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Aggression Control Therapy for Violent Forensic Psychiatric Patients

Method and Clinical Practice

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Aggression control therapy is based on Goldstein, Gibbs, and Glick's aggression replacement training and was developed for violent forensic psychiatric in- and outpatients (adolescents and adults) with a (oppositional-defiant) conduct disorder or an antisocial personality disorder. First, the conditions for promoting "treatment integrity" are examined. Then, target groups, framework, and procedure are described in detail, followed by the most important clinical findings during the period 2002 to 2006. Finally, new programme developments are mentioned, with aggression control therapy as a starting point.

Keywords: *aggression; cognitive-behavioral programme; treatment integrity*

Because there was no treatment programme for Dutch violent forensic psychiatric patients, a start was made with the development of the aggression control therapy in 2000 (Hornsveld, 2004a). The therapy was founded on the aggression replacement training (ART) of Goldstein, Glick, and Gibbs (1998). In the Netherlands, forensic psychiatric patients are offenders for whom, based on examination by a psychiatrist and/or a psychologist, a judge has established a connection between a "deficient mental development or mental disorder" and a committed offence. The aggression control therapy was initially meant for adult inpatients "detained under hospital order," but after some time it was also applied to violent adolescent and adult outpatients.

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Until now, there have been no studies of the effect of treatment programmes for Dutch violent forensic psychiatric patients, but more is known about the treatment of similar populations. For instance, Nas, Brugman, and Koops (2005) evaluated an EQUIP programme for Dutch juvenile delinquents in high-security correctional facilities. After completing the treatment programme, the members of the treatment group reported fewer "cognitive distortions" but no more social skills than the members of the control group who received "care as usual." However, the study was small and not all delinquent juveniles had committed a violent crime. In a review of meta-analyses, Lipton, Pearson, Cleland, and Yee (2003) concluded that in general, cognitive-behavioral treatment programmes have a beneficial effect on dynamic criminogenic needs (Andrews & Bonta, 2003) and therefore indirectly on recidivism risk. However, the studies included in that review differed in terms of offender age (most were adolescents), type of offence (violent or nonviolent), and treatment focus (most treatments were not primarily focused on reducing aggressive behavior). Moreover, the quality of the various studies was far from uniform. Polaschek (2006) pointed out that although there are studies showing that treatment programmes for violent offenders lead to a decrease in reconviction for violent crimes, these programmes often lack a model in which associations are drawn between (a change in) dynamic criminogenic needs and recidivism outcome.

One of the detailed programmes for violent behavior is the ART, which is solidly based on cognitive-behavioral theory (Polaschek, 2006). The training contains three parts: anger control, social skills, and moral reasoning. Goldstein et al. (1998) developed the training for children and adolescents who display violent and aggressive behavior and found ART to significantly improve behavior in a controlled study of aggressive and/or delinquent adolescents in residential settings, in outpatient projects, and in gangs. An adapted version of ART administered to boys and girls in a day center led to a decrease in antisocial behavior, manifested as violation of house rules, violation of social norms, violations of someone's personal property, and aggression toward the physical or mental well-being of others (Nugent, Bruley, & Allen, 1999). A large study in the state of Washington revealed that ART significantly decreased the risk of recidivism among aggressive and/or violent young people in the long term, provided the training was administered in a "competent manner" (Washington State Institute for Public Policy, 2004). Until recently, the effect of ART on the dynamic criminogenic needs of violent adults has not been studied.

In the past decade, it has become increasingly apparent that the effectiveness of treatment programmes for offenders depends not only on their content but also on the conditions under which they are conducted (Lipsey, 1995). In this connection, Hollin (1995) discussed the term "treatment integrity," that is, "a programme is implemented as intended in theory and practice" (p. 196). For an optimum treatment integrity, Cooke and Philip (2001) believed that the following conditions must be met: (a) The programme has been derived from an empirically tested theoretical framework; (b) the programme has a comprehensive treatment manual; (c) the programme is evaluated

with “objective” measurement instruments; (d) trainers have the right knowledge, experience, and attitudes; and (e) trainers are supervised to ensure that the programme is implemented as intended.

