

# Treatment of Dutch (sexually) violent forensic psychiatric in- and outpatients

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# **Part 1: Treatment of Dutch violent forensic psychiatric in- and outpatients**

# Models of general aggression

# **Risk-Need-Responsivity “Model” (Andrews & Bonta, 2010)**

## **Criminogenic needs (“Central Eight”):**

- **history of antisocial behavior**
- **antisocial personality pattern**
- **antisocial cognitions**
- **antisocial associates**
- **family/marital circumstances**
- **school/work**
- **leisure/recreation**
- **substance abuse**

**Green = static criminogenic needs**

**Purple = dynamic criminogenic needs**

# **“Good Lives Model” (Ward & Marshall, 2004)**

## **Ten good live goals;**

- **healthy life**
- **knowledge**
- **excellence in play and work**
- **agency**
- **inner peace**
- **relatedness**
- **community**
- **spirituality**
- **happiness**
- **creativity**

# **Comments on Risk-Need-Responsivity model and Good Lives Model**

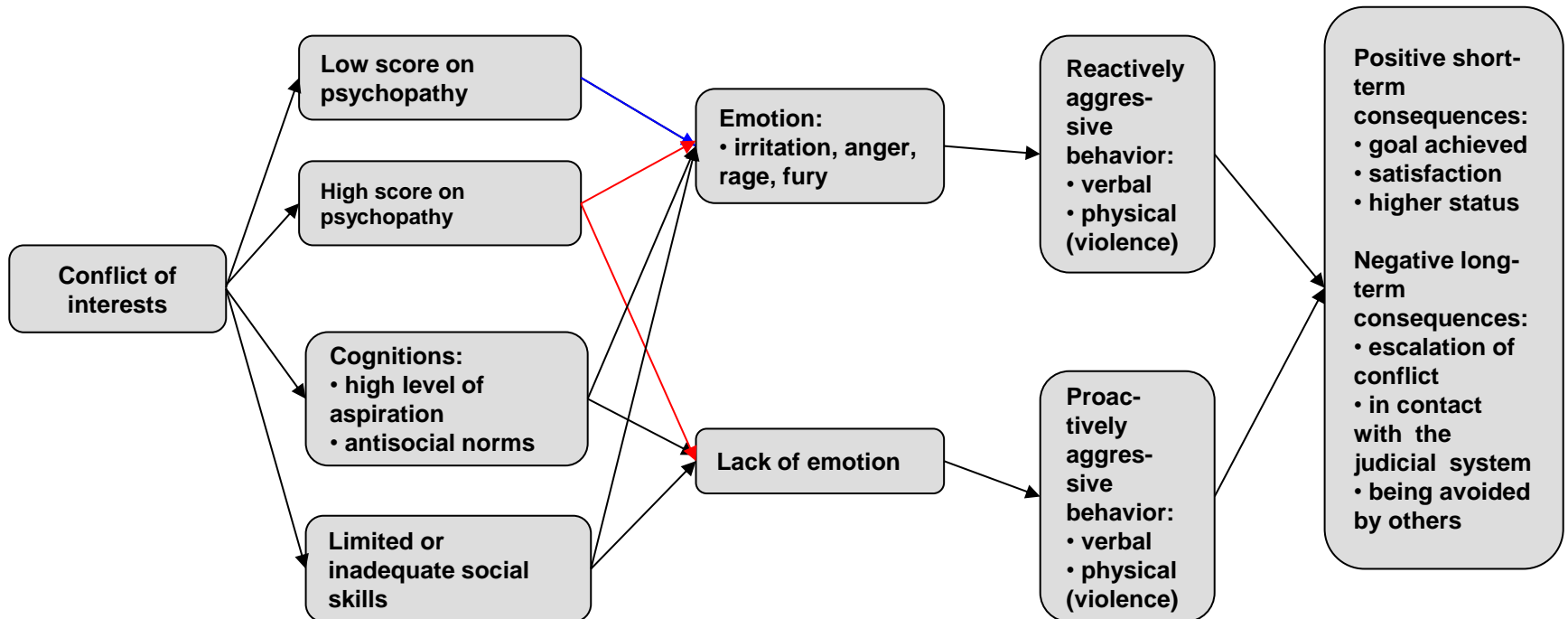
- **Items have different abstraction levels**
- **Not that so much models, but more a list of areas for special attention**
- **Translation of each area in psychological characteristics is needed: functional analyses**

