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Forensic psychiatric outpatients with sexual offences: Personality characteristics, aggression and social competence

RUUD H. J. HORNSVELD[1,2] & CINDY DE KRUYK[2]

[1]*Department of Medical Psychology, Radboud University Nijmegen, Nijmegen, and* [2]*Het Dok Forensic Psychiatric Outpatient Department, Rotterdam, The Netherlands*

Abstract

For greater insight into the personality characteristics and problem behaviours of Dutch sexually violent forensic psychiatric outpatients, a group of 105 sexually violent and a group of 69 non-sexually violent outpatients were studied. All had been required by the court to undergo treatment. It was found that together all outpatients scored higher than normal subjects on the neuroticism personality domain and lower on the agreeableness and conscientiousness domains. They also had a greater propensity to become angry.

When sexually violent outpatients were compared with non-sexually violent outpatients, the scores of sexually violent patients were found to be higher than those of non-sexually violent patients on the neuroticism and agreeableness personality domains. Sexually violent outpatients reported less hostile and aggressive behaviour and more social anxiety. The scores of sexually violent outpatients on the Static-99 showed that most ran a low average risk of recidivism.

Treatment programmes for sexually violent forensic psychiatric outpatients with a relatively low risk of recidivism need not primarily focus on anger management. As sexually violent outpatients are still less "agreeable" than the general Dutch population, it is recommended that moral reasoning training with problem sexual situations be part of the treatment programme for these patients.

Keywords: *Forensic psychiatry, personality characteristics, violence, sexual offences*

Introduction

In the literature on sexual offenders, there is nearly unanimous agreement that treatment should not exclusively focus on "specific" criminogenic "needs" such as deviant sexual behaviour, but also on "general" needs such as antisocial attitudes, negative emotions like anger, and limited social competence (Andrews & Bonta, 2003; O'Shaughnessy, 2002; Hanson, 2000; Hunter, 1999; Marshall, 1999; Marshall, Anderson, & Fernandez, 1999; Pithers, 1990). However, there has been very little research on sex offenders' personality characteristics, and studies on "needs" such as anger and limited social competence have yielded various results (Stermac, Segal, & Gillis, 1990; Marshall, Fernandez, & Cortoni, 1999). Using the NEO PI-R, Dennison, Stough, and Birgden (2001) found that incarcerated child molesters generally score high on neuroticism and low on extraversion

Correspondence: Ruud H. J. Hornsveld, Lange Dreef 52, 2285 LA Rijswijk, The Netherlands. E-mail: r.hornsveld@tiscali.nl

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and conscientiousness, compared with both a non-offender group and population norms. Fagan et al. also found a high score on neuroticism and a low score on conscientiousness (Fagan et al., 1991). However, they did not find a low score on extraversion, but on agreeableness. Seidman, Marshall, Hudson, and Robertson (1994) concluded that there are no differences between rapists and various other sex offenders, non-sex offenders and community controls on either trait or state anger, but Marshall (1999) noted that rapists, child molesters and incestuous fathers tend to be angry and often have trouble controlling their anger.

Regarding social competence, Bumby (2000), Hunter (1999), and Marshall (1999) assumed that juvenile sex offenders generally lack social competence, but other authors like Blackburn (1993), Prentky (1999) and Marshall, Anderson, and Fernandez (1999) have assumed that social skills deficits are characteristic of child molesters, but not of rapists.

Although various institutions in the Netherlands have developed treatment programmes for forensic psychiatric outpatients with a history of violent and sexual offences, empirical knowledge pertaining to the psychological personality traits and problem behaviours of these patients is fairly scant. However, there are several publications on traits and behaviours in populations of offenders in general and of violent offenders in particular. Based on international studies, Nietzel, Hasemann, and Lynam (1999) determined that "severe antisocial behaviour" is related to low scores on the Big Five personality domains of agreeableness and conscientiousness (Costa & McCrae, 1992), a relationship already previously proposed by other authors (Digman, 1994; Widiger et al., 1994). Eysenck and Gudjonsson (1989) concluded from research that there is a connection between the personality dimensions of extraversion and neuroticism and criminality: in younger, more active criminals, the relationship to extraversion is supposed to be stronger and to neuroticism weaker than in older, incarcerated criminals. According to Digman (1994) and Eysenck and Gudjonsson, neuroticism and extraversion dimensions correspond to the Big Five personality domains with the same names.