This article first tests if the aggression control therapy meets the criteria for treatment integrity. Then, target groups and method are described in detail, after which important clinical findings are reported. Finally, a few new developments with respect to the aggression control therapy are mentioned. In this article, aggressive behavior is taken to imply conduct causing (mental or physical) harm to others (Berkowitz, 1993). Violence is seen as a specific form of aggressive behavior that mainly involves the infliction of physical harm (Browne & Howells, 1996). With aggressive or violent behavior, we make a distinction between reactive and proactive or instrumental aggressive behavior (Dodge, 1991). Reactive aggressive persons are described by Dodge, Lochman, Harnish, Bates, and Pettit (1997) as “emotional, defensive and hot-tempered” and proactive aggressive persons as “calculating, offensive and cold-blooded.” Anger and rage refer to emotions that are displayed as a reaction to a (alleged) provocation and which manifest themselves in behavior such as staring, talking loud, and standing too close. With hostility, we refer to the inclination to attribute negative intentions to others (Blackburn, 1993). A personality characteristic concerns one of the Big Five personality domains (Costa & McCrae, 1992), whereas the term *psychopathy* refers to a combination of using others in an insensitive and unscrupulous way in combination with a chronic unstable and antisocial lifestyle (Hare, 1991). Conduct disorder refers to a medical–psychiatric classification on Axis I and antisocial personality disorder to a classification on Axis II of the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (*DSM-IV*; American Psychiatric Association, 1994). One of the criteria for these two classifications is that verbal and/or physical aggressive behavior is displayed on a regular basis.

Treatment Integrity

Testing the aggression control therapy with regard to the criteria of Cooke and Philip (2001) leads to the following findings.

Theoretical Framework

Aggression control therapy is derived from ART (Goldstein et al., 1998), which according to Hollin (2004) is solidly funded on social learning theory. Andrews and Bonta (2003) pointed out that a treatment programme is only effective if it sets out to change dynamic criminogenic needs such as limited emotional control, inadequate social skills, and antisocial attitudes. There is evidence that the three components of the ART directly or indirectly focus on problems in the areas of perception (Akhtar & Bradley, 1991), attention (Lochman, White, & Wayland, 1991), attribution (Dodge, Price, Bachorowski, & Newman, 1990), social cognition (Lochman & Dodge, 1994),

emotion (Zamble & Quinsey, 1997), social competence (Hollin, 1990), and moral reasoning (Nelson, Smith, & Dodd, 1990; Palmer & Hollin, 1999).

Treatment Manual

The treatment manual (“hero without violence”) for trainers contains specific information about the method and detailed descriptions of each session (Hornsveld, 2004b). Trainers report that the manual answers their expectations.

Measurement Instruments

To measure the different components of aggressive behavior, two new instruments had to be developed, namely, an instrument for the measurement of hostility (Hornsveld, Nijman, Hollin, & Kraaimaat, 2007) and an observation scale for the measurement of aggressive and social behavior on the ward (Hornsveld, Hollin, Nijman, & Kraaimaat, in press). A study of native and non-native outpatients, and of native and non-native pupils, showed that different norms had to be determined for the most important ethnic minority groups with regard to questionnaires for aggression and social competence (Hornsveld, Cuperus, De Vries, & Kraaimaat, 2006).

Evaluation

A controlled study during the period 2002 to 2005 of 136 inpatients and 200 outpatients revealed that aggression control therapy can result in a significant decrease of aggressive behavior but not in an increase of social skills (Hornsveld, Nijman, & Kraaimaat, in press). The already relatively high scores for social skills at the start of the therapy explained the lack of change in social skills in general. Patients appeared to have specific problems exhibiting *approaching* behavior and they displayed *limit-setting* behavior too often. However, teaching approaching skills is less appropriate in patients with high scores for psychopathy.

Individual Differences

Hornsveld, Hollin, Nijman, and Kraaimaat (in press) studied the individual differences in personality traits and problem behaviors of 133 inpatients and of 176 violent forensic psychiatric outpatients. They found that for patients with a relative low score on psychopathy, aggressive behavior seemed to be related to social anxiety and limited social skills, but for patients with a relatively high score on psychopathy this relation was not found.

Knowledge, Experience, and Attitudes of Trainers

Trainers are required to be registered as a “health” psychologist or as a psychiatrist, to be familiar with the cognitive–behavioral therapy frame of reference, and to have

experience with group therapy for poorly motivated psychiatric patients. Cotrainers are expected to have higher professional training in social work or social psychiatric care and experience in giving training to severely disordered psychiatric patients.

Supervision of Trainers

Located throughout the Netherlands, six forensic psychiatric institutions participated in the evaluation study. During the evaluation period, the first author of this article organized harmonization meetings every 2 weeks at a central location for the trainers from those institutions.

