Treatment of Dutch violent forensic psychiatric in- and outpatients

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“Models” for violent behavior

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

Good Lives Model (Ward & Marshall, 2004)

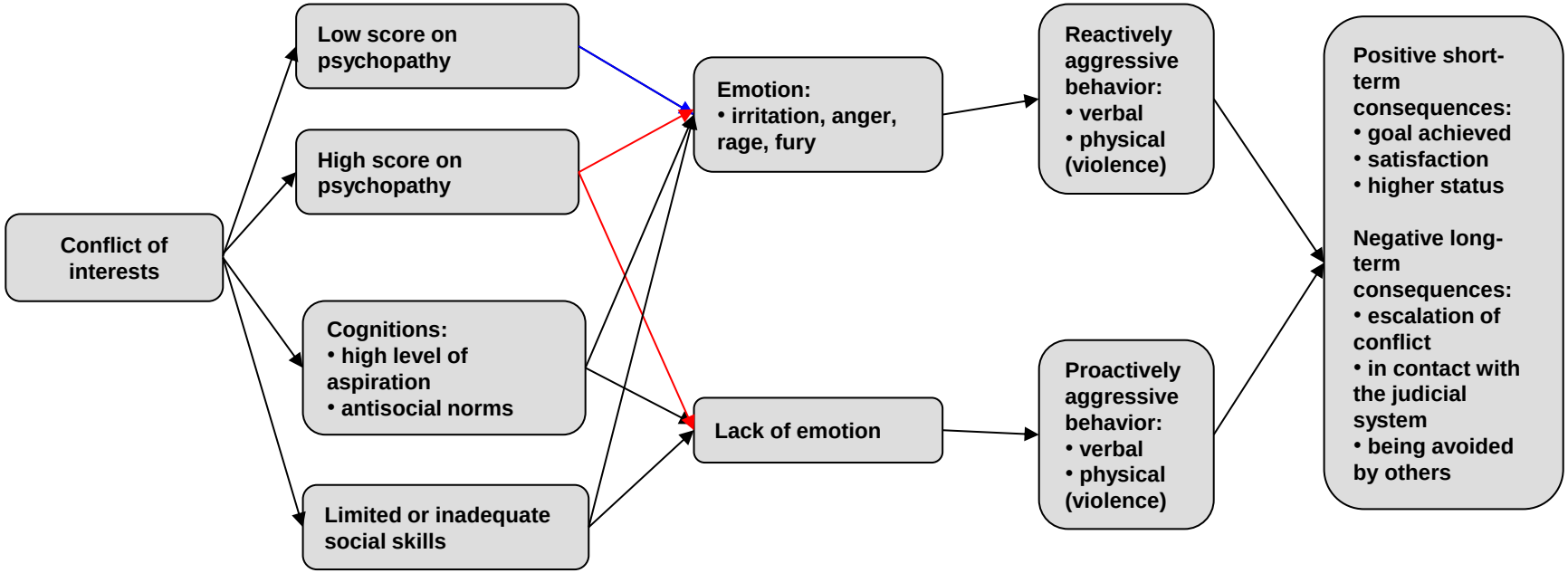
Ten good live goals;

- **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**

Model for aggressive behavior



Summary psychological characteristics of forensic psychiatric in- and outpatients

- **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**

Aggression Replacement Training (ART)

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)**

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**

Outpatient ART and design

Outpatient ART

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 had to complete homework assignments

Design

Three measurement moments:

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

Results

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	*M (SD)*		Effect
		Intake	Pre	*d*
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	*M (SD)*		Effect
		Intake	Pre	*d*
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**

Behavior of Dutch violent forensic psychiatric inpatients on the ward

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Observation Scale for Aggressive Behavior (OSAB; Hornsveld et al., 2007)

Three of the six subscales:

- **Irritation/anger (5 items)**
- **Aggressive behavior (10 items)**
- **Prosocial behavior (12 items)**