Goldstein, Glick, and Gibbs (1998) believed that aggressive behaviour is related to problem behaviours, such as inadequate emotional control, a limited range of social skills and antisocial attitudes. Several researchers have found empirical support for this position. Compared with non-aggressive people, aggressive people showed dysfunctions in perception (Akhtar & Bradley, 1991), attention (Lochman, White, & Wayland, 1991), attribution (Dodge, Price, Bachorowski, & Newman, 1990), cognition (Lochman & Dodge, 1994), emotion (Zamble & Quinsey, 1997), social competence (Hollin, 1990) and awareness of current norms and values (Nelson, Smith, & Dodd, 1990; Palmer & Hollin, 1999).

Hornsveld, van Dam-Baggen, Lammers, Nijman, and Kraaimaat (2004) studied the extent to which these personality traits and problem behaviours, like aggressive and social incompetent behaviour, are specific to a Dutch population of violent forensic psychiatric patients. For this, a group of inpatients and a group of outpatients (all males) were compared with norm groups, using self-report questionnaires. Compared with average Dutch people, the scores of Dutch forensic psychiatric patients with violent offences appeared to differ on the Big Five personality domains of neuroticism (higher) and agreeableness (lower), but not on extraversion and conscientiousness. These patients were also more disposed to become angry than average Dutch people. The fact that these results only partially correspond to research findings reported in the international literature could be explained by the involvement of a somewhat different population in this study, i.e. forensic psychiatric patients and not aggressive people or violent offenders in general. The differences in personality traits and problem behaviours between inpatients and outpatients

were significant on nearly all measures. The outpatient group scored lower on the personality domains of openness, agreeableness and conscientiousness and higher on hostile and aggressive behaviour, while there was no difference in socially competent behaviour.

An exploratory study was conducted in order to examine the personality traits and problem behaviours of a Dutch sample of forensic psychiatric outpatients for the further development of treatment programmes for sexually violent forensic psychiatric outpatients at Het Dok outpatient department in Rotterdam, the Netherlands. For this, the same group of non-sexually violent outpatients used in the aforementioned study by Hornsveld et al. (2004) and a separate group of sexually violent outpatients were compared with norm groups using self-report questionnaires. The questionnaires were related to personality traits and aspects of aggressive and socially competent behaviour. In addition, the two patient groups were compared to check for differences in personality traits and problem behaviours.

In view of the literature, our own research and clinical findings, it was expected that together outpatients who had committed a violent offence would score higher on neuroticism and anger as a trait and lower on agreeableness and conscientiousness than the general Dutch population. In addition, the group of sexually violent outpatients was also expected to score lower on extraversion than the general Dutch population. Concerning socially incompetent behaviour, the group of sexually violent outpatients was expected to score higher on social anxiety and lower on social skills than the general Dutch population.

In comparison with the group of non-sexually violent outpatients, it was assumed that the group of sexually violent outpatients would score higher on neuroticism and agreeableness and lower on extraversion and report less aggressive behaviour, more social anxiety and fewer social skills than the group of non-sexually violent outpatients.

Method

Patients

In the Netherlands, the court can require juvenile and adult forensic psychiatric outpatients to undergo treatment as (a) an added conditional punishment for offences to which imprisonment for 3 years or less applies, (b) an alternative punishment for offences to which imprisonment for 6 months or less applies, (c) a condition of suspension of detention while awaiting trial, (d) part of a Penal Programme, and (e) a supervision element for a youth protection agency.