Method

Target Groups

Aggression control therapy is intended for violent forensic psychiatric patients (adolescents and adults). Inpatients have an antisocial personality disorder on Axis II or a psychotic disorder on Axis I, combined with an antisocial personality disorder on Axis II (*DSM-IV*; American Psychiatric Association, 1994). The chronic psychiatric condition of the psychotic patients has to be stabilized. Outpatients must be 16 years or older and court ordered to follow aggression control therapy. They have an (oppositional–defiant) conduct disorder on Axis I or, if they are 18 years or older, a main diagnosis of antisocial personality disorder on Axis II (*DSM-IV*; American Psychiatric Association, 1994). Contraindications are acute psychosis, acute substance abuse (outpatients), insufficient knowledge of the Dutch language, and lack of ability to participate in a group of eight patients.

In the period from January 1, 2002, to January 1, 2007, 170 forensic psychiatric inpatients and 248 forensic psychiatric outpatients (all males) were referred for aggression control therapy. The inpatients were treated at six forensic psychiatric institutions and detained under hospital order.¹ The outpatients were treated at two outpatient treatment centers with an easily accessible admittance policy. The average age of the 170 inpatients was 33.6 years ($SD = 7.6$, range = 21 to 56 years); 29.2% belonged to an ethnic minority. The 106 adult outpatients were on the average 31.6 years old ($SD = 8.6$, range = 21 to 56 years); 44.2% belonged to an ethnic minority. The average age of the 142 adolescent outpatients was 17.0 years ($SD = 1.5$, range = 13 to 20 years); 54.5% of the patients belonged to an ethnic minority. Patients belonging to a minority had at least one parent who was born in Suriname, the Netherlands Antilles, Turkey, Morocco, or Cape Verde.

Framework

In contravention of ART, the frequency of sessions was reduced from three times to once a week because the therapy had to be used in both inpatient and outpatient

Table 1
Modules of the Aggression Control Therapy

Module	Sessions	Aims
Anger management	Weeks 1 to 5	Recognition and management of feelings such as irritation, anger, and rage
Social skills	Weeks 6 to 10	Improving or extending relevant social skills
Moral reasoning	Weeks 11 to 15	Taking knowledge of current values and norms and solving moral problems
Self-regulation skills	Weeks 6 to 15	Changing inadequate aspiration level, reinforcing oneself for attained results, and making programs for new behavior
Follow-up	Weeks 20, 25, and 30	Evaluation and report

settings, and the availability of clinicians trained in cognitive-behavior therapy was limited. Aggression control therapy is composed of fifteen 90-min weekly sessions, for the anger management, social skills, and moral reasoning modules, and three follow-up sessions at 5-week intervals. The therapy is given to groups of eight patients, with a self-regulation skills module added (Van Dam-Baggen & Kraaimaat, 2000), so that patients have a method for dealing with problems in interactions with others at the end of the programme. This procedure enables patients to apply appropriate skills to entirely new situations (Goldstein & Martens, 2000). The framework of aggression control therapy is shown in Table 1.

A multidisciplinary indication team determines indication for aggression control therapy. For inpatients, this takes place on the basis of file studies, psychiatric and psychological evaluation, and clinical judgment. At the start of the programme, inpatients are already in the institution for some time. The person responsible for treatment then discusses the participation with the inpatients. For outpatients, an indication for the therapy is determined on the basis of a report from an intake interview, to which the person making the referral and parents, in the case of adolescents, are invited. Usually, the interviewer has the psychiatric and psychological report at his disposal on the basis of which the judge has concluded that an outpatient treatment must be followed. Before therapy, an individual introductory interview is given to inpatients and to outpatients, during which a treatment contract is signed.

Procedure

For the anger management module, the antecedent-behavior-consequence scheme of ART has been extended with thought and emotion (event, thought, emotion, overt behavior, and consequence). Event and thought are practiced in the first two sessions. In the third session, ways to reduce physical arousal are listed, and emotion and consequences are dealt with in the fourth and fifth sessions.

Table 2
Social Skills to Be Chosen by Patients

No.	Social Skill
1	Making contact
2	Ending a situation
3	Making a request
4	Refusing a request
5	Reacting to a refusal
6	Criticizing
7	Reacting on criticism
8	Giving one's opinion
9	Standing up for oneself
10	Complimenting somebody else
11	Appreciating oneself
12	Reacting to a compliment

For the social skills module, 12 social skills are used that can be applied individually or in combinations to most social situations (Van Dam-Baggen & Kraaimaat, 2000) because Goldstein's (1999) 50 situations with social skills overlap a great deal. The 12 skills provide the most relevant alternatives to aggressive behavior. As part of the homework for the fifth session, patients chose from these 12 social skills. A group ranking of skills is drawn up based on the patients' choices (see Table 2).

