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

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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)
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

- *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
\((n = 73)\)

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

* \(p < .05\)
## Pre measurement vs. post measurement (n = 62)

<table>
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<tr>
<th>Measure</th>
<th>Content of scale</th>
<th>M (SD)</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Intake</td>
<td>Pre</td>
</tr>
<tr>
<td>PFS-AV</td>
<td>Hostility</td>
<td>33.34 (12.30)</td>
<td>30.84 (12.27)</td>
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<tr>
<td>AQ</td>
<td>Aggression</td>
<td>82.56 (20.67)</td>
<td>78.90 (20.32)</td>
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<td>Phys. aggr.</td>
<td>28.39 (8.02)*</td>
<td>26.45 (7.46)*</td>
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<td>NAS-PI</td>
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<td>87.29 (18.31)</td>
<td>83.98 (16.74)</td>
</tr>
<tr>
<td>IIS</td>
<td>Social anxiety</td>
<td>65.36 (22.75)*</td>
<td>57.74 (22.75)*</td>
</tr>
<tr>
<td></td>
<td>Social skills</td>
<td>115.88 (22.22)</td>
<td>116.93 (29.75)</td>
</tr>
</tbody>
</table>

* 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
References


References (to be continued)


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