In most cases, the court has determined a link between "insufficient development or pathological disorder of mental faculties" in forensic psychiatric patients and their offences, based on examination by a psychiatrist and a psychologist. Without outpatient treatment, the risk of recidivism is considered high. That is the reason the most important goal of treatment in a forensic outpatient department is to bring about permanent, structural change in these patients' behaviour, in order to prevent relapses.

The study was conducted among 105 sexually and 69 non-sexually violent outpatients (all male), who were required to undergo treatment. The non-sexually violent outpatients participated in Aggression Control Therapy, a cognitive-behaviour group therapy (eight patients, 18 sessions) for violent forensic psychiatric patients (Hornsveld, 2004). The average age of the non-sexually violent outpatients was 23.4 years (SD = 8.3; range: 16–47 years). Outpatient Aggression Control Therapy is indicated for patients with a main diagnosis of conduct disorder on axis I or an antisocial personality disorder on axis II of the

DSM-IV (American Psychiatric Association, 1994). Adult sexually violent outpatients participated in the Treatment Programme for Sexual Offenders (12–15 patients, 90 sessions)[1] and juvenile sexually violent outpatients in the Treatment Programme for Juvenile Sexual Offenders (four to six patients, 30 sessions). Both are cognitive-behaviour group therapies providing the following modules: (a) offence script, (b) course of life, (c) sexuality and aggression and (d) empathy training. Treatment programmes for sex offenders are indicated for patients with a main diagnosis of paraphilia (paedophilia, exhibitionism and voyeurism), adult sexual abuse and child sexual abuse on axis I of the DSM-IV (American Psychiatric Association, 1994).

The average age of the sexually violent outpatients was 40.5 years (SD = 14.5; range: 16–76 years). They had committed abuse and rape of children or adolescents (43.9%), rape of adults (5.2%), hands-off offences (4.6%), sexual abuse of adults (1.7%), or were suffering from sexual obsessions (3.5%). Most of the child molesters had committed incestuous offences. Nearly all patients were first offenders. The sexually violent outpatients were divided into the following risk categories, according to their total Static-99 score: low (33.0%), low average (43.7%), high average (17.5%) and high (5.8%).

The outpatients seem representative of the population of perpetrators of violent and sexual crimes for whom the court directly or indirectly imposes outpatient treatment. Only in a few cases did patients have to be excluded from participation for acute psychotic symptoms, addiction problems and/or inability to function in a group. Most of the outpatients had completed primary school, followed by no more than a few years of lower technical vocational training.

Measures

Two questionnaires were used to measure personality traits. The *NEO Five Factor Inventory* (NEO-FFI; Costa & McCrae, 1992; Dutch version: Hoekstra, Ormel, & De Fruyt, 1996) has 60 items and measures five personality "domains", i.e. neuroticism, extraversion, openness, agreeableness, and conscientiousness (Big Five). The *Zelf-Analyse Vragenlijst* (Self-Analysis Questionnaire) is a Dutch translation of the Spielberger State-Trait Anger Scale (Spielberger, 1980). Ten trait items were used from this questionnaire (ZAV; Van der Ploeg, Defares, & Spielberger, 1982) for assessing anger as disposition.

Patients had to complete five questionnaires to assess aggressive and social competent behaviour. The *Attributie Vragenlijst* (Attribution Questionnaire) is an experimental instrument intended to measure hostility. Patients have to write down their reaction to 17 vignettes that describe ambiguous, provocative situations. Answers were rated on a seven-point Likert scale, ranging from 1 = not at all hostile to 7 = extremely hostile (ATV; Hornsveld, Nijman, & Kraaimaat, 2002). Cronbach's α was 0.83 in this study.

The *Agressie Vragenlijst* (Aggression Questionnaire) is a Dutch adaptation of Buss and Perry's Aggression Questionnaire (Buss and Perry, 1992). This 29-item questionnaire measures different types of aggressive behaviour, i.e. physical aggression, verbal aggression, anger and hostility (AVL; Meesters, Muris, Bosma, Schouten, & Beuving, 1996).