## **Psychological risk factors**

- **Patients score higher than ‘normals’ on neuroticism (NEO-FFI) and trait anger (ZAV), and lower than ‘normals’ on Agreeableness (NEO-FFI)**
- **Patients score lower than ‘normals’ on anxiety when giving criticism and higher on anxiety when giving compliments**
- **Patients give more often than ‘normals’ criticism and more less than ‘normals’ compliments**
- **Outpatients score higher on hostility, anger, and aggression than inpatients**



# Model for general aggression



# **Aggression Replacement Training (ART)**

# Design

**Fifteen weekly sessions lasting 1½ hours each and three five-weekly follow-up meetings for six to eight patients:**

- **anger management, sessions 1 to 5**
- **social skills, sessions 6 to 10**
- **moral reasoning, sessions 11 to 15**
- **follow-up and evaluation, sessions 16 to 18**

**Participants have to complete homework assignments**

**Three measurement moments:**

- **at intake/before a waiting period**
- **after the waiting period/before the training**
- **after the training (post-training measurement)**

# Measures

- ***Psychopathy Checklist-Revised (PCL-R;***  
**Vertommen, Verheul, De Ruiter, & Hildebrand, 2002)**
- ***NEO Five-Factor Inventory (NEO-FFI; Hoekstra,***  
**Ormel, & De Fruyt, 1996)**
- **Trait Anger subscale of the Spielberger (1980)**  
***State-Trait Anger Scale (STAS; Van der Ploeg,***  
**Defares, & Spielberger, 1982)**
- ***Adapted Version of the Picture-Frustration Study***  
**(PFS-AV; Hornsveld, Nijman, Hollin, & Kraaimaat,**  
**2007)**
- ***Aggression Questionnaire (AQ; Hornsveld, Muris,***  
**Kraaimaat, & Meesters, 2009)**

## Measures (continued)

- **NAS part of the *Novaco Anger Scale-Provocation Inventory* (NAS-PI; Hornsveld, Muris, & Kraaimaat, 2011)**
- ***Inventory of Interpersonal Situations* (IIS; Van Dam-Baggen & Kraaimaat, 1999)**

### **For inpatients is added:**

- **Observation Scale for Aggressive Behavior (OSAB; Hornsveld, Nijman, Hollin, & Kraaimaat, 2007)**

# ART in outpatients

# Participants

## Data sets

- 123 outpatients (mean age = 17.35 years,  $SD = 1.82$ , range: 15-21 years)
- 73 patients were measured both during the intake interview and at the start of the training (mean age = 17.12 years,  $SD = 1.72$ , range: 15-21 years)
- 62 patients completed the questionnaires at both the start and the end of the training (mean age = 17.35 years,  $SD = 1.91$ , range: 15-21 years)
- 61 patients withdrew prematurely during the waiting period or during the training (nonstarters plus non-completers; mean age 17.35 years,  $SD = 1.82$ , range: 15-21 years)

# Results

## Dynamic criminogenic needs

- Compared with a *reference group* of 275 secondary vocational students, patients scored higher on trait anger, hostility, and aggression, and lower on social anxiety

## Nonstarters and noncompleters

- Patients who withdrew prematurely scored higher on psychopathy than the completers, in particular on the factor antisocial behavior



# Intake measurement vs. pre measurement ( $n = 73$ )

Measure	Content of scale	<i>M (SD)</i>		Effect <i>d</i>
		Intake	Pre	
PFS-AV	Hostility	33.22 (9.58)	34.16 (11.49)	-.13
AQ	Aggression	90.00 (27.88)	85.59 (21.57)	.21
	Phys. aggr.	33.01 (18.47)	29.48 (8.19)	.36
NAS-PI	Anger	87.52 (17.35)*	90.81 (19.32)*	-.29
IIS	Social anxiety	71.43 (28.73)	68.07 (25.80)	.24
	Social skills	112.42 (25.19)	112.32 (25.18)	.01

\*  $p < .05$

# Pre measurement vs. post measurement ( $n = 62$ )

Measure	Content of scale	<i>M (SD)</i>		Effect <i>d</i>
		Intake	Pre	
PFS-AV	Hostility	33.34 (12.30)	30.84 (12.27)	.25
AQ	Aggression	82.56 (20.67)	78.90 (20.32)	.21
	Phys. aggr.	28.39 (8.02)*	26.45 (7.46)*	.28
NAS-PI	Anger	87.29 (18.31)	83.98 (16.74)	.21
IIS	Social anxiety	65.36 (22.75)*	57.74 (22.75)*	.31
	Social skills	115.88 (22.22)	116.93 (29.75)	-.04

