

Criminogenic needs of Dutch violent forensic psychiatric in- and outpatients

Ruud H.J. Hornsveld (Ph.D.), Erasmus University
Medical Center

r.hornsveld@tiscali.nl

www.Agressiehanteringstherapie.nl

Contents

Part 1

- **New measurement instruments**
- **Dynamic criminogenic needs**
- **Aggression Replacement Training**

Part 2

- **Course of prosocial behavior during the first three years of stay**
- **Predictors of behavior on the ward**
- **Consequences for treatment policy**

New measurement instruments

Evaluation of existing measurement instruments

Problems

- Self-report questionnaires mostly developed using college or university students
- No investigation on the psychometric properties of these questionnaires in Dutch forensic psychiatric in- and outpatients
- Observation scales about aggression mostly developed for general psychiatric patients in crisis

Findings

- Questionnaires are reliable and valid when used for Dutch forensic psychiatric patients, but most divisions in subscales do not fit

Measurement instruments for program evaluation

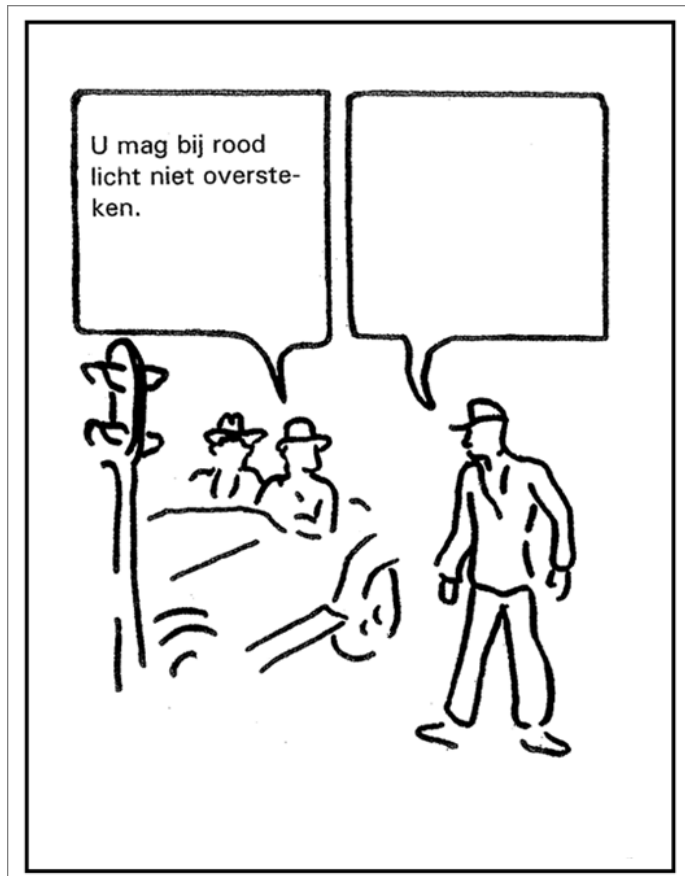
Current instruments

- Aggression Questionnaire (AQ; Hornsveld, Muris, Kraaimaat, & Meesters (2009)
- Novaco Anger Scale-Provocation Inventory (NAS-PI; Hornsveld, Muris & Kraaimaat (2011)
- Bermond Vorst Alexithymia Questionnaire (BVAQ; Hornsveld & Kraaimaat, 2012)

New instruments

- Adapted version of Rosenzweig Picture-Frustration Study (PFS-AV): Hostility
- Observation Scale for Aggressive Behavior (OSAB): Behavior of forensic psychiatric inpatients on the ward

Adapted Version of Rosenzweig Picture-Frustration Study (PFS-AV): Hostility



You are not allowed to cross the street when the light is red.

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

Six subscales:

- **Irritation/anger (5 items)**
- **Anxiety/Gloominess (4 items)**
- **Aggressive behavior (10 items)**
- **Prosocial behavior (12 items)**
- **Antecedents (6 items)**
- **Sanctions (3 items)**

Scoring: Behavior on the ward during last week

Scores of subscales

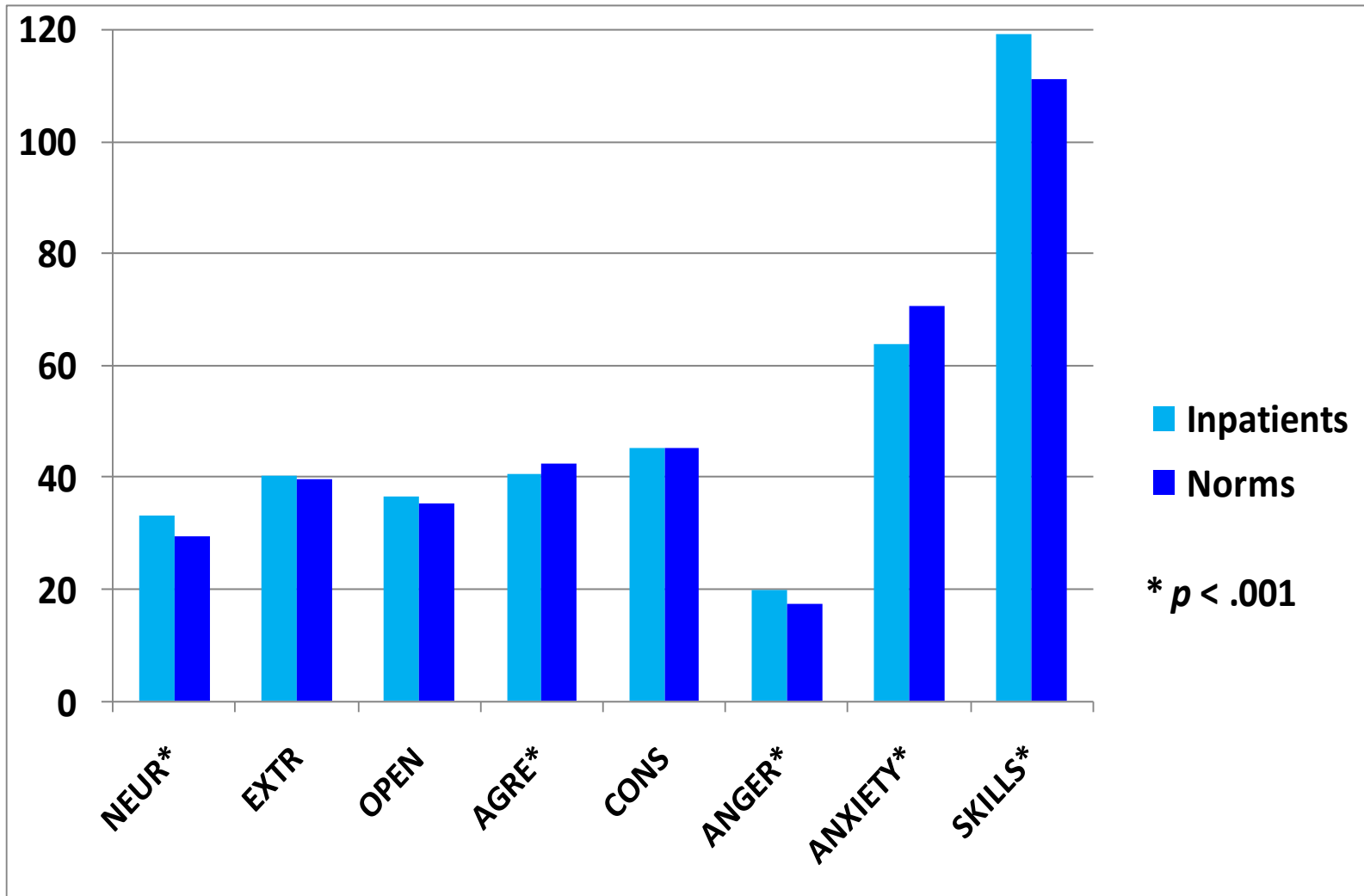
Scoring of items: 'no' = 1, 'seldom' = 2, 'occasionally' = 3, and 'frequently' = 4