The *Novaco Anger Scale* (NAS; Novaco, 1994) used in this study was a translation of a provisional version, containing 48 items in part A and 25 items in part B. Patients only had to complete part A, which focuses on how individuals experience anger (Cronbach's $\alpha = 0.95$).

In the *Inventarisatielijst Omgaan met Anderen* (Inventory of Interpersonal Situations), patients were presented with two questions related to 35 interpersonal situations, i.e. how nervous they would feel (social anxiety) and how often they would perform the behaviour

described in that situation (social skills). The five sub-scales of the questionnaire, both for social anxiety and social skills, are Criticizing, Giving your opinion, Giving a compliment to somebody, Making contact and Appreciating yourself (IOA; Van Dam-Baggen & Kraaimaat, 2000).

The *Alexithymia Vragenlijst* (Alexithymia Questionnaire) has 40 items related to coping with emotions. There are five sub-scales, e.g. (difficulty with) verbalizing, fantasizing, identifying, emotionalizing and analysing (BVAQ; Bermond & Vorst, 1996).

The *Static-99* (Hanson & Thornton, 1999; Dutch version: Van Beek, De Doncker, & De Ruiter, 2001) was used to assess the risk of recidivism in patients with sexual offences. This instrument consists of 10 "static" items, which are scored by consulting patient files.

Regarding personality traits, outpatients' scores on the NEO-FFI were compared with those of "Men over age 17" from the norm group, derived from a broad-based population sample (Hoekstra, Ormel, & De Fruyt, 1996). The outpatient group was also compared with a norm group of "randomly selected male residents of Leiden between the ages of 16 and 71" (Van der Ploeg, Defares, & Spielberger, 1982) on disposition to become angry (ZAV-D). The outpatients could be compared to a norm group ranging in age from 16 to 80 years old, on the basis of reported problem behaviours in the area of social competence (Van Dam-Baggen & Kraaimaat, 2000).

Procedure

The questionnaires were individually administered to the non-sexually violent outpatients prior to Aggression Control Therapy. The sexually violent outpatients were measured prior to the treatment programmes for adult and juvenile sex offenders or during the first part of the programmes, where attention was focused on offence script and course of life, and not explicitly on anger management and social skills training. Participation in the study was voluntary. The treatment agreement informed patients of the study objective and the confidential, anonymous use of information compiled. Sixty-one of the 105 sexually violent outpatients (58.1%) and 68 of the 69 non-sexually violent outpatients (98.6%) completed the questionnaires. Sexually violent outpatients who completed the questionnaires did not significantly differ in age [$t(101) = 0.2$, $p = 0.82$] or on the total Static-99 score from patients who refused to do so [$t(101) = 0.5$, $p = 0.63$].

Results

The group of non-sexually violent outpatients was significantly younger than that of sexually violent outpatients who completed the questionnaires [$t(125) = -7.9$, $p < 0.05$]. The average scores of the patient groups studied were compared with the average scores of the norm groups using one-sample *t*-tests.

When we compared the *total group of violent outpatients with norm groups*, we found as expected that all outpatients scored significantly higher on the neuroticism personality domain, lower on the agreeableness and conscientiousness domains (NEO-FFI) and higher on disposition to anger (ZAV-D) in comparison with the norm groups (Table I).

The assumption that *sexually violent outpatients* would also score lower on extraversion (NEO-FFI) *in comparison with the norm group* was not supported. Neither did the sexually violent outpatient group score differently from the norm group on disposition to become angry (ZAV-D). As expected, these outpatients did score higher than the norm group on social anxiety (IOA), but they did not report fewer social skills (IOA).

Table I. Comparison of sexually violent and non-sexually violent forensic psychiatric outpatients with norm groups.