\*  $p < .05$

## Results (continued)

### Behavior change

- **No change in 73 patients between intake and pre measurement, except for an increase in anger**
- **Compared with the pre training measurement, 62 patients scored lower on physical aggression and social anxiety during the post-training measurement. There was a trend in the reduction of hostility, aggression, and anger**
- **After completion of the training, patients did not differ from the *reference group* of secondary vocational students with respect to hostility and aggressive behavior**

# Discussion

## Drop-out

- **In the current study, 61 of the 123 patients did not show up at the start of the training or did not complete the training**
- **This result is in line with the results of other studies on treatment dropouts (e.g., Olver & Wong, 2009)**
- **Non-completion has been associated with a higher risk of recidivism (Wormith, Olver, Stevenson, & Girard, 2007), as well as aggression and rule-violating behaviors (Beyko & Wong, 2005)**
- **There seems to be a relation between psychopathy, treatment attrition, and recidivism risk**

## **Consequences for treatment**

- **For this group of patients a more consequent and stricter policy is required among the referring agencies in case of drop-out**
- **Refusing to follow the training hardly had any negative consequences in most cases**
- **Creating alternative conditions and consequences for the completion of an obligatory treatment program has the highest priority**
- **For instance, the training can be provided at the office of the after-care and resettlement organization by a qualified trainer from the outpatient clinic and a probation officer**

# ART in inpatients

# Extended ART for inpatients

# **Part 3: Treatment of Dutch sexually violent forensic psychiatric inpatients**



# Psychological risk factors

## **Comparison with norm group or of subgroups with each other**

- **Sexually violent offenders score significantly higher on the NEO-FFI domain of neuroticism**
- **Rapists do report more aggression on self-report questionnaires than child abusers**
- **Rapists score higher than child abusers on psychopathy as measured by the PCL-R**
- **Child abusers associate children more with sex or submission than rapists or non-sexually violent inpatients by means of implicit association tests**

## **Relation of psychological risk factors to recidivism (Hanson & Morton-Bourgon, 2005)**

- **Deviant sexual orientation and antisocial attitudes are the most important predictors of recidivism**
- **Less important predictors are sexual preoccupations, unstable lifestyle/ impulsivity, offense supporting attitudes and problems in intimate relations**
- **Stress, denial of the sexual offense, lack of empathy or limited motivation for treatment had hardly or no relation to recidivism**

# Effects of treatment programs

# **Relapse prevention model (Pithers et al., 1988)**

**Relapse is a process with a number of successive steps**

- feeling moody or brooding**
- fantasizing about deviant sexual behavior**
- distorted cognitions**
- making plans for a sexual offense**
- masturbating**
- committing the offense**

# Designs

- **Relation of treated versus non-treated sexually violent offenders to recidivism**
- **Relation of behavior change as result of treatment to recidivism**
- **At first, programs were based on risk factors which had contributed to the committed sexual offense (relapse prevention model), later on psychological risk factors who contribute to the continuation of recidivism risk (risk-need-responsivity model)**
- **Conclusion: treatment results in a significant but modest reduction of recidivism risk**