Range of subscale scores:

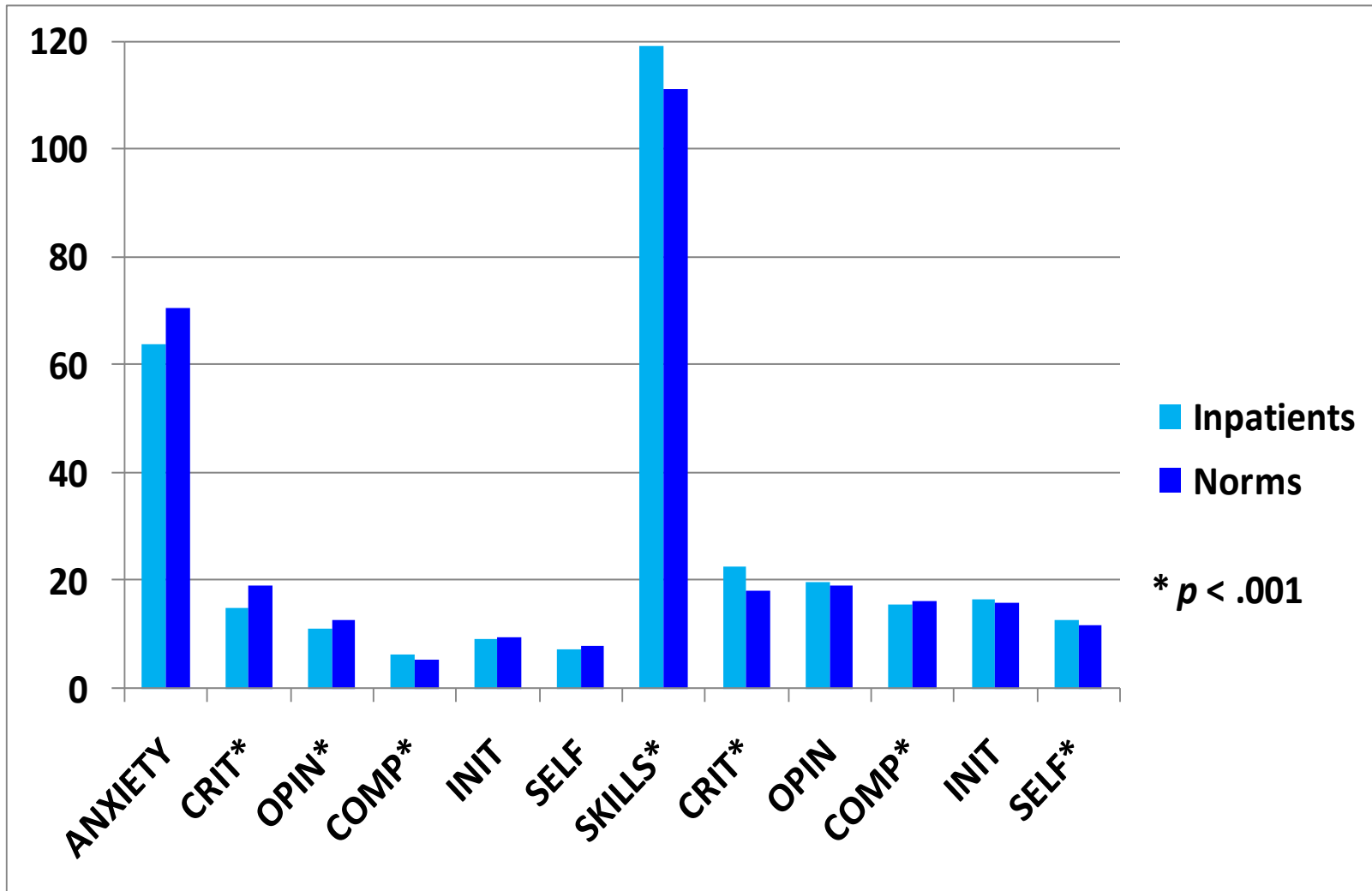
- **Irritation/anger: 5 - 20**
- **Anxiety/Gloominess: 4 - 16**
- **Aggressive behavior: 10 - 40**
- **Prosocial behavior: 12 - 48**
- **Antecedents: 6 - 24**
- **Sanctions: 3 -13**

Dynamic criminogenic needs of forensic psychiatric patients

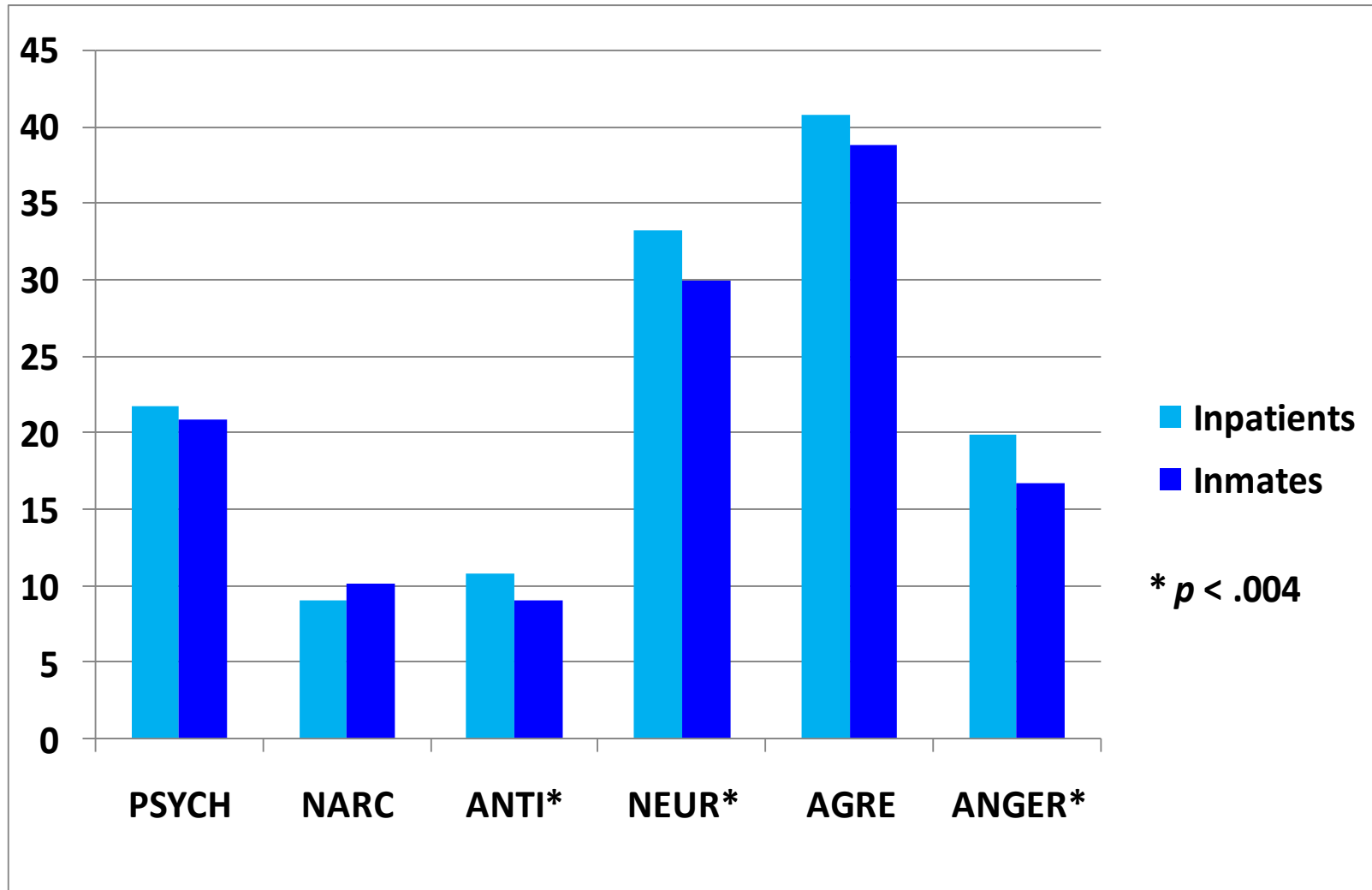
Inpatients versus norms ($N = 136$)



