
- Vreugdenhil C (2003) Psychiatric Disorders among incarcerated male adolescents in the Netherlands. Dissertation, Vrije Universiteit, Amsterdam.

Address correspondence to: Ruud H.J. Hornsveld, Lange Dreef 52, 2285 La Rijswijk, The Netherlands. Email: r.hornsveld@tiscali.nl