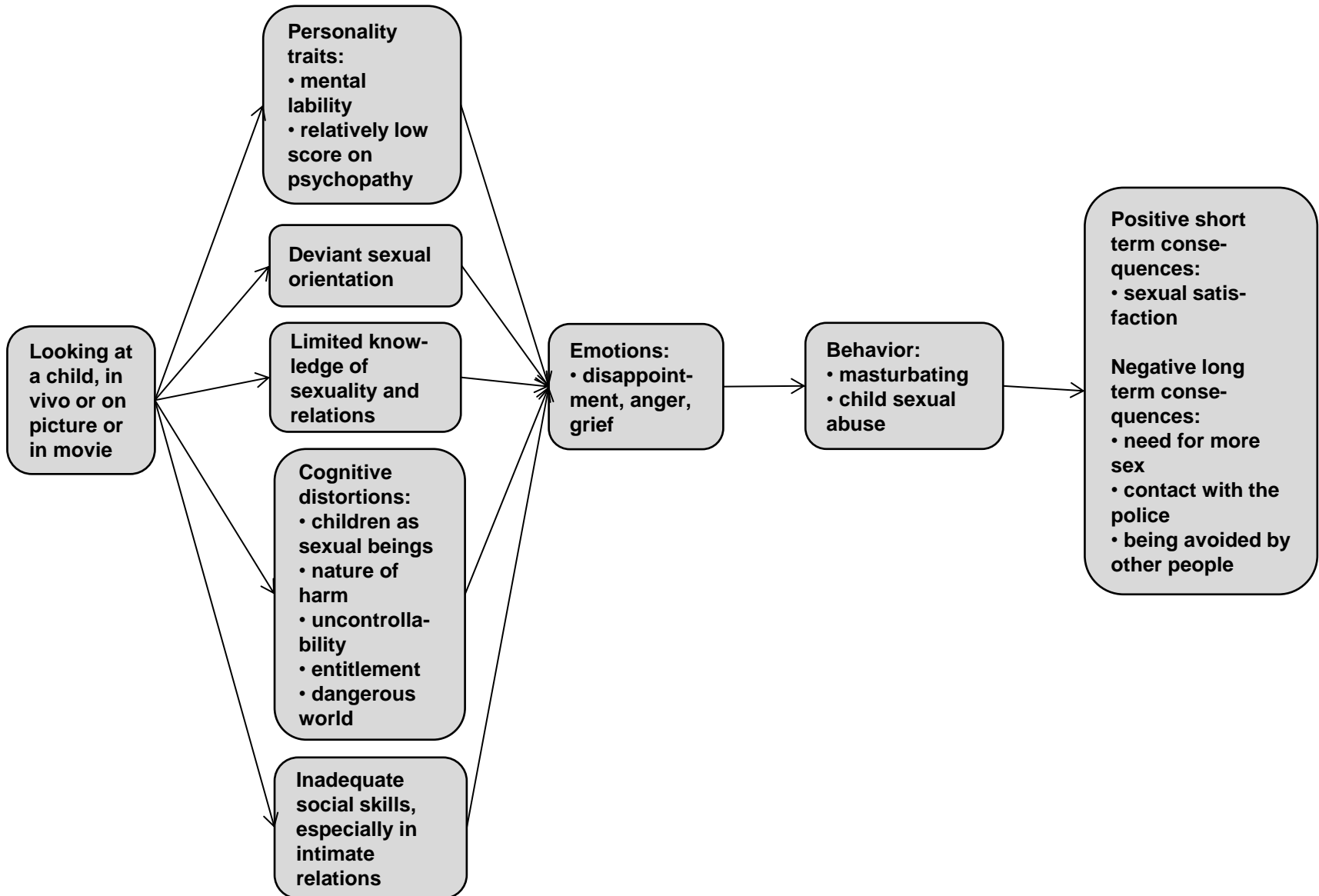
## Comments

- **No subdivision in relevant subgroups**
- **No holistic theory with functional analyses for the several problem behaviors of the individual participants**
- **No public and detailed treatment manual**
- **No clear quality standard for trainers**
- **No information about supervision of trainers**