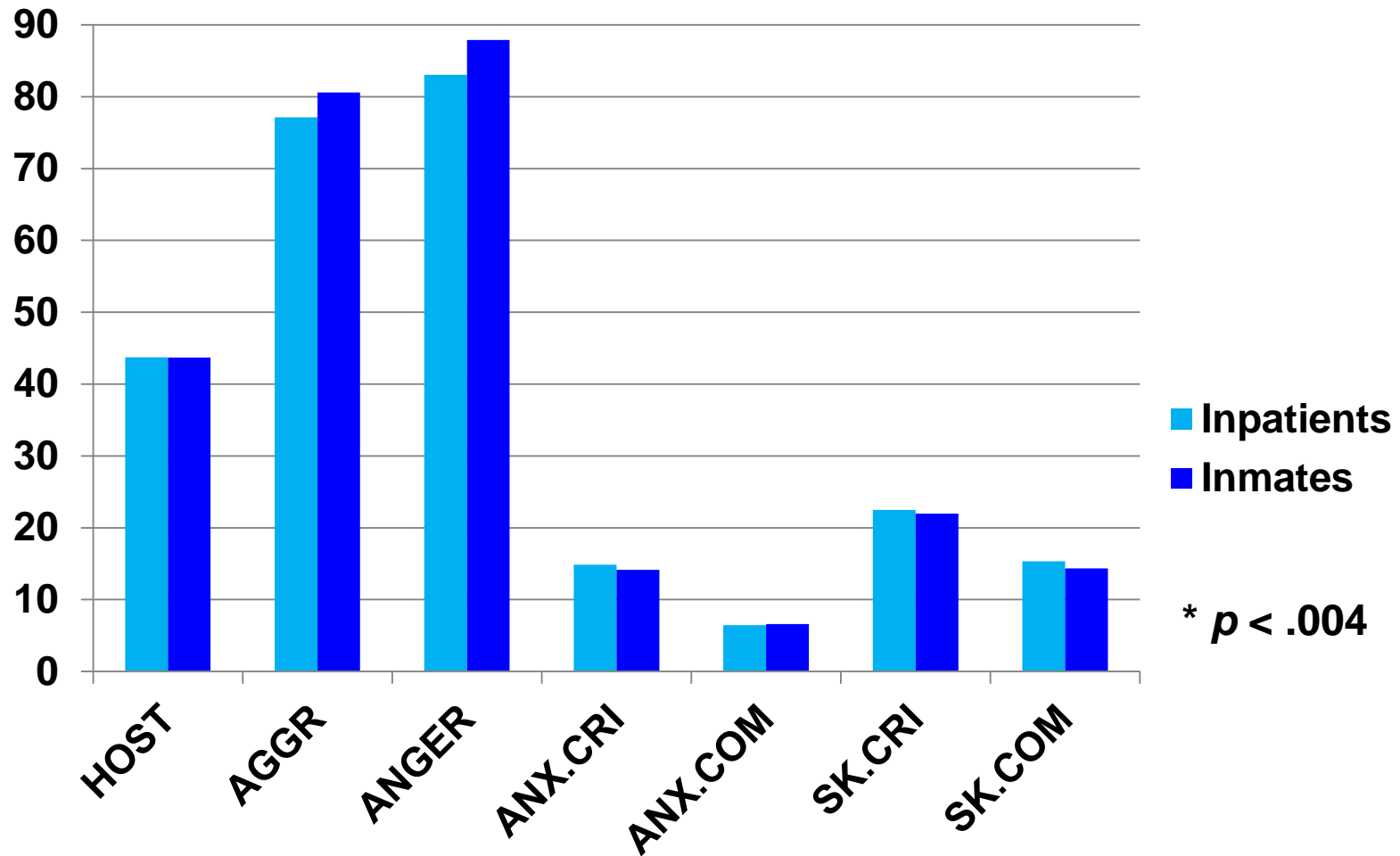
Inpatients versus norms ($N = 136$)



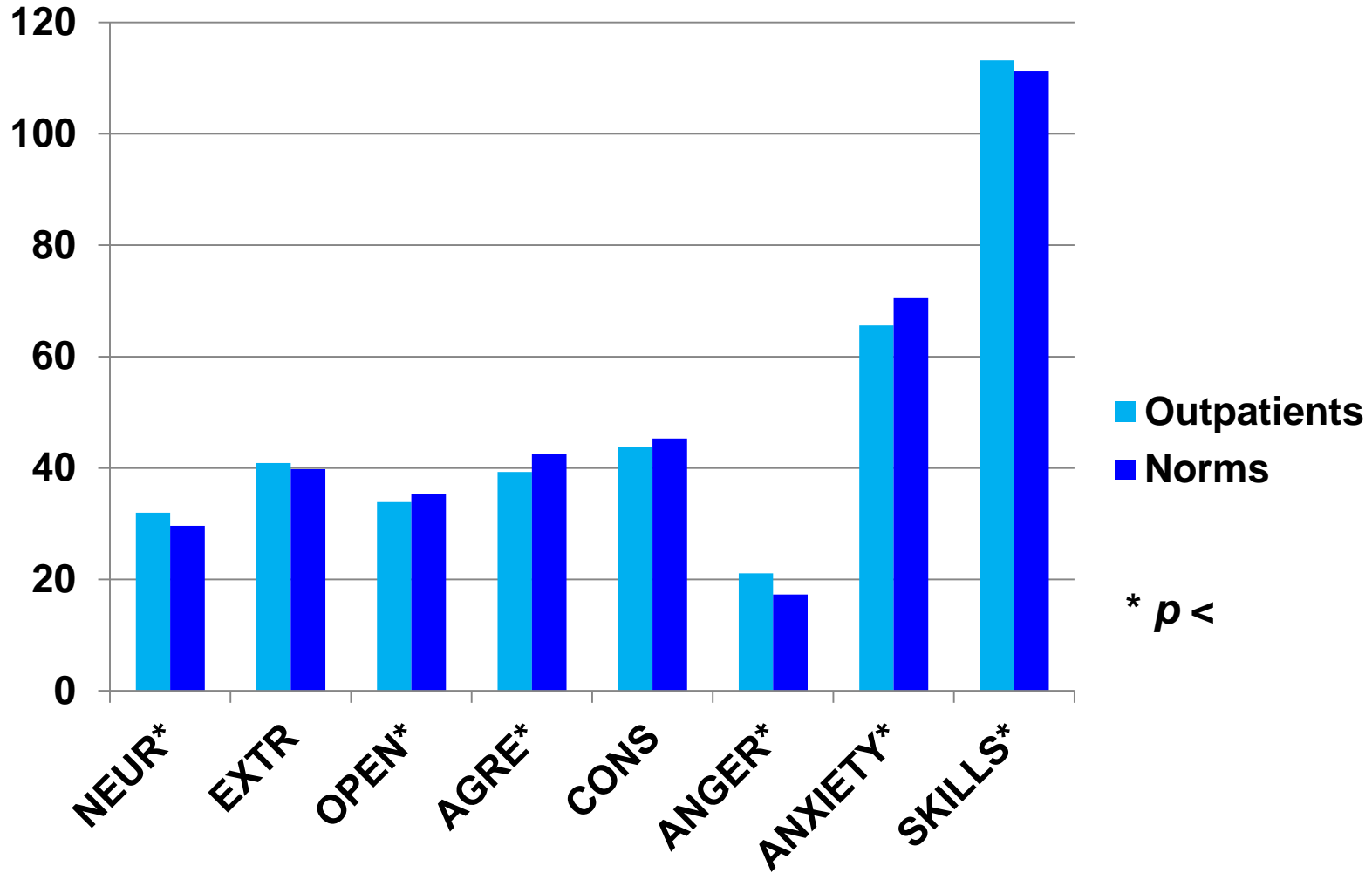
Inpatients ($N = 136$) versus detainees ($N = 100$)



