

# Aggression Replacement Training for violent young men in a forensic psychiatric outpatient clinic

**Ruud H.J. Hornsveld (Ph.D.),  
clinical psychologist/researcher,  
Erasmus University Medical Center**

**[r.hornsveld@tiscali.nl](mailto:r.hornsveld@tiscali.nl)**

**[www.Agressiehanteringstherapie.nl](http://www.Agressiehanteringstherapie.nl)**

# Introduction

## Aggression Replacement Training (ART)

- **Goldstein, Glick, and Gibbs (1998):** aggressive behavior is associated with inadequate emotional control, a limited range of social skills, and a lack of prosocial norms and values
- ART has three major components, namely, Anger Control Training, Skillstreaming (social skills training), and Moral Reasoning Training
- Originally, ART lasts for 10 weeks at three sessions weekly, one for each component

# Introduction (continued)

## Research on ART

- In 522 boys and girls in a runaway shelter, ART led to a significant decrease in antisocial and aggressive behavior (Nugent, Bruley, & Allen, 1999)
- In 704 juvenile offenders from Washington State, ART resulted in a 24% reduction in 18-month felony recidivism in the training group compared with the control group (Barnoski, 2004)
- In a group of 53 British adult violent offenders who were required to follow ART, 20 were reconvicted, while 27 were reconvicted in a control group of 53 offenders (Hatcher et al., 2010)

# Introduction (continued)

## Research on EQUIP

- **An experimental group of male adolescents in a correctional facility reported significantly less cognitive distortions than a control group, but not more social skills (Nas, Brugman, & Koops, 2005)**
- **49 adolescents showed a greater reduction in cognitive distortions than a control group of 28 adolescents, but no differences in recidivism rate could be established (Brugman & Bink, 2010)**
- **89 adolescent detainees who followed EQUIP remained stable in social skills and moral maturity, while a control group of 26 adolescents showed a decrease in social skills and moral value evaluation (Helmond, Overbeek, & Brugman, 2012)**

# 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)

## Participants (continued)

### DSM-IV classification

- Patients had a conduct or oppositional defiant disorder as their main diagnosis on axis I or, when they were 18 years or older, an antisocial personality disorder on axis II of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994)
- Classifications were based not only on the psychiatric and/or psychological evaluation (*Pro Justitia* report) used by the court in deciding to impose a forensic psychiatric outpatient treatment but also on the evaluation of an experienced clinical psychologist during the intake interview

# Measures

- ***Psychopathy Checklist-Revised (PCL-R;*** Vertommen, Verheul, De Ruiter, & Hildebrand, 2002): psychopathy
- ***NEO Five-Factor Inventory (NEO-FFI;*** Hoekstra, Ormel, & De Fruyt, 1996): neuroticism, agreeableness, and conscientiousness
- **Trait Anger subscale of the Spielberger (1980) *State-Trait Anger Scale (STAS;*** Van der Ploeg, Defares, & Spielberger, 1982): general disposition to anger
- ***Adapted Version of the Picture-Frustration Study (PFS-AV;*** Hornsveld, Nijman, Hollin, & Kraaimaat, 2007): hostility

## Measures (to be continued)

- ***Aggression Questionnaire (AQ; Meesters, Muris, Bosma, Schouten, & Beuving, 1996):*** general aggression and physical aggression
- ***NAS part of the Novaco Anger Scale-Provocation Inventory (NAS-PI; Hornsveld, Muris, & Kraaimaat, 2011):*** anger
- ***Inventory of Interpersonal Situations (IIS; Van Dam-Baggen & Kraaimaat, 1999):*** social anxiety and frequency of social skills

# 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 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</i> ( <i>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 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**

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