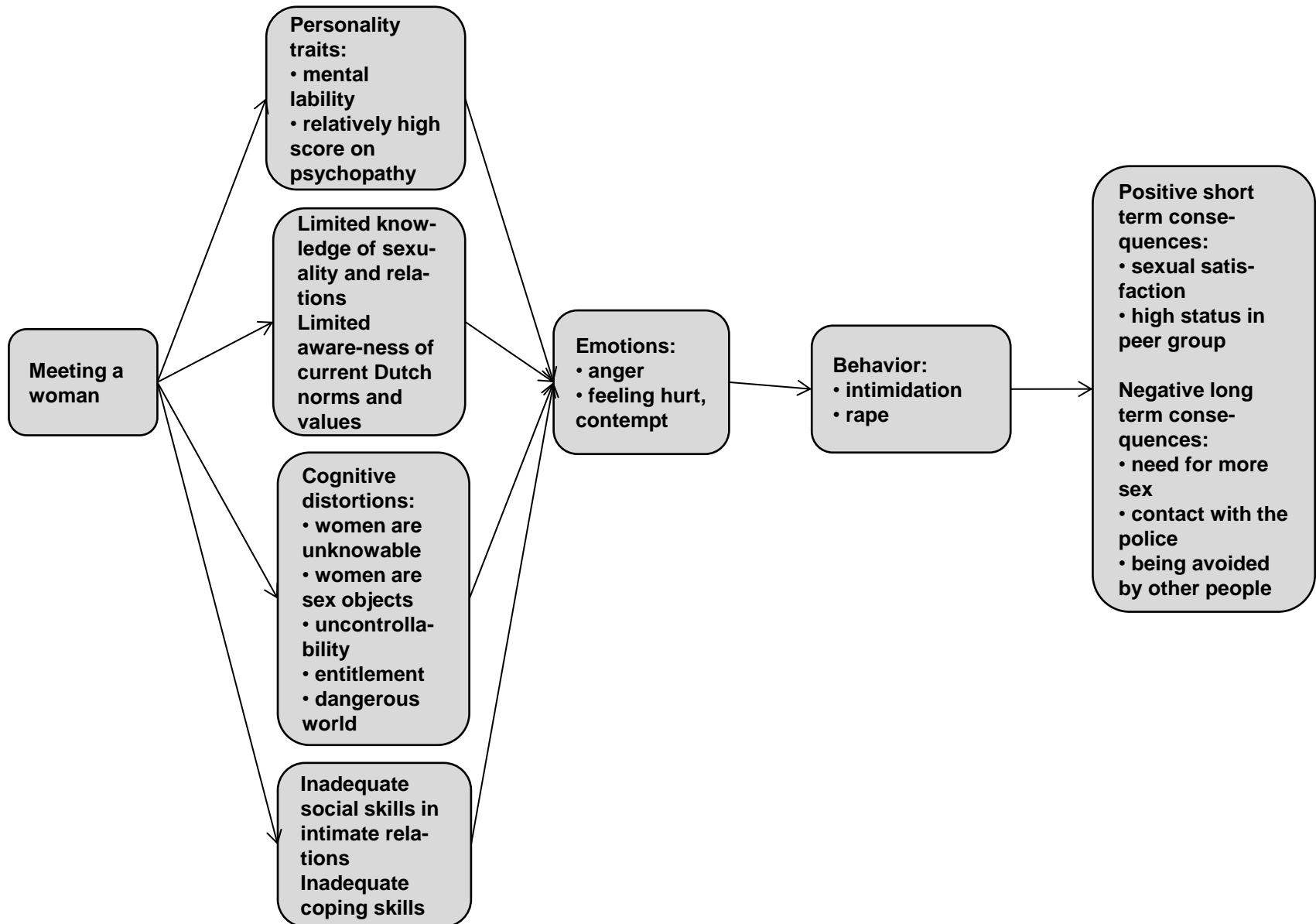
# **Treatment program for Dutch sexually violent forensic psychiatric inpatients**



# Model of child abuse



# Model of rape



# **Cognitive behavioral program for sexually violent inpatients**

## **Content**

- **Assessment**
- **Basic training for child abusers and rapists separately:**
  - **Emotion regulation and social skills training for child abusers**
  - **Aggression management training for rapists**
- **Specific training for child abusers and rapists together:**
  - **Psycho-education**
  - **Cognitive distortions**
  - **Prosocial skills**
- **Management of risk situations**
- **Evaluation**

# **Cognitive behavioral program for sexually violent inpatients (continued)**

## **Conditions**

- **Manual for trainers and work book for patients**
- **Trainers are psychologists, at least one of them is a health care psychologist who is member of the Dutch society for cognitive-behavioral therapy (VGCT)**
- **Supervisor is a clinical psychologist who is also a member of the VGCT**
- **Staff on the ward is qualified and informed about the targets and the content of the program**

# **Cognitive behavioral program for sexually violent inpatients (continued)**

## **Additional interventions on indication**

- **Individual sessions for additional assessment or improvement of motivation**
- **Treatment of other problem behaviors such as depression or substance abuse.**
- **Pharmacological treatment**

# **Part 3: Course of inpatient behavior during the first three years of stay**

# Method

## Design

**All patients were measured bi-annually with the Observation Scale for Aggressive Behavior (OSAB; Hornsveld, Nijman, Hollin, & Kraaimaat, 2007)**

**In addition, data were collected from self-report questionnaires such as the NEO-FFI (Hoekstra, Ormel, & De Fruyt, 1996) and the Trait Anger subscale of the Spielberger (1980) *State-Trait Anger Scale* (STAS; Van der Ploeg, Defares, & Spielberger, 1982)**



## Measurement instruments

The **Observation Scale for Aggressive Behavior (OSAB)** measures behavior on the ward. The scale comprises 40 items spread over the subscales Irritation/Anger, Anxiety/Gloominess, Aggressive Behavior, Prosocial Behavior, Antecedent, and Sanction. The staff scores the behavior of the inpatients in the preceding week on a four-point scale with 1 = “no,” 2 = “seldom,” 3 = “occasionally,” and 4 = “frequently.”