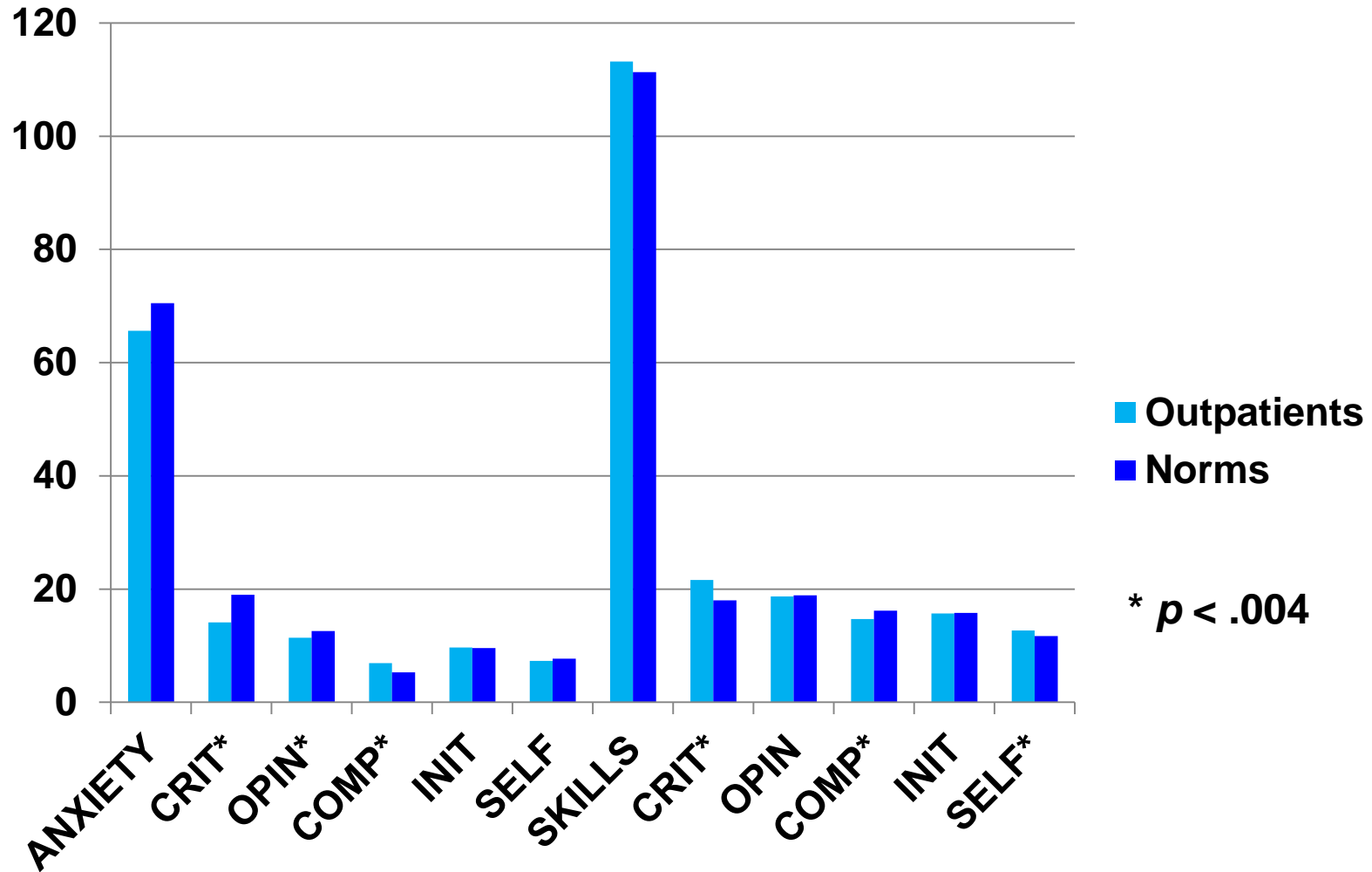
Inpatients ($N = 136$) versus detainees ($N = 100$)



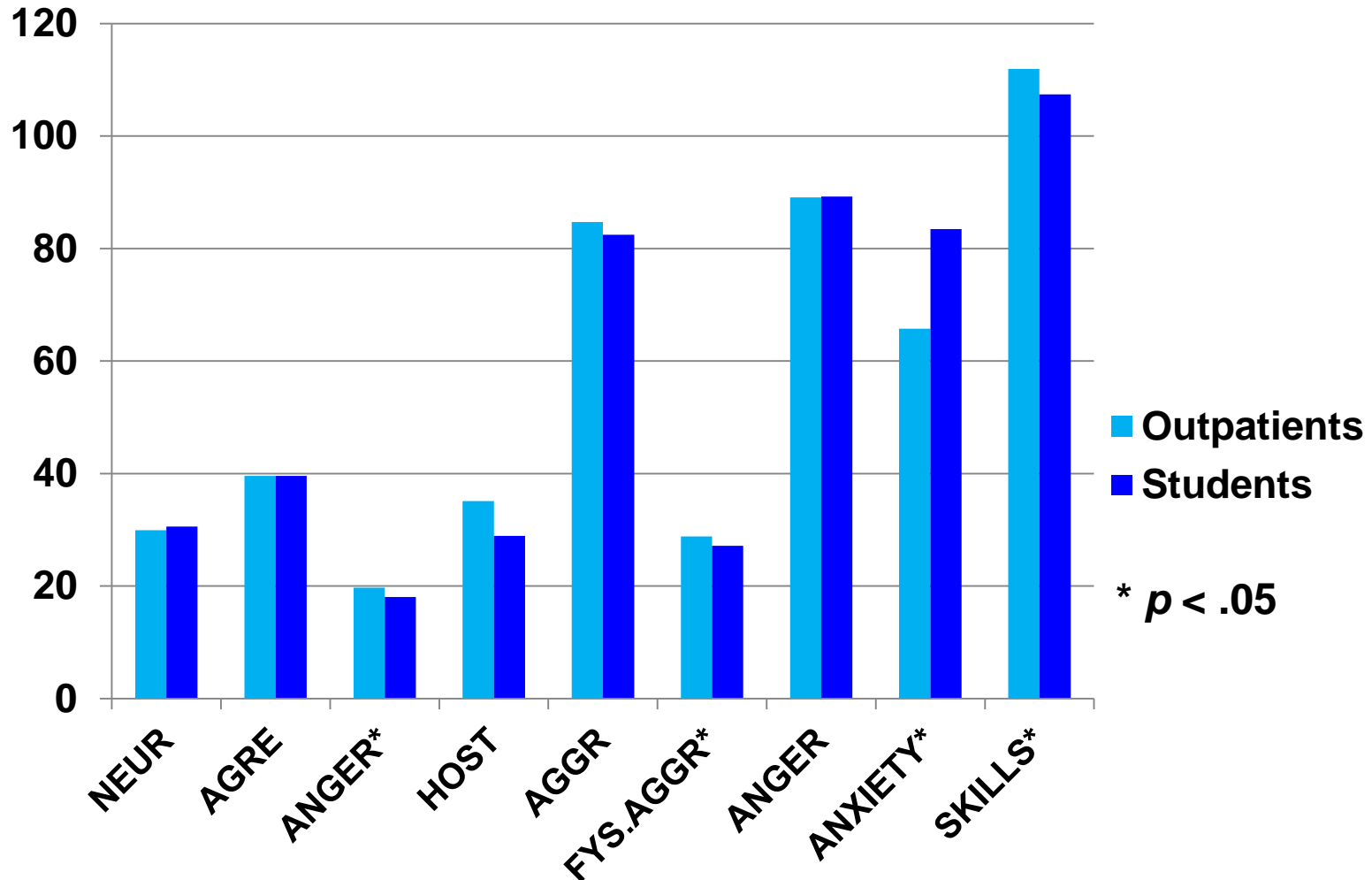
Outpatients versus norms ($N = 200$)



