Beyond Aggression Replacement Training: Cognitive–Behavioral Programs for (Sexually) Violent Forensic Psychiatric Inpatients in the Netherlands

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The development of cognitive–behavioral programs for violent offenders started rather late in the Netherlands compared to other countries. Reasoning and rehabilitation (R&R; Ross, Fabiano, & Ewles, 1988) was applied in Canada and the United States in the early 1990s. This program is based on the assumption that offenders cannot realize their goals because they lack the necessary cognitive and behavioral skills. In 36 meetings, each of 2 hours, 6 to 12 participants extend or modify their cognitions and skills to decrease their risk of recidivism. Robinson and Porporino (2001) reviewed several R&R outcome studies, including a study of more than 4,000 Canadian offenders who completed the program between 1989 and 1994 (Robinson, 1995). A year after discharge, the recidivism rate was 19.7% for R&R and 24.8% for the control group—that is, a 20.6% reduction in the treatment group. Enhanced Thinking Skills training, a 20-session British modification of R&R, was implemented in the United Kingdom from 1993. Friendship, Blud, Erikson, Travers, and Thornton (2003) compared a treatment group of offenders who followed R&R or Enhanced Thinking Skills (N = 667) with a control group of offenders (N = 1,801). The recidivism risk of the treatment group was lower than that of the control group, but the magnitude was related to the pretreatment recidivism risk.
In 1990, Andrews, Bonta, and Hoge introduced their “risk-need-responsivity” (RNR) principles, which tie program intensity to recidivism risk and focus on dynamic risk factors such as antisocial personality patterns, procriminal attitudes, antisocial associates, family and/or marital problems, school and/or work problems, leisure and recreation problems, and substance abuse. The program format is consistent with the learning style of the participants by taking into account motivation, abilities, personality, ethnicity, and gender (Bonta & Andrews, 2007).

The first cognitive–behavioral programs for sexually violent offenders were based on the relapse prevention model (Pithers, Kashima, Cumming, Beal, & Buell, 1988) and offered sexually violent offenders insight into thoughts, feelings, and behaviors that might lead to criminal behavior so as to increase their knowledge of sexuality, empathy, social skills, relationship skills, anger management, problem-solving skills, and self-esteem (Marshall & Anderson, 2000). A meta-analysis by Lösel and Schmucker (2005) of 69 studies including 22,181 sexually violent offenders showed that relapse prevention programs have moderate, positive results. For instance, in a study of the Sex Offender Treatment and Evaluation Project, an experimental group (N = 259) was compared with a control group that did not follow the program but participated in the study (N = 225) and with a control group who did not take part (N = 220). There was no difference between the three groups in sexually or nonsexually violent recidivism over 8 years; however, sexually violent offenders who met the program’s treatment objectives had lower reoffense rates than those who did not (Marques, Wiederanders, Day, Nelson, & Van Ommeren, 2005).

Parallel to developments in the United States, the Sex Offender Treatment Program (SOTP) was implemented in the United Kingdom (Grubin & Thornton, 1994). It included core and booster programs for all offenders and an extended program as needed. An evaluation of SOTP (Friendship, Mann, & Beech, 2003) included a group of 647 treated and a group of 1,910 untreated sexually violent offenders, but it had disappointing results. There were no differences in the percentages of sexual reoffending after 2 years in the treatment and untreated groups, although significant differences were found when sexual offenses were combined with violent crimes.

Hanson (2000) commented that treatment programs should focus on factors that initiate criminal behavior and prevent relapse instead of focusing solely on factors that may lead to a sexual offense; this observation is in line with the “risk-need-responsivity Model (Andrews, Bonta, & Hoge, 1990). A meta-analysis of 23 high-quality studies (Hanson, Bourgon, Helmus, & Hodgson, 2009) showed that the recidivism rates of treated sexually violent offenders (11%) were significantly lower than those of the untreated offenders (19%). This study also indicated that programs based on the risk-need-responsivity principles showed the largest decrease in sexual and general recidivism.