The five skills most frequently chosen from the group ranking are practiced in the 6th to the 10th sessions. Patients are asked to indicate on a 5-point scale how much anxiety they experience in the five generally formulated situations to the first skill discussed. In the session, patients practice the situation that poses the least anxiety for them. In the following sessions, they continue to practice using situations that they referred to before the session and that are related to the skills for that session. For each behavior to be practiced, patients conceive of five practice situations, ranging from easy to difficult. Preceding these exercises, the goals of ("What do you want to achieve?") and criteria for ("To what do you pay attention?") the skills are listed, after which the patients are given a handout of possible goals and criteria. Both during the sessions and in homework assignments, patients begin by practicing "easy" situations, in that the situations involve little anxiety, and then continue to work through the hierarchy in each session.

The moral reasoning module is composed of five sessions in which moral problem situations were discussed. An example of this type of situation is a coworker who offers to sell the patient a DVD recorder for an improbably low price because "it fell off the truck" (i.e., was stolen). One situation is extensively discussed during a session, whereas other situations are prepared as part of the homework assignment. Patients are also assigned the task of solving a moral problem and writing a report on it in their homework notebook.

With the help of the self-regulation skills module (Van Dam-Baggen & Kraaimaat, 2000), patients first learn to identify their set requirements and provide themselves with self-reinforcement for the activity in question. Next, they learn to identify and modify obstructive requirements (i.e., mainly too high or too vague). Finally, they practice developing a programme for increasing or decreasing activities. After practicing a step in a programme (practice situation), patients write a report in their homework notebook. They are also encouraged to use self-reinforcement when the intended goal is achieved or otherwise to lower their requirements and practice the situation again.

During the first follow-up session (Week 20), the patients give an account of their further progress with their programmes and report how they have progressed in applying social skills. At the second follow-up session (Week 25), the contribution of successful and less successful situations is left almost entirely to the patients themselves. After this exercise, the therapy is evaluated based on 18 statements referring to elements of the programme, the own efforts of patients, and achieved results. On a 5-point scale, patients can indicate the extent to which the statements apply to them. The therapy ends in the third follow-up session (Week 30). Patients first indicate the extent to which they still use what they have learned in the therapy. They do so using a list of 12 statements and can again indicate the degree to which the statements apply to them. Then the draft report to the referral agency is discussed, which contains information on the progress each participant has made, their actual attendance, the quality of their homework, and any problem behaviors requiring further attention. Finally, participants receive a certificate as proof of participation.

Clinical Practice

The inpatients sometimes failed to attend, probably because the programme is not mandatory. Forensic psychiatric patients in the Netherlands are sentenced to compulsory care but not compulsory treatment. If a patient is late for a session, the ward staff can be asked to persuade the patient to come. In only a few cases have patients been excluded from participation for seriously provocative behavior directed at the trainers. Ultimately, 29 of the 170 inpatients did not complete the therapy (17.1%).

Inpatients usually do their homework assignments alone or in small groups in an Education section of the institution. The instructors discuss the information pamphlets with the patients and assist them in completing assignments. Most patients appreciate this method, and even patients who have difficulty reading and writing are able to make an active contribution to the groups.

Although the court directly or indirectly imposes participation in aggression control therapy for outpatients, patients sometimes have to be excluded from further participation for impermissible absence. The probation officers often fail to persuade unmotivated outpatients to continue their participation in therapy, although this can

sometimes result in (renewed) detention. The result was that 39 of the 106 adult outpatients (36.8%) and 58 of the 142 adolescent outpatients (40.8%) failed to complete the therapy. Adolescent outpatients in particular are not usually independently able to complete homework assignments. Unfortunately, two sessions a week (one for the therapy and one for the homework assignments) is not feasible, partly because patients also frequently have appointments with their probation officers. A viable solution is to give patients an opportunity to do homework before the sessions under the supervision of the trainers.