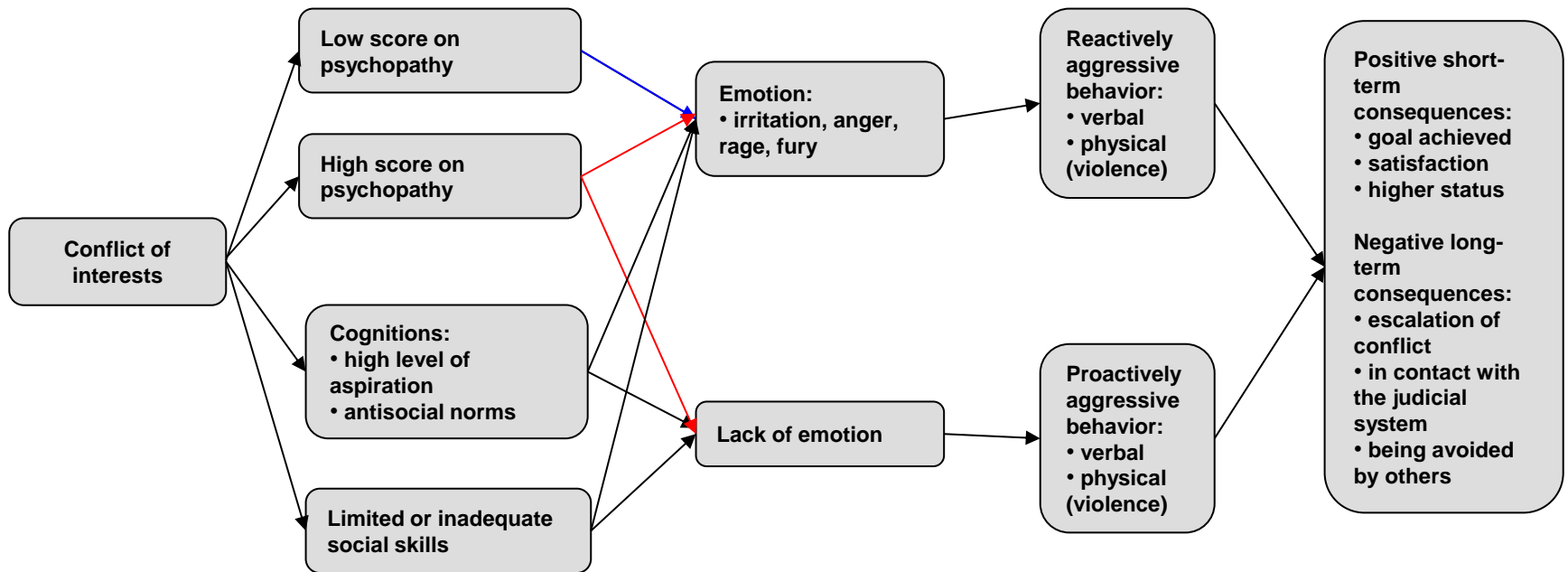
Outpatients versus norms (N = 200)



Young outpatients ($N = 123$) versus male students ($N = 160$)



Model for aggressive behavior



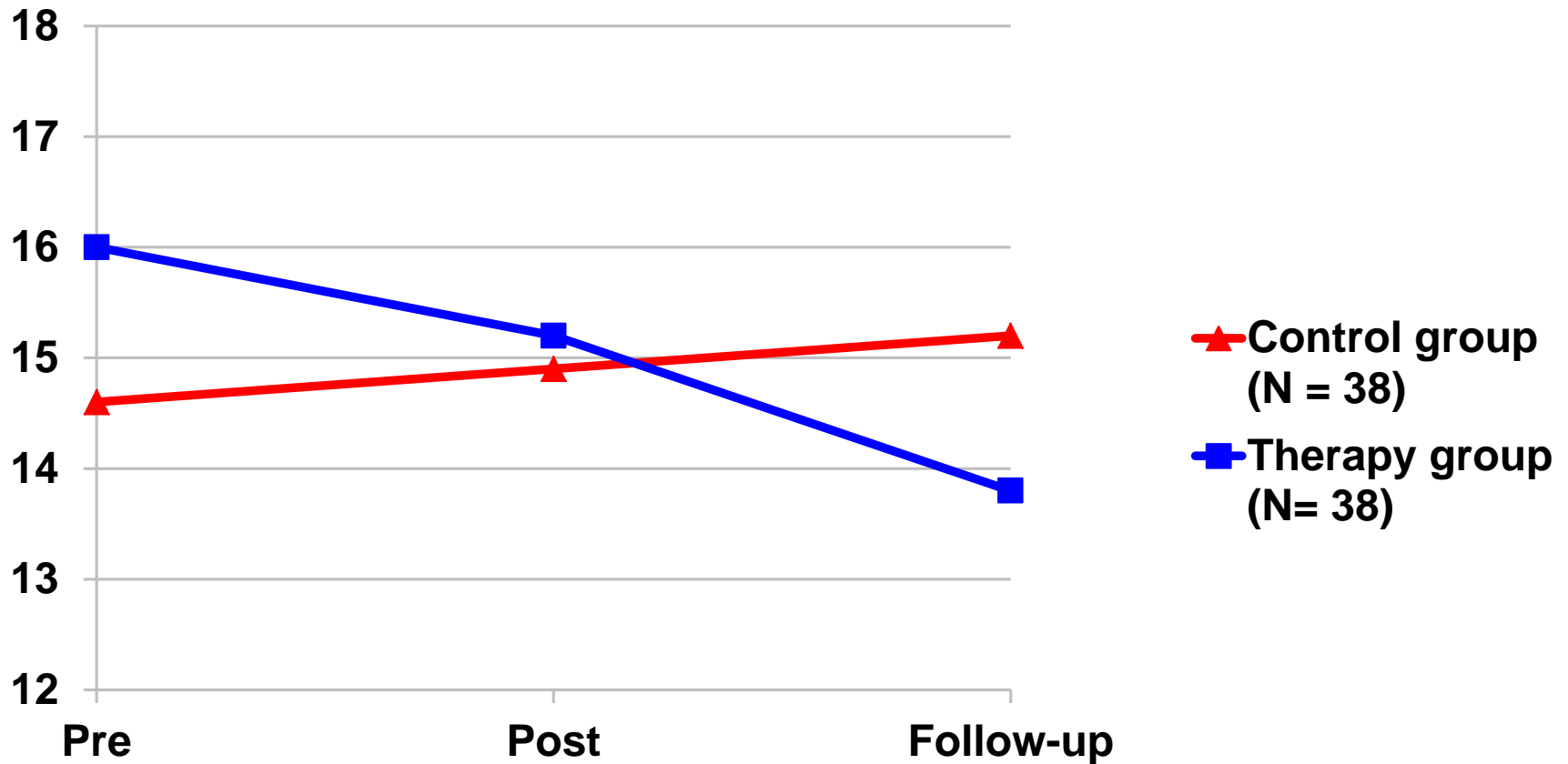
Aggression Replacement Training (ART)