**Aggression Replacement Training**

Aggression Replacement Training (ART; Goldstein, Glick, & Gibbs, 1998) is a multimodal intervention to improve prosocial behavior in aggressive and violent children. The authors regarded aggression as the result of inadequate emotional control, limited social skills, and a lack of moral standards and values. ART has three main components: anger management, social skills, and moral reasoning. The original ART takes 10 weeks with three sessions per week, one for each component. Groups usually include six to eight participants. Homework assignments are given during all modules to achieve generalization of learned skills to new situations. In 1999 in the United States, Washington state investigated ART, Functional Family Therapy (Alexander & Parsons, 1982), and Multisystemic Therapy (Henggeler, 1999). An
Experimental group of juvenile offenders with a medium to high recidivism risk \((N = 704)\) was compared with a no-treatment control group \((N = 525)\). ART resulted in 24% lower recidivism than a control group over 18 months (Barnoski, 2004). In contrast to Functional Family Therapy and Multisystemic Therapy, ART is easily adapted to different settings and focuses specifically on young people with manifest aggressive attitudes or behavior (Guerra, Kim, & Boxer, 2008). Therefore, we selected ART as the basis of two cognitive–behavioral treatment programs for forensic patients.

**Dutch Forensic Psychiatric Inpatients**

In the Netherlands, offenders are detained under a hospital order when the court has established a relationship between a psychiatric disorder and an offense (Van Marle, 2000). These inpatients have committed an offense, such as severe assault, manslaughter, or murder, for which an imprisonment of more than 4 years applies. Rulings are based on psychiatric and psychological evaluations at a Ministry of Security and Justice special assessment center and recidivism is deemed likely without care or treatment. In Dutch forensic psychiatric hospitals, a distinction is often made between patients with a personality disorder (about 75% of the population) and patients with a chronic psychotic disorder as their primary diagnosis (De Beurs & Barendregt, 2008). This dichotomy is applied on wards and in treatment programs. The programs that are described in this chapter are meant for forensic psychiatric inpatients with a Cluster B personality disorder (American Psychiatric Association, 2013) as their primary classification.

The Ministry of Security and Justice requires risk assessment in all forensic psychiatric inpatients using the Historic, Clinical, Future–Revised (HCF–R; Spreen, Brand, Ter Horst, & Bogaerts, 2013). The Psychopathy Checklist–Revised (PCL–R; Hare, 1991; Dutch version: Vertommen, Verheul, De Ruiter, & Hildebrand, 2002) also has to be completed for all inpatients. Additionally, the Sexual Violence Risk-20 (SVR-20; Boer, Wilson, Gauthier, & Hart, 1997; Dutch version: Hildebrand, De Ruiter, & Van Beek, 2001) must be completed in sexually violent inpatients. The scores on the risk assessment instruments indicate the level of security and length and intensity of individual treatment and rehabilitation (Andrews et al., 1990). Furthermore, scores on dynamic items of the clinical and future subscales of the HCF–R and SVR-20 may provide information about major problem behaviors that should be objectives of individual treatment plans.

The dynamic items of the two abovementioned risk assessment instruments, however, omit situation specificity (e.g., “social skills”) or refer to rather broad domains (e.g., “employment problems”). For example, a social skills problem may manifest itself in inadequate responses to a manager’s request, in domestic violence, or in too strong protests against the decision of a referee during a soccer game. Therefore, most of the relatively high scores on dynamic items require further functional analyses as the basis of an individual treatment or rehabilitation plan. Together with information from self-report questionnaires and observation scales, the interrelationships between different problem behaviors can be made explicit for each patient in a preliminary model, named a “case formulation” (Sturmey & McMurran, 2011) or “functional analytic clinical case model” (Haynes & O’Brien, 2000), which can drive selected treatment targets. In the Netherlands and Flanders, a functional analytic clinical case model is called a “holistic theory.”

At the end of a program, the instruments mentioned are used again to assess changes in the risk level and problem behaviors. For the assessment of recidivism risk at the end of a program,
the Structured Assessment of Protective Factors for Violence Risk (De Vogel, De Ruiter, Bouman, & De Vries Robbé, 2007) may also be of interest. For comparison with other studies, the HCF–R should be supplemented with the Historical Clinical Risk Management-20, version 3 (Douglas, Hart, Webster, & Belfrage, 2013; Dutch version: De Vogel, De Vries Robbé, Bouman, Chakhssi, & De Ruiter, 2013) and the SVR-20 should be replaced with a Dutch version of the Static/Stable/Acute, consisting of the Static-99R (Helmus, Hanson, Thornton, Babchishin, & Harris, 2012) to assess the static factors of recidivism risk, the Stable-2007 (Hanson, Harris, Scott, & Helmus, 2007) to determine dynamic criminogenic needs, and the Acute-2007 (Hanson et al., 2007) for the measurement of dynamic risk factors.