In the opinion of the trainers, both inpatients and outpatients generally actively participate in the anger management module. Analysis of their aggressive behavior is informative and nonthreatening for most patients, because no change in their behavior is required at that time. As the anger management module proceeds, patients can increasingly mention relevant situations. In practice, the social skills module poses the greatest problems. Many patients believe they already have adequate social skills and think they use them in the right way. However, nearly all groups choose boundary-setting skills for situations with authority figures, such as giving criticism, refusing a request, reacting to a refusal, and so on. Approaching social skills, such as making contact and giving someone a compliment are less frequently chosen. Consequently, the trainers sometimes partly pass over the patients' choice and have them practice approaching and boundary-setting skills. In the self-regulation skills module it becomes clear how much difficulty patients have with continuing to use learned skills and with learning new skills. The formulation of a concrete goal and dividing this goal into feasible intermediate steps is usually hindered by the high requirements patients set for themselves.

During the moral reasoning modules, it becomes apparent in the moral dilemmas discussed that many patients have a hostile and distrustful attitude toward people in general. Although some patients say they made an exception for close family members, their files usually show that there have been serious conflicts in the past in the family sphere. It appears that it is extremely difficult for most patients to make any changes in their distrustful, downplaying attitude.

The therapy evaluation mostly yields a high amount of socially acceptable answers. Some patients persist in their assertion that they have been unjustly placed in the group and therefore did not get anything out of it. However, patients give relevant information about the therapy framework: For example, the information pamphlets are apparently difficult for some patients to understand.

Conclusion and New Developments

During the period 2002 to 2007, we evaluated aggression control therapy quantitatively and qualitatively for 170 forensic psychiatric inpatients and 248 forensic psychiatric outpatients (all males) with a history of violent crimes. Based on our research and clinical findings, we suppose that the therapy, if it is carried out as planned,

meets most conditions for treatment integrity (Cooke & Philip, 2001). Although originally intended for adult inpatients with an antisocial personality disorder, the therapy seems to be applicable to adolescents with an oppositional–defiant conduct disorder and adult outpatients with an antisocial personality disorder. Patients are excluded from participation in case of acute psychosis, acute substance abuse, insufficient knowledge of the Dutch language, and the inability to participate in a group.

Our research and our clinical experiences seem to indicate that aggression control therapy can reduce the aggressive behavior of violent forensic psychiatric patients to some extent. However, there are indications that in its current form aggression control therapy is especially beneficial for patients with a relatively low score on psychopathy. These patients often exhibit reactive aggressive behavior, because they have limited emotional control and social skill deficits (Hornsveld, Hollin, et al., in press). According to several authors (e.g., Cornell et al., 1996), patients with a relatively high score on psychopathy mostly exhibit not only reactive but mostly proactive aggressive behavior. Therefore, the therapy will be extended with two new modules, character formation (Salmon, 2004) and prosocial thinking styles (Gibbs, Potter, & Goldstein, 1995). During the character formation module, patients are not only to be confronted with the negative consequences of proactive aggression but also with the positive consequences of prosocial behavior. The purpose of the prosocial thinking styles module is to change criminogenic antisocial attitudes into prosocial attitudes.

For patients with a long-lasting antisocial personality disorder, the therapy has to be part of a treatment programme for dynamic criminogenic needs, such as drug dependency, inability to function adequately in intimate relationships, lack of adequate parental education (adolescents), and ambient factors such as limited education, unemployment, and antisocial friends. For inpatients, booster sessions during the extramural resocialization need to be part of such a programme to check whether the patient can adequately apply what he has learned outside of the hospital as well. At this moment, a day treatment programme for violent adolescent outpatients with a relatively high score on psychopathy is evaluated extensively at the Dok Outpatient and Day Treatment Center at Rotterdam. An evaluation of an inpatient treatment programme, not only for aggressive behavior but also for substance abuse and for problems in intimate relationships, will start in the Kijvelanden Forensic Psychiatric Center at Poortugaal, the Netherlands, this year.

Unfortunately, the dropout rate for outpatients is high, despite the many measures to stimulate their participation in the therapy. The environment of most outpatients is often characterized by a lack of structure and by encouragement of aggressive or violent behavior. In addition, outpatient dropouts hardly seem to experience any negative consequences from this. Although the referring agencies can decide to report those dropouts to the public prosecutor, this is sometimes not done because the patient is “doing relatively well at present.” When an outpatient is reported to the public prosecutor, this does not mean that his case will go to court because, among other reasons, the public prosecutor may give other cases higher priority. Therefore, we strongly favor information and special training for referring agencies, public prosecutors, and judges.

Note

1. In 2003, there were in the Netherlands 1,297 inpatients “detained under hospital order.” Their average stay in the institution was at that time more than 6 years. About 25% had a (chronic) psychotic disorder, and about 75% had a personality disorder as their main diagnosis. Almost all patients were convicted for (sexually) violent crimes.

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