Adaptation of Aggression Replacement Training (ART)

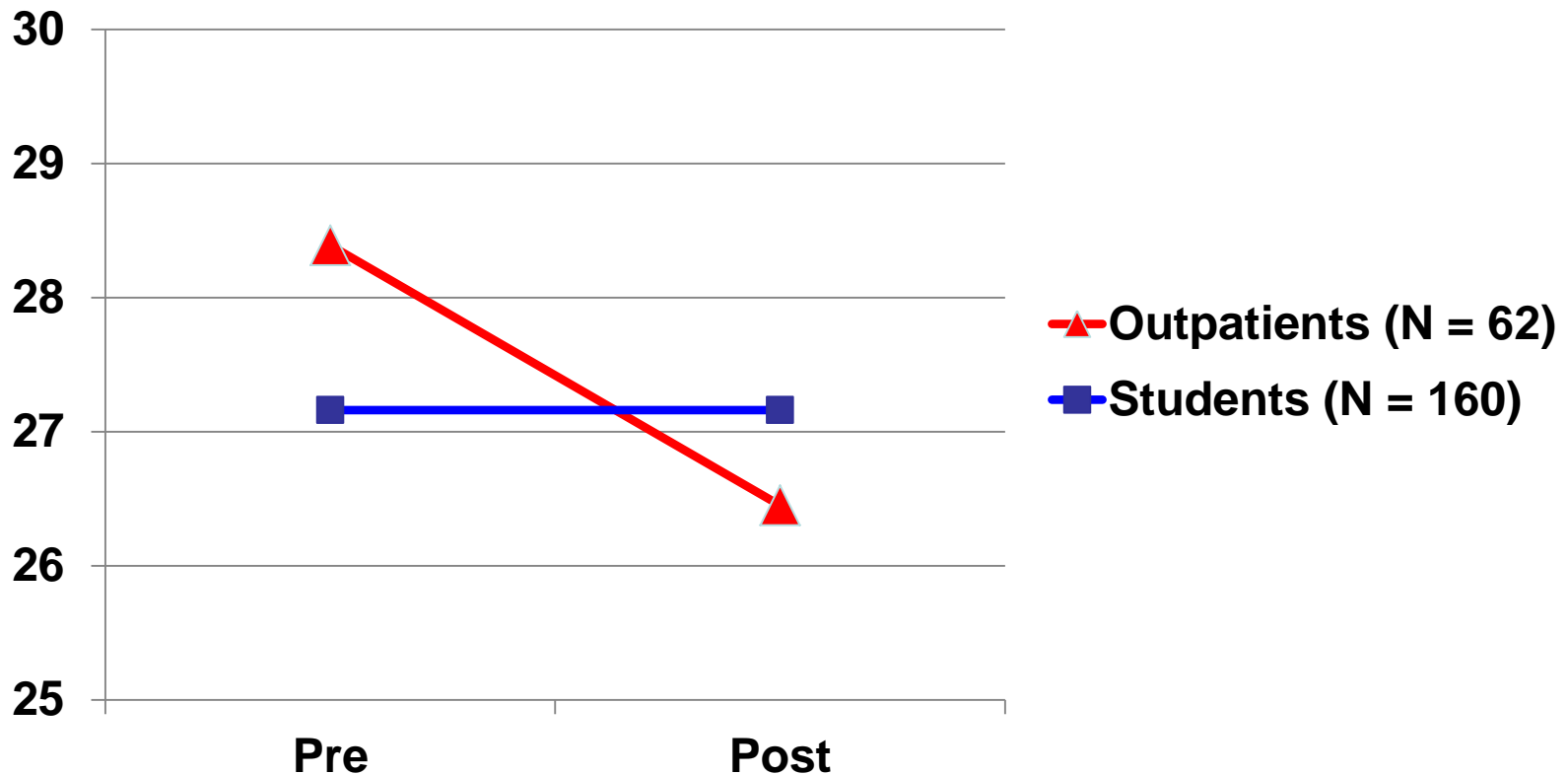
Framework

- **Anger management (session 1-5)**
 - **Social skills (session 6-10)**
 - **Moral reasoning (session 11-15)**
 - **Self-regulation skills (session 6-15)**
 - **Follow-up, evaluation, and report**
-
- **Manual for trainers**
 - **Portfolio for patients**

Inpatients: aggressive behavior, measured with the OSAB



Outpatients: Physical aggression, measured with the AQ



Behavior of Dutch violent forensic psychiatric inpatients on the ward

Ruud H.J. Hornsveld (Ph.D.), Erasmus University
Medical Center

r.hornsveld@tiscali.nl

www.Agressiehanteringstherapie.nl

Literature

- **PCL-R scores relate only modestly with disruptive behavior during hospitalization**
 - **Hildebrand, De Ruiter, & Nijman (2004): PCL-R and incidents**
- **Stay in a forensic psychiatric hospital can result in a small improvement of dynamic criminogenic needs**
 - **Belfrage & Douglas (2002): HCR-20**
 - **De Jonge, Nijman, & Lammers (2009): HKT-30**
 - **Nijman, De Kruyk, & Van Nieuwenhuizen (2004): REHAB**
 - **Chakhssi, De Ruiter, & Bernstein (2010): BSI**

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

Table 1. Number of patients assessed on seven measurements

	Total group		Personality disordered		Chronically psychotic	
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M(SD)</i>	<i>N</i>	<i>M(SD)</i>
1	253	37.49 (10.38)	159	38.62 (10.64)	94	35.56 (9.69)
2	248	37.40 (10.44)	157	38.58 (10.68)	91	35.37 (9.75)
3	236	37.17 (10.41)	148	38.38 (10.66)	88	35.15 (9.69)
4	213	37.20 (10.34)	134	38.69 (10.88)	79	34.67 (8.86)
5	178	36.97 (10.46)	108	38.69 (11.14)	70	34.30 (8.74)
6	146	37.03 (10.17)	86	38.99 (10.77)	60	34.22 (8.58)
7	115	36.97 (10.27)	70	38.79 (10.75)	45	34.13 (8.85)