Treatment Program for Violent Forensic Psychiatric Patients

Aggression is a major problem behavior in violent offenders and is positively correlated with the Big Five domains of Neuroticism, Agreeableness, and Consciouness (Jones, Miller, & Lynam, 2011) and with psychopathy (Porter & Woodworth, 2006). When not managed adequately, feelings such as anger and hostility contribute to aggressive behavior (Berkowitz, 2012; Novaco, 2013). More specifically, self-reported aggression in Dutch male violent forensic psychiatric patients has been found to be significantly correlated to self-reported neuroticism, trait and state anger, and social anxiety in situations involving criticism (Hornsveld, Nijman, Hollin, & Kraaimaat, 2008). Self-reported aggressive behavior and Factor 2 (“chronically unstable and antisocial lifestyle”) of the PCL–R were positively related and aggression was negatively related to agreeableness and social skills in situations where a compliment could be given.

Aggressive behavior can be distinguished according to reactive (hostile) and proactive (instrumental) aggression (Crick & Dodge, 1996). Reactive aggression is an angry, defensive response to frustration or provocation, whereas proactive aggression is deliberate behavior to obtain a desired goal. Several authors have demonstrated that violent offenders with a relatively low score on psychopathy mainly show reactive aggression, whereas those with a relatively high score tend to show both reactive and proactive aggression (Cima & Raine, 2009; Cornell et al., 1996; Woodworth & Porter, 2002). Social anxiety may only play a role in reactive and not in proactive aggression because offenders with a relatively high score on psychopathy usually do not experience anxiety when trying to attain their goals. Andrews and Bonta (2003) suggest that the two forms of aggression require different treatment approaches because they seem to be related to different dynamic criminogenic needs.

Thus, we designed a heuristic behavioral model of reactive and proactive aggressive behavior that involves antecedent, subject (traits, cognitions, emotions, responses), and consequent cues and factors, and the assumed relationships between these elements (Figure 82.1). ART was used as a starting point for the development of a cognitive–behavioral program for Dutch violent psychiatric inpatients because ART is based on social learning theory (Bandura, 1973) and it focuses on physiological reactions and emotion, cognition, and overt behavioral aspects of aggression (Hollin, 2004). The original version of ART with three sessions per week for 10 weeks was changed into a preliminary Dutch version that could be applied to both inpatients and outpatients (Hornsveld, 2004b). This preliminary version comprises three modules with weekly sessions, namely Anger Management (sessions 1 to 5), Social Skills (sessions 6 to 10), and Moral Reasoning (sessions 11 to 15), and three sessions with intervals of 5 weeks for the follow-up and evaluation (sessions 16 to 18). Role-playing with the use of video equipment and
with the participation of an actress is an essential part of the therapy. The video allows a participant to review his behavior and the actress enhances the realism of the training situations. After discussing the feedback, the role-play is rehearsed when necessary. Participants must complete homework assignments for the generalization of learned skills to new situations. By complementing the ART with four additional modules, the program also focuses on important dynamic criminogenic factors (Andrews & Bonta, 2003), namely antisocial cognitions, antisocial networks of relationships with others, and interpersonal problems (Zwets et al., 2016).

After the publication of a practitioner manual and participant workbook, the 18-session, ART-based program was evaluated in various forensic psychiatric settings (Hornsveld, 2004a). A controlled study in both inpatients and outpatients showed significant decreases in aggression at program completion and 15-week follow-up (Hornsveld, Kraaimaat, Muris, Zwets, & Kanters, 2014; Hornsveld, Nijman, & Kraaimaat, 2008). This preliminary version of the program was extended with four modules specifically for violent forensic psychiatric inpatients (Hornsveld & De Vries, 2009). The Prosocial Thinking module addresses knowing how to convert cognitions that may lead to antisocial behavior into cognitions that may lead to prosocial behavior.

Five antisocial cognitions are discussed and practiced during role-playing exercises, which address lack of empathy, self-centeredness, minimizing the consequences of one’s own behavior, assuming the worst, and blaming others. The second module, Consequences of Behavior, addresses learning to focus on the short-term and long-term consequences of prosocial and antisocial behaviors. Five themes are discussed and practiced, namely accountability, subservience, respect, cooperation, and honesty. The third module, Prosocial Network, teaches how to engage in prosocial contact and how to refrain from or end antisocial contact.

Five problem situations are practiced, namely making acquaintances, making an appointment, intensifying a contact, informing others about your offense, and responding to a...
rejection. Finally, in module four, Contact With Women, patients learn how to behave toward women. Participants practice five problem situations, namely showing their need for intimacy, responding to a rejection, responding to approaches, intensifying a relationship, and dealing with relational problems. Each module has five weekly sessions and the program consists of 35 weekly sessions and three follow-up and evaluation sessions. Dutch manuals and workbooks are available at http://www.agressiehanteringstherapie.nl.

