

CONTROLLING ANGRY AGGRESSION: A PILOT GROUP INTERVENTION WITH PERSONALITY DISORDERED OFFENDERS

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Abstract. In this paper, we describe the progress of four male, legally-detained personality disordered offenders in a group treatment programme for angry aggression. “Controlling angry aggression” is a 15-session, structured, cognitive-behavioural programme that is part of a wider integrated, multidisciplinary treatment programme run within a specialist personality disorder treatment unit. Psychometric tests showed that three of the four patients improved over the course of the treatment programme. Behaviour ratings of staff and patients concurred, allowing confidence in patients’ self-report of anger. No change in behaviour was evident over time for any patient, but initial low rates of aggression allowed little room for improvement. Self-monitored anger and aggression scores did vary markedly over time, and since behaviour remains stable despite anger, this indicates that these patients can control their behaviour. One patient did not improve, and reasons for this are examined, concluding with a reminder of the need for rigorous selection of patients for treatment programmes.

Keywords: Anger, aggression, personality disordered offenders, treatment.

Introduction

Personality disordered offenders are of particular concern to mental health professionals in that they are two to three times more likely than mentally ill offenders to reoffend (Steels et al., 1998). Angry aggression is one risk factor for violent offending, and this may also in part explain why an offender attracts a personality disorder diagnosis. Hostility and aggression are defining features of many personality traits, with violence a defining feature of borderline and antisocial personality disorders (Tyrer, 1992; Widiger & Trull, 1994).

A theoretical understanding of the genesis and maintenance of angry aggression is important in developing effective treatments. Biopsychosocial developmental approaches to the understanding of angry aggression allow for the incorporation of individual

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differences in psychology and pathology that explain why people differ in levels of angry aggression, as well as social-psychological factors that explain why similarly angry people behave differently and why any one individual's response varies from one occasion to the next. Such integrated theoretical approaches to the explanation of angry aggression have been proposed by major anger and aggression theorists (Barratt & Slaughter, 1998; Robins & Novaco, 1999). In brief, events that have the potential to trigger anger must be perceived as aversive or threatening within that person's world view, and the consequent physiological arousal must then be labelled anger. Aggression must be part of the individual's behavioural repertoire, with alternative courses of action lacking or less well-developed. Aggression can be maintained by its immediate positive impact, for instance the removal of the aversive or threatening stimulus and the reduction of unpleasant emotional arousal, even though the longer-term outcomes are generally detrimental. Using this explanatory framework, certain features of personality disordered offenders may be seen to exacerbate angry aggression.

Three important factors appear implicated in the increased likelihood of angry aggression in personality disordered offenders – impulsivity, hostility, and over-learned aggression. Impulsivity is strongly associated with antisocial and borderline personality disorders, to the point that it is suspected as a core trait of these disorders (Brennan & Raine, 1997; Links, Heslegrave, & van Reekum, 1999), and early impulsivity is a strong predictor of later aggression and violence (Hawkins *et al.*, 1998). Impulsivity has both cognitive and behavioural components, meaning that impulsive people are less likely to stop and think about the most appropriate course of action in a threatening situation, and are more likely to react instantly (White *et al.*, 1994). Mentally disordered offenders have been shown to have poor social problem-solving skills, with high impulsivity and low rationality (McMurran, Egan, Richardson, & Ahmadi, 1999). Furthermore, impulsivity is associated with irritability, both traits possibly having the same biological basis (Seroczynski, Bergeman, & Coccaro, 1999).

These underlying traits, through reciprocal social interactions across the lifespan, have the potential to lead to both hostility and aggression. Difficult children may experience harsh forms of discipline in childhood, which leads them to view the world as a hostile place. Regarding appraisal of events, aggressive adolescents have been shown to have hostile attributional styles (Dodge, Price, Bachorowski, & Newman, 1990; Lochman & Dodge, 1994). Furthermore, this experience of harshness presents them with a model of aggressive interpersonal problem-solving, and simultaneously fails to present a model of prosocial interpersonal problem-solving. There is evidence that adult violence is more likely when early problems flourish into conduct disorder in childhood, and that those whose parents permit, or even condone, early aggression are more violent in adulthood (Hawkins *et al.*, 1998; Maughan, 1993). Many offenders go on to develop lifestyles that increase the risk of exposure to anger-provoking triggers, for instance by mixing with aggressive peers, and reduce their capability of rationally dealing with provocation, for example by heavy drinking and drug use. This sets the scene for over-learning aggression in response to anger.