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

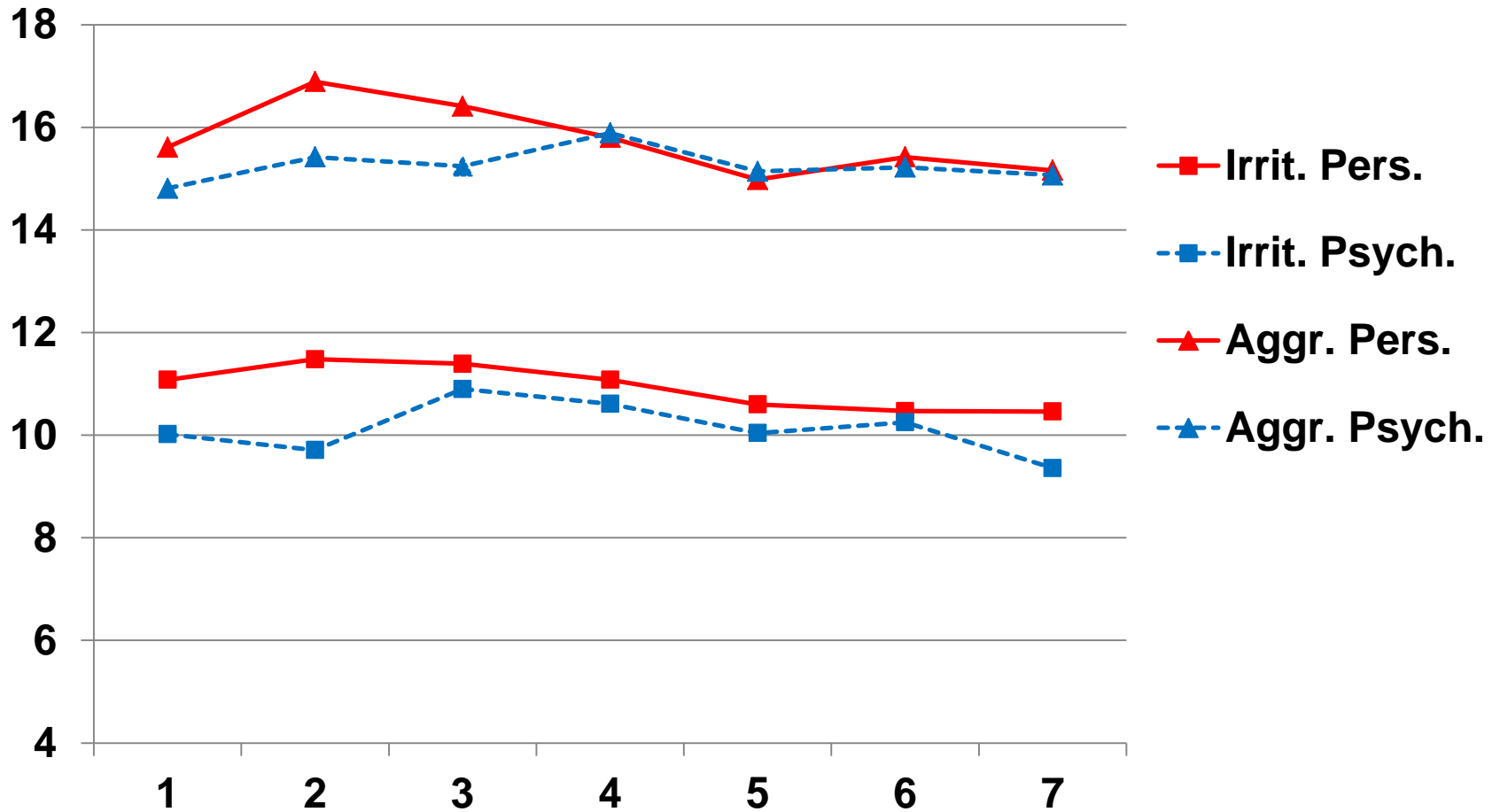


Figure 2. Course of prosocial behavior during the first three years of stay

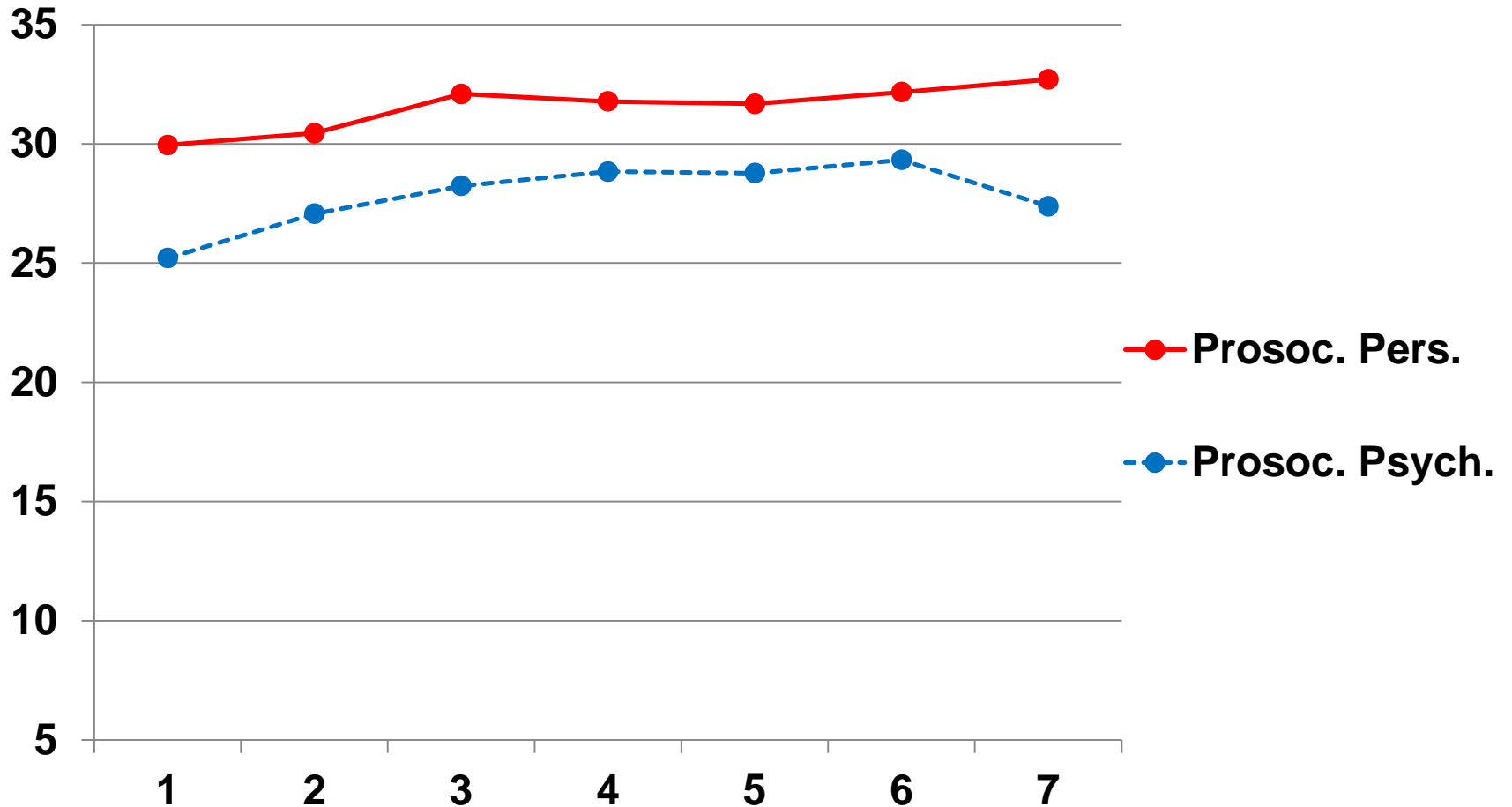


Figure 3. Course of irritation/anger and aggressive behavior during the first three years of stay