Treatment Program for Sexually Violent Forensic Psychiatric Inpatients

In the Netherlands, male sexually violent forensic psychiatric inpatients are often classified as child abusers and rapists (De Vogel, De Ruiter, Van Beek, & Mead, 2004). Sexual child abuse involves sexual assault or rape of victims under the age of 16 while rape concerns the sexual abuse of victims who are 16 years of age or older.

Regarding the dynamic criminogenic needs of sexually violent forensic psychiatric inpatients, sexual abusers have higher scores than nonclinical volunteers on self-reported neuroticism. Rapists usually report more aggressive behavior than child abusers and score higher on psychopathy as measured by the PCL–R. Implicit association tests show that child abusers associate children more strongly with sex and submission more strongly with sexual attractiveness than rapists or violent nonsexual offenders (Hornsveld et al., 2015). A meta-analysis of studies on sexually violent offenders showed that deviant sexual orientation and antisocial attitudes are the main predictors of recidivism (Hanson & Morton-Bourgon, 2005). In contrast, sexual preoccupations, unstable lifestyle and impulsivity, offense-supportive attitudes, and problems in intimate relationships contribute less to recidivism risk. Heuristic behavioral models are presented in Figure 82.2 for child abusers and Figure 82.3 for rapists; these models include antecedents, subject (traits, cognitions, emotions, responses) and consequent cues and factors, and the assumed relationships between these elements.

Figure 82.2 Psychological factors that preserve sexually violent behavior in child abusers.
We developed a program for sexually violent patients on the basis of these dynamic criminogenic needs, with separate basic training for child abusers and rapists, followed by training for both subgroups jointly. Rapists receive complementary training for nonsexual aggression, and child abusers receive training that focuses on unassertiveness and limited basic social skills (Hornsveld et al., 2016).

For rapists, the basic training consists initially of five modules of extended ART over a total of 25 sessions. The basic training for child abusers comprises 25 sessions during which participants learn to cope with emotions other than anger—for example, fear or sadness. In this basic training, the Social Skills module has 15 sessions, so all the skills that are important for initiating and maintaining intimate relationships can be practiced.

After the basic training, child abusers and rapists participate together in group training consisting of four modules, namely Psychoeducation, Cognitive Distortions, Prosocial Skills, and Dealing With Risky Situations. In the first module, Psychoeducation (Hornsveld, Kanters, Van der Wal, & Zwets, 2016), there are 14 group sessions; these discuss gender roles, sexual organs and sexual arousal, sexually transmitted diseases and contraception, pornography, and sexual violence. First, information is provided on these subjects, and this is followed by a group discussion. Finally, the participants are given homework assignments, which include questions that require answers in writing. Brochures and handouts are available with information about all aspects of sexuality (De Vries & Hornsveld, 2010). The second module, Cognitive Distortions (Hornsveld & Kanters, 2016a), consists of approximately 20 sessions and is dedicated to four cognitive distortions related to rapists and four related to child abusers. Each session begins with a case of a child abuser or a rapist and is followed by a group discussion. Finally, the participants are given a homework assignment that aims to change a cognitive distortion into a prosocial cognition. The third module, Prosocial Skills (Hornsveld & Kanters, 2016b), consists of about 18 sessions in which participants practice prosocial behaviors.
through role-play, with the use of video equipment and with the participation of an actress. The video recordings confront participants with their overt behavior, and the actress increases the reality value of the practice situation. The final module, Dealing With Risky Situations (Hornsveld & Kanters, 2016b), has six sessions focused on coping with high-risk situations in which participants make a functional assessment (in the Netherlands a “functional analysis”) of their problem behaviors with the aid of therapists. Their skills are practiced using role-play and they demonstrate to what extent they can resolve various risky situations adequately. If desired, the number of sessions can be extended.

Group treatment is used in about 90% of programs for sexually violent offenders (McGrath, Cumming, & Burchard, 2003). McRoberts, Burlingame, and Hoag (1998) performed a meta-analysis of 23 studies comparing individual and group treatment and found them to be about equally effective. According to Serran, Marshall, Marshall, and O’Brien (2013), the few studies on the differences between individual and group treatment for sexually violent offenders demonstrate marginal differences. For instance, Di Fazio, Abracen, and Looman (2001) and Abracen and Looman (2004) found no differences in recidivism rate between individual or group treatment in sexually violent offenders with a high risk of recidivism. Thus, the claimed benefits of group versus individual treatment are cost-effectiveness (MacKenzie, 1995), efficiency (Marshall, Anderson, & Fernandez, 1999) and the use of group processes to facilitate individual goals. According to Marshall et al. (1999), individual therapy is less efficient and less effective. Furthermore, a group provides more models and more reinforcement potential, and it facilitates the practice of new behaviors through role-play. Specifically, when it comes to challenging cognitions, group members are observed as being more credible than therapists and also participants may question each other more critically than therapists and present better examples of ideas and behavior from their experience.