In this study, three subscales were used: Irritation/anger (5 items), Aggressive behavior (10 items), and Prosocial behavior (12 items).

## Measurement instruments (continued)

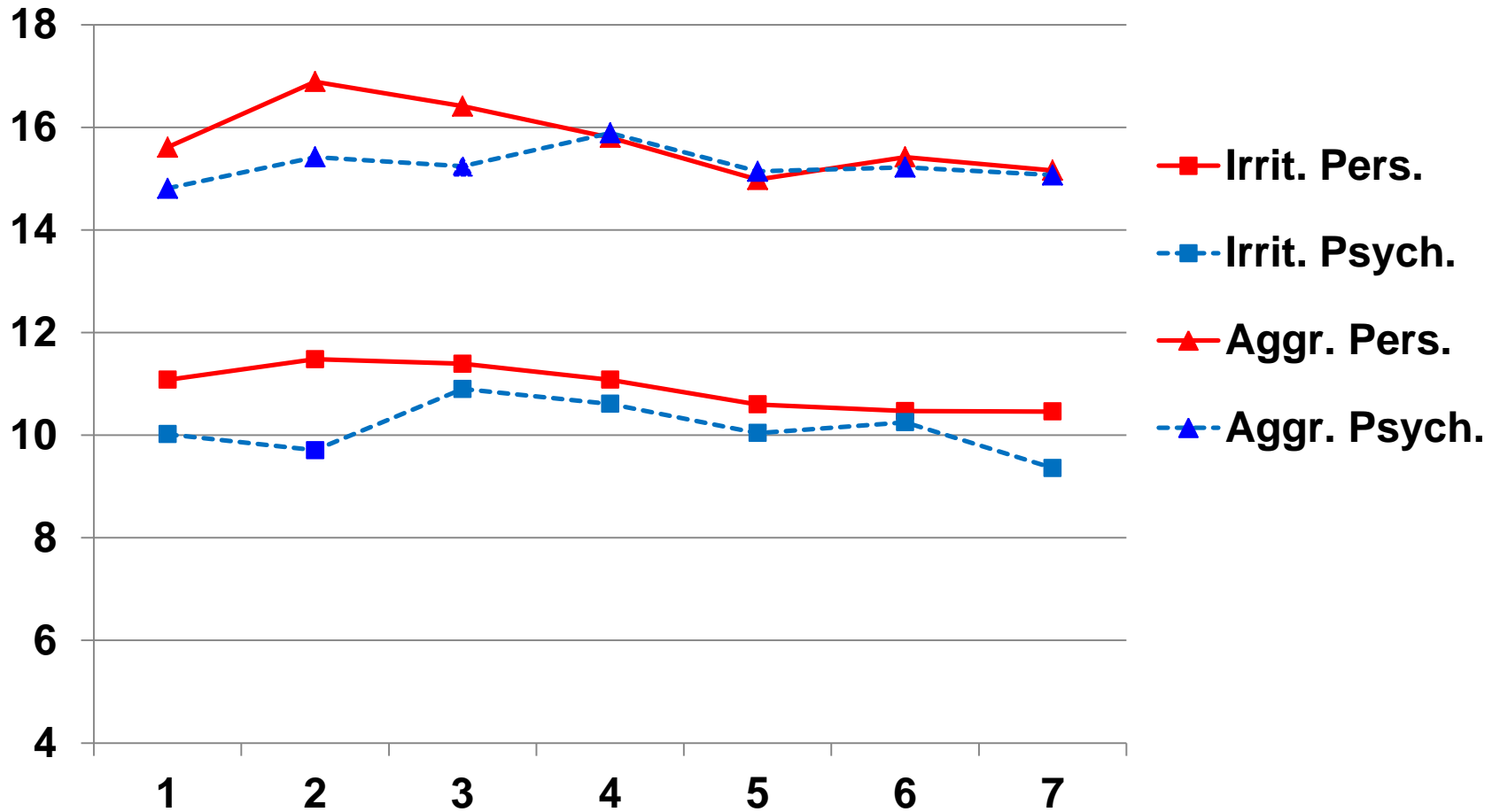
The **NEO-FFI (Hoekstra, Ormel, & De Fruyt, 1996)** includes 60 items and measures the Big Five personality domains of neuroticism, extraversion, openness, agreeableness, and conscientiousness. Items are score on a five-point scale ranging from “entirely disagree” to “entirely agree.” In the present study, we were interested only in the neuroticism and agreeableness scales because these traits are considered as relevant in the context of aggression (Hornsveld, Nijman, & Kraaimaat, 2008).