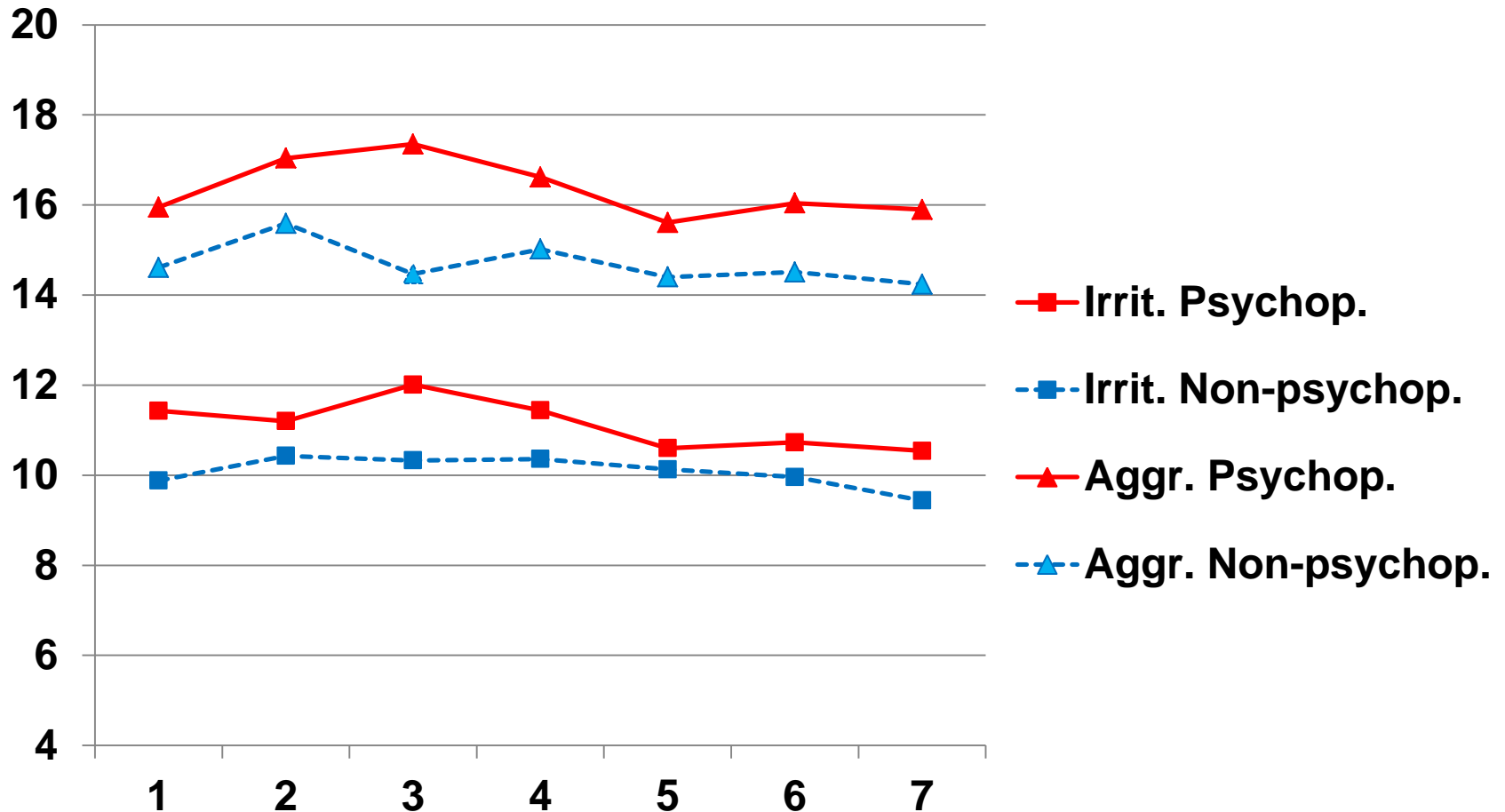


Figure 4. Course of prosocial behavior during the first three years of stay

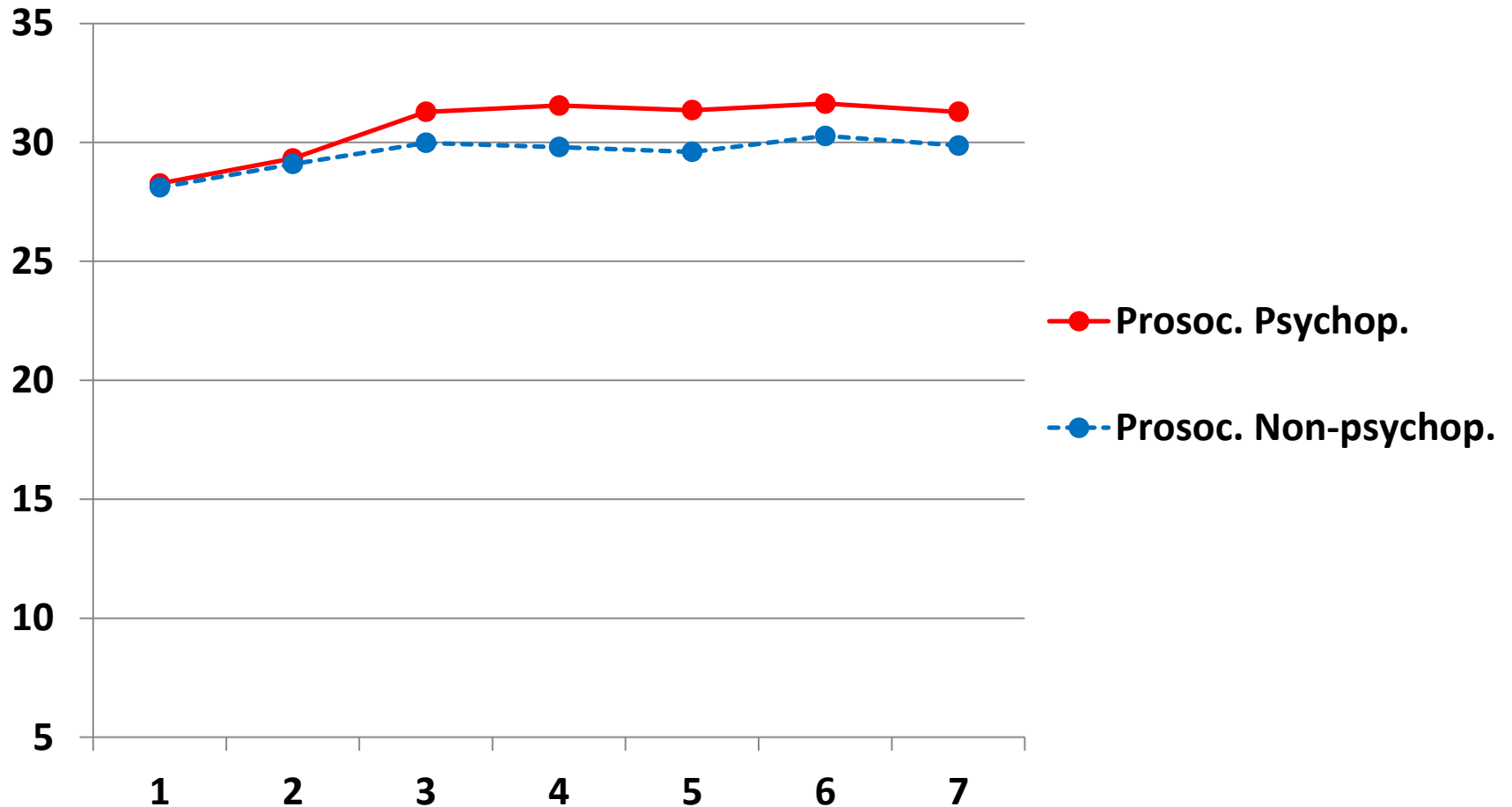


Table 2. Mean scores and SD's in personality disordered and chronically psychotic patients

Meas- ure	Factor or sub- scale	Personality disordered		Chronically psychotic		Differences between subsamples
		<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>	
PCL-R	Psychop	159	22.25 (8.06)	94	17.96 (7.84)	$F(2,250) = 13.13 (p < .001)^{**}$
	Interpers	159	3.57 (2.47)	94	1.80 (1.88)	$F(2,250) = 18.02 (p < .001)^{**}$
	Affective	159	6.13 (1.72)	94	5.64 (1.84)	$F(2,250) = 3.10 (p = .047)^*$
	Lifestyle	159	5.94 (2.76)	94	4.98 (2.90)	$F(2,250) = 14.01 (p < .001)^{**}$
	Antisoc	159	5.11 (2.81)	94	4.68 (2.81)	$F(2,250) = 6.58 (p = .002)^{**}$
NEO-FFI	Neurot	97	32.24 (8.49)	48	31.73 (7.92)	$F(2,142) = 0.95 (p = .909)$
	Agree	97	41.59 (5.23)	48	42.52 (4.93)	$F(2,142) = 0.53 (p = .591)$
STAS	Anger	92	17.91 (6.64)	47	15.85 (4.29)	$F(2,136) = 1.94 (p = .148)$

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	.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 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 6. *Outflow of patients*

Patients	Percentage	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 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.**