In contrast to what one might expect, in one study, Cowburn (1990; cited in Harkins & Beech, 2008) observed that rapists did not feel superior to child abusers in mixed groups; rather, composite groups have the advantage that sexually violent offenders with similarly distorted views, such as child abusers and rapists, do not tend to be inclined to conspire with each other. Harkins and Beech (2008) found no difference in recidivism percentages in homogeneous groups (only child sex abusers or only rapists) versus mixed groups of child abusers and rapists. In our opinion, the advantages of group therapy above individual therapy also apply to nonsexually violent offenders.

**Program Format**

The programs described in this chapter are closed rather than open groups. An open group has irregular inflow and outflow of participants, which demands additional therapist skills such as maintaining a systematic and structured treatment plan and securing a safe and cohesive group atmosphere. To preserve the structured learning principles, participants should follow the prescribed order of the program modules as closely as possible. Most forensic patients come from socially weak backgrounds and often have limited education and may therefore profit most from structured therapy based on learning principles, in which a combination of modeling, role-play, and social reinforcement use is applied (Fernandez, Shingler, & Marshall, 2006).

The assessment of an individual patient might indicate that other problem areas, such as trauma, depression, or substance abuse, that are not targeted by the current treatment are
warranted. In such cases, a tailor-made program should be provided to address additional objectives.

**Treatment Integrity**

Treatment integrity is essential to program outcome. Treatment should be based on an empirically validated, theoretical framework using a manual describing the program objectives and how those objectives can be achieved. Manuals are also relevant for outcome studies because they allow replication (Mann, 2009). It is also important that treatment programs are explicitly part of the treatment policy of the organization. Effective management support is crucial for the implementation, continuity, and evaluation of the program (Cooke & Philip, 2001).

The result of a program is largely determined by therapist knowledge and skills. Cognitive–behavioral programs for psychiatric patients should be carried out by qualified therapists with experience in providing group therapy. At least one experienced clinical psychologist who is also accredited to perform cognitive–behavioral therapy with forensic psychiatric patients should perform these interventions. Therapists should have knowledge of the individual patient’s functional assessments and be able to adapt treatment when needed. Staff members of the ward at which patients are located have an important role in reinforcing adequate behavior and ignoring or punishing unwanted behavior. To do this effectively, they must have knowledge of the objectives and approach of the program and the specific treatment goals of each patient. This information may be obtained to some extent from the patients during patient–staff meetings. Also, staff members and therapists should discuss and adjust their treatment policy on a regular basis.

**Summary and Recommendations**

In this chapter, two cognitive–behavioral programs have been presented: one for violent forensic psychiatric inpatients and the other for sexually violent forensic psychiatric inpatients (child abusers and rapists). In developing these programs, we took ART and the recommendations of Cooke and Philip (2001) and Hollin (2006) as a starting point. The main finding of our research is that it is difficult to determine whether there has been a change in aggressive behaviors, including sexually aggressive behaviors, in a forensic psychiatric hospital, because of the structured and controlled environment. Therefore, we recommended that programs pay attention to the strengthening of prosocial behavior instead of focusing solely on the reduction of negative behaviors (Hornsveld, Kraaimaat, Bouwmeester, Polak, & Zwets, 2014). For the practice of new prosocial behavior, including prosocial sexual behavior, the use of virtual reality apparatus seems to be useful (Kampmann et al., 2016). Follow-up assessment of program effectiveness on several occasions after discharge is essential.

In the Netherlands, research on the effects of cognitive–behavioral programs for forensic psychiatric patients is not only limited because of the relatively small number of patients but also hampered by the partial cooperation between Dutch forensic psychiatric institutions in the use of assessment procedures and program development. Contrary to policies in countries such as Canada and the United Kingdom, the Dutch Ministry of Security and Justice is reserved in offering national guidelines on these matters. Therefore, we call for international
collaboration in developing assessment instruments and treatment programs that may prevent an overlap of activities and reduce time investment and costs.

References