## Measurement instruments (continued)

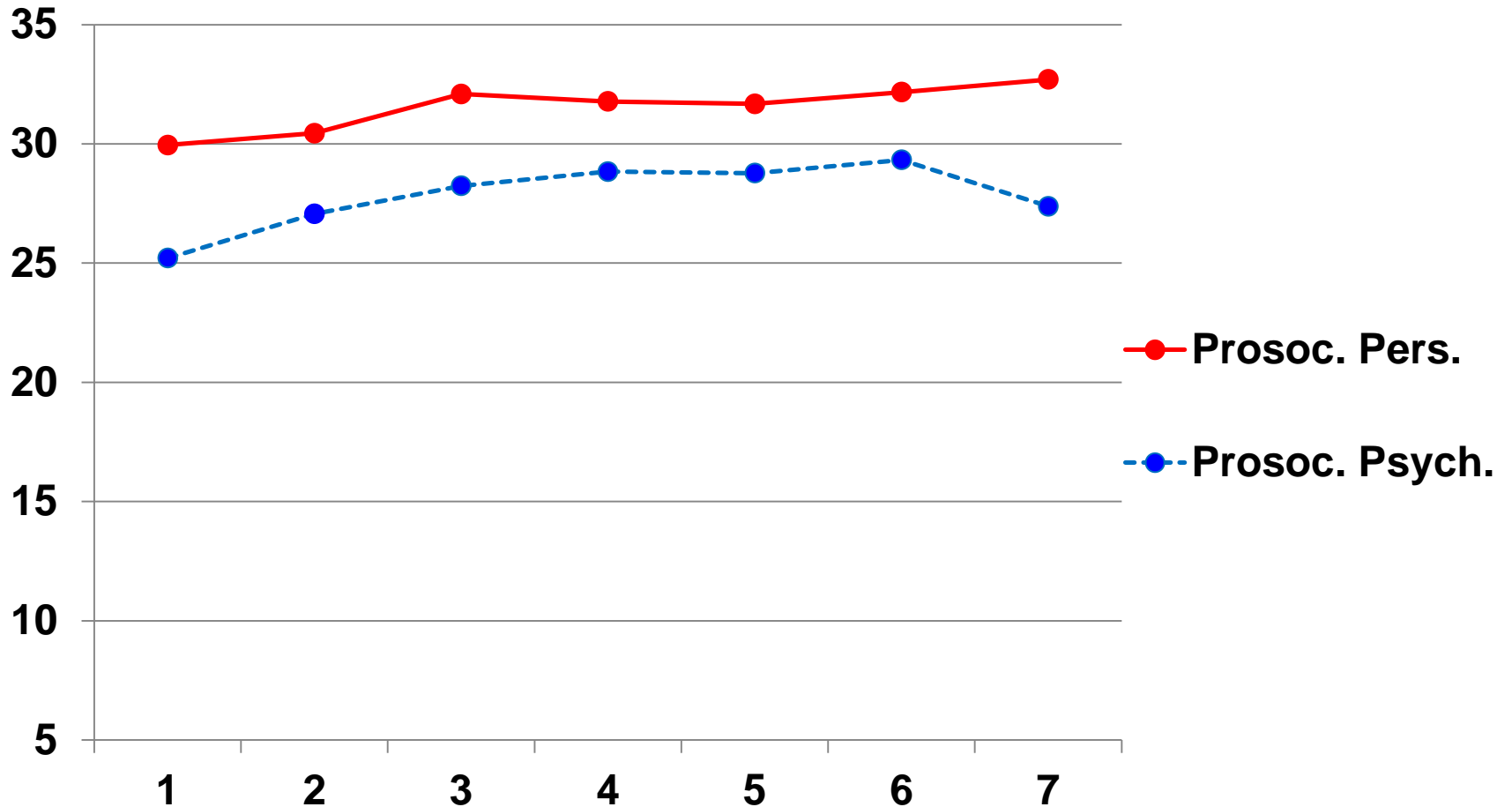
The **Trait Anger subscale of the Spielberger (1980) State-Trait Anger Scale (STAS; Van der Ploeg, Defares, & Spielberger, 1982)** consists of 10 items and was used as a measure of the general disposition to anger. Participants rate each item about how they generally feel (e.g., “I am quick tempered.”) by using a four-point scale: 1 = “almost never,” 2 = “sometimes,” 3 = “often,” and 4 = “almost always.”