			Sexually violent outpatients			Non-sexually violent outpatients			Total group		
Measurement instruments	Sub-scales	Norm groups *M* (SD)	*M* (SD)	Score of norm group	*t*	*M* (SD)	Score of norm group	*t*	*M* (SD)	Score of norm group	*t*
NEO Five Factor Inventory (NEO FFI)	Neuroticism	29.6 (7.8)	36.6 (8.3)	7th decile	$t(60) = 6.4^{\star}$	33.1 (7.8)	6th decile	$t(65) = 3.7^{\star}$	34.8 (8.2)	7th decile	$t(126) = 7.1^{\star}$
	Extraversion	39.8 (6.5)	38.9 (7.6)	5th decile	$t(60) = 1.0$	39.9 (5.4)	5th decile	$t(65) = 0.2$	39.4 (6.5)	5th decile	$t(126) = 0.7$
	Openness	35.4 (6.6)	35.9 (6.2)	5th decile	$t(60) = 0.6$	33.7 (4.8)	5th decile	$t(65) = 2.8^{\star}$	34.8 (5.6)	5th decile	$t(126) = 1.3$
	Agreeableness	42.5 (5.1)	40.1 (5.5)	4th decile	$t(60) = 3.4^{\star}$	37.7 (5.8)	3th decile	$t(65) = 6.7^{\star}$	38.9 (5.7)	4th decile	$t(126) = 7.2^{\star}$
	Conscien-tiousness	45.3 (5.7)	43.2 (6.6)	4th decile	$t(60) = 2.5^{\star}$	42.7 (6.5)	4th decile	$t(65) = 3.3^{\star}$	42.9 (6.5)	4th decile	$t(126) = 4.1^{\star}$
Self-Analysis Questionnaire (ZAV)	Disposition to anger	17.3 (5.4)	17.3 (5.7)	6th decile	$t(59) = 0.1$	21.5 (7.4)	8th decile	$t(58) = 4.3^{\star}$	19.3 (6.9)	8th decile	$t(118) = 3.2^{\star}$
Inventory of Interper-sonal Situations (IOA)	Social anxiety	70.5 (17.8)	76.9 (24.6)	Above average	$t(57) = 2.0^{\star}$	66.5 (21.3)	Average	$t(59) = 1.5$	71.6 (23.5)	Average	$t(117) = 0.5$
	Social skills	111.3 (15.8)	110.5 (17.6)	Average	$t(51) = 0.3$	110.5 (21.5)	Average	$t(57) = 0.3$	110.5 (19.6)	Average	$t(110) = 0.4$

$^{\star}p < 0.05$ (one-sided).

As previously noted, it was found that the age of the sexually violent outpatients who completed the questionnaires differed significantly from that of the non-sexually violent outpatients. As the results on some assessment instruments are significantly correlated with age, ANOVAs were used to correct for age to compare averages on assessment instruments between groups. Once again, α was set at 0.05. After correction for age, sexually violent outpatients differed significantly on several measures from non-sexually violent outpatients.

The group of sexually violent outpatients scored higher on the domains of neuroticism and agreeableness (NEO-FFI) and lower on anger as a trait (ZAV-D) than the group of non-sexually violent outpatients. As expected, sexually violent outpatients scored significantly lower on hostile and aggressive behaviour on all measures (ATV, AVL and NAS) and reported more favourably on their ability to cope with emotions (BVAQ) than non-sexually violent outpatients. Although the group of sexually violent outpatients reported more social anxiety, there was no difference in reported social skills (Table II).

Concerning the *risk of recidivism*, it appeared that the average score on the Static-99 ($M = 2.5$; SD $= 1.8$; median $= 2$; range: 0–8) for the outpatient sex offender group was a "low average" (Van Beek, De Doncker, & De Ruiter, 2001), mainly because most of the patients had committed incestuous crimes. To investigate whether patients with a relatively high Static-99 score differed from patients with a relatively low score in terms of personality characteristics and problem behaviours, the sexually violent patients who had completed the questionnaires were divided in two subgroups—one with a score of 2 ($n = 31$) or lower and one with a score of 3 or higher ($n = 29$). The comparison yielded no significant differences, possibly due to the small number of patients.

Discussion

Compared with the general Dutch population, the scores of the forensic psychiatric outpatients appeared to differ on the Big Five personality domains of neuroticism (higher),

Table II. Comparison of sexually violent and non-sexually violent forensic psychiatric outpatients.