Scoring: Behavior on the ward during last week

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

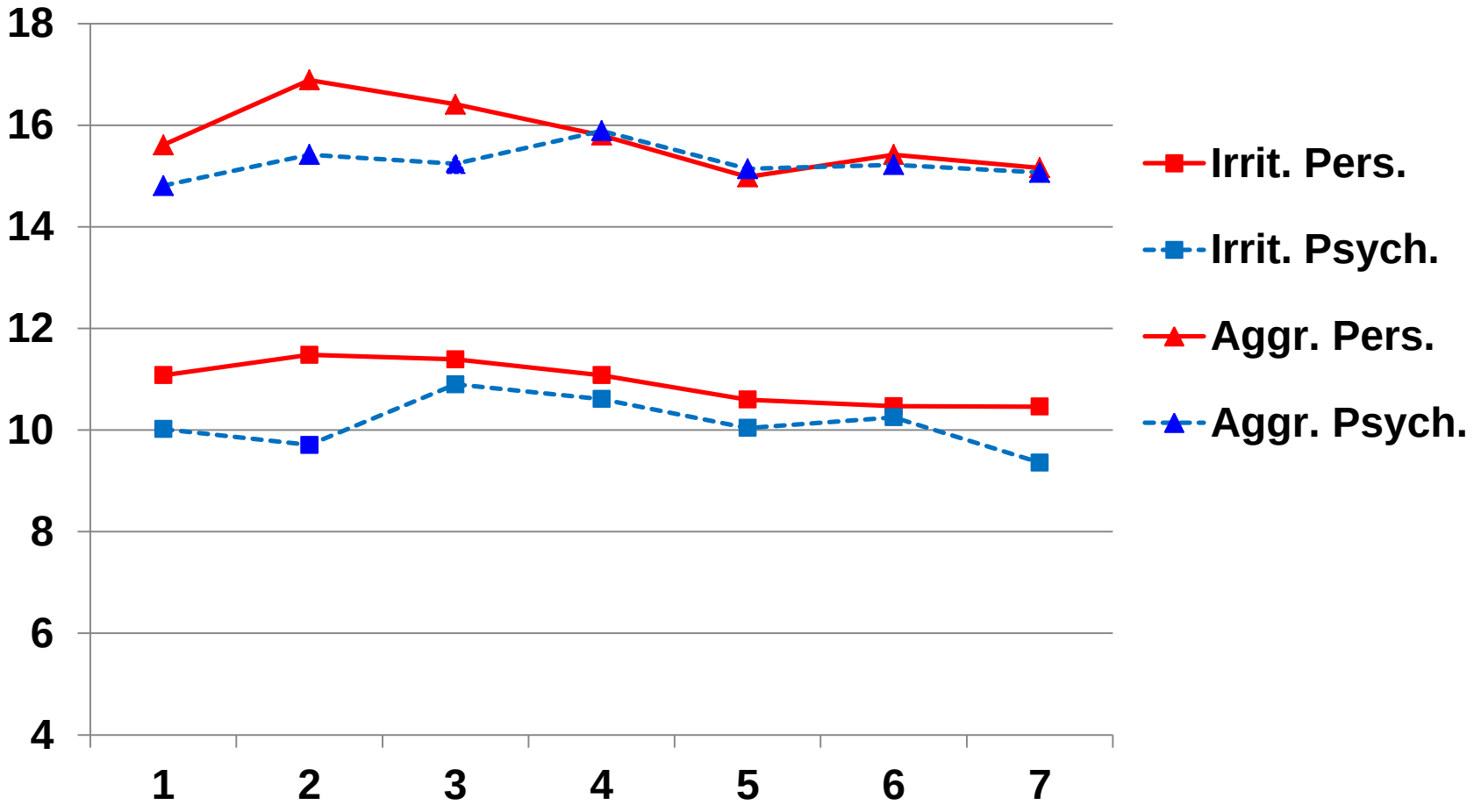

Figure 2. *Course of prosocial behavior during the first three years of stay*

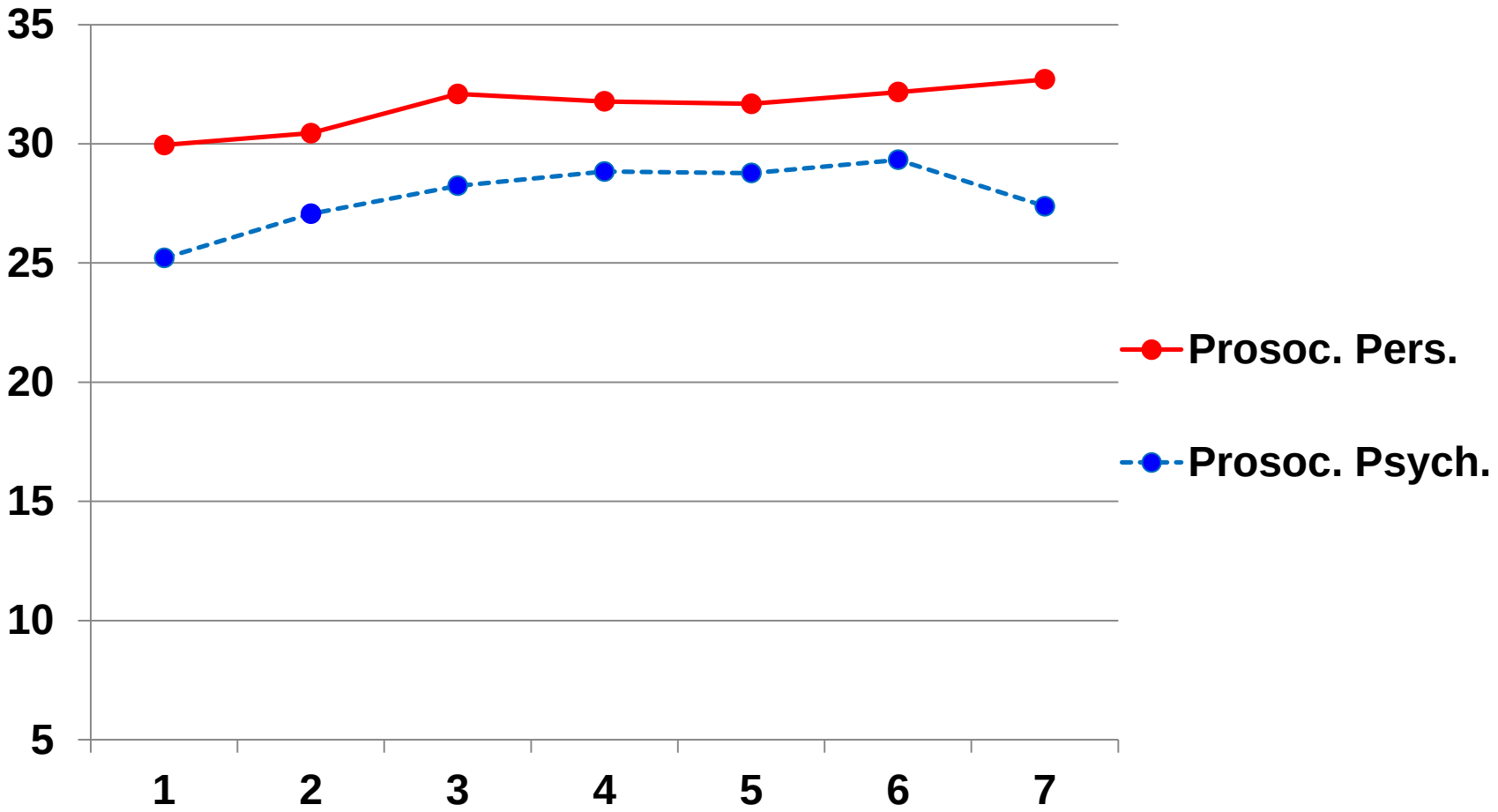

Table 5. *Change scores on the OSAB (measurement 1 vs. measurement 7)*

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)	.650	24.22 (7.99)	27.38 (7.60)	.646

Table 4. *Correlations assessed shortly after admittance*

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

Table 6. *Outflow of patients*

Patients	Percen-tage	Age	PCL-R	Aggression on the ward
7 measurements	56.4	36.97 (10.27)	20.49 (7.97)	14,97 (5.66)
3 year of stay but no 7 measurements	22.1	39.38 (11.78)	17.68 (7.94)	15.92 (4.60)
Reselection	9.8	36.95 (8.89)	22.63 (7.86)	16.16 (5.23)
Long-stay	2.9	55.00 (8.46)	23.40 (7.57)	18.40 (2.61)
Finishing TBS or leave	3.4	41.29 (11.94)	17.00 (8.25)	14.14 (2.48)
Others	5.4	35.89 (6.31)	25.67 (9.35)	15.67 (3.20)

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.**

Discussion and recommendations

- **Outcome of treatment programs should not be based on negative but on positive behavior.**
- **Limited validity of risk assessment instruments if they our 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 of four years has no incremental value.**

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