# Results

**Figure 1. Course of irritation/anger and aggressive behavior during the first three years of stay**



**Figure 2. Course of prosocial behavior during the first three years of stay**



**Table 5. Change scores on the OSAB  
(measurement 1 vs. measurement 7)**

OSAB sub- scale	Personality disordered patients			Chronically psychotic patients		
	Measure- ment 1	Measure- ment 7	Ef- fect size	Measure- ment 1	Measure- ment 7	Ef- fect size
	M (SD)	M (SD)	d	M (SD)	M (SD)	d
Irrit./Anger	10.57 (3.31)	10.46 (3.04)	.057	9.60 (4.03)	9.36 (3.57)	.113
Aggr. beh.	14.93 (5.38)	15.16 (4.67)	.065	15.02 (6.15)	15.07 (5.79)	.015
Prosoc. beh.	29.50 (8.39)	32.70 (6.94)	<b>.650</b>	24.22 (7.99)	27.38 (7.60)	<b>.646</b>

**Table 4. Correlations assessed shortly after admittance**

Measure	Factors or subscales	Personality disordered patients			Chronically psychotic patients		
		Irritation/ Anger	Aggressive behavior	Pro-social behavior	Irritation/ anger	Aggressive behavior	Pro-social behavior
PCL-R	Psychp	<b>.236**</b>	<b>.208**</b>	.016	.169	.052	.080
	Interper	.097	.069	.057	.192	.056	.089
	Affect	.177*	.122	-.051	.078	-.012	.073
	Lifest	<b>.207**</b>	<b>.199*</b>	-.001	<b>.245*</b>	.160	.034
	Antisoc	<b>.290**</b>	<b>.274**</b>	.091	.051	-.030	.039
NEO-FFI	Neurot	<b>.199*</b>	<b>.209*</b>	-.107	.059	-.001	.161
	Agree	-.097	-.160	.093	-.111	-.127	-.099
STAS	Anger	.140	.214*	.023	.157	.182	.078



## **Table 6. *Outflow of patients***

<b>Patients</b>	<b>Percentage</b>	<b>Age</b>	<b>PCL-R</b>	<b>Aggression on the ward</b>
<b>7 measurements</b>	<b>56.4</b>	<b>36.97 (10.27)</b>	<b>20.49 (7.97)</b>	<b>14.97 (5.66)</b>
<b>3 year of stay but no 7 measurements</b>	<b>22.1</b>	<b>39.38 (11.78)</b>	<b>17.68 (7.94)</b>	<b>15.92 (4.60)</b>
<b>Reselection</b>	<b>9.8</b>	<b>36.95 (8.89)</b>	<b>22.63 (7.86)</b>	<b>16.16 (5.23)</b>
<b>Long-stay</b>	<b>2.9</b>	<b>55.00 (8.46)</b>	<b>23.40 (7.57)</b>	<b>18.40 (2.61)</b>
<b>Finishing TBS or leave</b>	<b>3.4</b>	<b>41.29 (11.94)</b>	<b>17.00 (8.25)</b>	<b>14.14 (2.48)</b>
<b>Others</b>	<b>5.4</b>	<b>35.89 (6.31)</b>	<b>25.67 (9.35)</b>	<b>15.67 (3.20)</b>

# Conclusions

- **No relation between length of stay and mood, aggressive behavior, and sanctions.**
- **However, social skills are related to length of stay.**
- **Personality disordered patients exhibit more anger, more aggressive behavior, and more prosocial behavior than chronic psychotic patients.**
- **Patients with relatively high scores on the**
- **PCL-R exhibit more anger, more aggressive behavior, but also more prosocial behavior than patients with relatively low scores on the PCL-R.**
- **In general, base rates of negative behaviors are low.**

# Recommendations

- **Outcome of treatment programs should not be based on negative but on positive behavior.**
- **Limited validity of risk assessment instruments if they are based on negative behaviors.**
- **Protective factors, which refer to positive behavior, can contribute considerably to a better prediction of recidivism risk (SAPROF).**
- **There is a group of inpatients for which a stay longer than three or four years has no incremental value.**