Measurement instruments	Sub-scales	Sexually violent outpatients M (SD)	Non-sexually violent outpatients M (SD)	t or F
Age		40.5 (15.3)	23.4 (8.3)	$t(125) = 7.9\star$
NEO Five Factor Inventory (NEO FFI)	Neuroticism	36.6 (8.3)	33.1 (7.8)	$F(1,124) = 3.4\star$
	Extraversion	38.9 (7.6)	39.9 (5.4)	$F(1,124) = 0.5$
	Openness	35.9 (6.2)	33.7 (4.8)	$F(1,124) = 2.3$
	Agreeableness	40.1 (5.5)	37.7 (5.8)	$F(1,124) = 4.8\star$
	Conscientiousness	43.2 (6.6)	42.7 (6.5)	$F(1,124) = 0.8$
Self-Analysis Questionnaire (ZAV)	Disposition to anger	17.3 (5.7)	21.5 (7.4)	$F(1,116) = 6.1\star$
Attribution Questionnaire (ATV)		42.1 (7.3)	51.9 (15.9)	$F(1,109) = 8.9\star$
Aggression Questionnaire (AVL)		77.5 (17.8)	91.4 (22.7)	$F(1,116) = 6.9\star$
Novaco Anger Scale (NAS)		85.2 (16.8)	95.1 (19.5)	$F(1,119) = 5.4\star$
Inventory of Interpersonal Situations (IOA)	Social anxiety	76.9 (24.6)	66.5 (21.3)	$F(1,115) = 3.1\star$
	Social skills	110.5 (17.6)	110.5 (21.5)	$F(1,108) = 0.1$
Alexithymia Questionnaire (BVAQ)		112.7 (18.8)	120.9 (18.9)	$F(1,113) = 3.5\star$

$\star p < 0.05$ (one-sided).

agreeableness (lower) and conscientiousness (lower), but not on extraversion. Sexually violent outpatients are not more disposed to becoming angry than the general population, but do report more social anxiety in social situations. These results only partially correspond to research findings reported in the international literature. Discrepancies could be explained by the fact that this study involves a somewhat different population, i.e. forensic psychiatric outpatients and not sex offenders in general.

The differences in personality traits and problem behaviours between non-sexually violent and sexually violent outpatients were significant on a number of measures. In accordance with our expectations, the sexually violent outpatients did score higher on the personality domain of neuroticism, but did not score lower on the domain of extraversion. Compared with non-sexually violent outpatients, the sexually violent outpatients scored lower on disposition to anger and on hostile and aggressive behaviour. As expected, sexually violent outpatients did score higher on social anxiety, but did not score lower on social skills.

The results of this study seem to suggest the provisional conclusion that anger management need not be a major element of treatment programmes for sexually violent outpatients with a "low average" risk of recidivism. However, this type of programme should include social skills training, focusing relatively more attention on reducing social anxiety than on extending social skills. For most patients, the programme should be geared to general interpersonal situations, in which they feel anxious or insufficient. Some patients need practice with more intimate situations.

The outcome of this study should be viewed with caution, because the number of outpatients was relatively small and only 58% of the sexually violent outpatients completed the questionnaires. The disadvantage of using self-report questionnaires is that scores can be affected by a tendency to give socially acceptable answers (Bech & Mak, 1995) and by respondents' limited insight into how they function socially. Therefore, the finding that the sexually violent outpatients scored lower on hostile and aggressive behaviour than non-sexually violent outpatients should be interpreted with reservations, as sex offenders also frequently commit non-sexually violent crimes (Hanson & Bussière, 1998). While sexually violent outpatients' score on agreeableness was higher than that of non-sexually violent outpatients, the former group's score was still significantly lower than the norm group's score. Sexually violent outpatients tend to be egotistic and disregard their victims' rights. That is why moral reasoning training (Goldstein, Glick, & Gibbs, 1998) with sexual problem situations adapted to this population should be part of a treatment programme for these patients.

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