Reducing angry aggression is an important therapeutic endeavour with personality disordered offenders. A meta-analysis of cognitive-behavioural therapies used in the treatment of anger has shown them to be highly successful, with an effect size of 0.70 (Beck & Fernandez, 1998), and a review highlights relaxation and skills training as particularly effective components of anger treatment (Edmondson & Conger, 1996). Modest improvements in

angry aggression, as measured by clinicians' ratings, have been achieved by cognitive-behavioural anger treatment with mentally disordered offenders detained in a secure psychiatric hospital (Renwick, Black, Ramm, & Novaco, 1997).

In this paper, we report a pilot study of a group treatment programme for angry aggression designed for personality disordered offenders detained in a medium secure unit. These patients are resident in a unit dedicated to the treatment of personality disorder, which runs an integrated, multi-disciplinary treatment programme, including social problem-solving, interpersonal skills training, self-awareness training, education, and individual therapies. "Controlling angry aggression" is a structured, cognitive-behavioural programme, based upon the premise that anger is a normal emotion, not in itself a criminal offence, yet it can be a risk factor for aggression or violence (Novaco, 1994). A heuristic model of angry aggression is taught to participants, namely that a trigger is perceived and processed by the individual, who experiences emotional arousal that is labelled anger, and this prompts behaviour, which in turn influences the trigger. Participants are then encouraged to become "personal scientists" (Mahoney & Thoresen, 1974), who recognize their anger, investigate anger triggers, experiment with new ways of preventing and controlling anger, and try alternative non-aggressive behaviours. Emphasis is placed upon self-monitoring, changing hostile thoughts, improving social problem-solving skills, controlling physical arousal through relaxation, and learning negotiation skills. Preliminary findings on four men who undertook "Controlling angry aggression" are reported here.

Method

Participants

Participants were four men detained in a medium secure psychiatric unit under the terms of the mental health legislation for England and Wales. The assessment of the participants' personality disorder was by an experienced psychiatrist (CD), trained in the use of the interview version of the International Personality Disorder Examination (IPDE; Loranger et al., 1994). This produces both DSM-III-R and ICD-10 personality disorder diagnoses, according to explicitly defined operational criteria. The men were resident in a self-contained part of the unit that is dedicated to the treatment of personality disorder, as described in the introduction.

Patient A. (21 years old) was a substance misuser with antisocial and borderline personality disorders. He has a history of acquisitive offending, with one violent offence. Violence within the family is recorded, as is carrying weapons.

Patient B. (19 years old) was also a substance misuser with antisocial, borderline, passive aggressive, dyssocial, impulsive and histrionic personality disorders. His crimes were primarily acquisitive, driven by the need to fund his substance misuse. He has a conviction for threatening behaviour.

Patient C. (42 years old) had an alcohol problem, and was diagnosed as suffering from paranoid, avoidant, impulsive and anxious personality disorders. His history of violent offending dates back 17 years, and he is currently serving a 10-year sentence for grievous bodily harm.

Patient D. (42 years old) had an antisocial personality disorder, and a record of acquisitive offending, hoax fire calls, and fire-setting. He was convicted of manslaughter at the age of 19 years, and had been transferred to psychiatric care after six years in prison.

Measures

State-Trait Anger Inventory. (STAXI; Spielberger, 1996). The STAXI measures the experience and expression of anger, and consists of 44 items that respondents rate on a 4-point scale. These items form six scales and two sub-scales: (1) State anger (S-Anger; 10 items) – the intensity of angry feelings at the time of completion; (2) trait anger (T-Anger; 10 items) – a disposition to experience anger, containing subscales (a) angry temperament (T-Anger/T; 4 items) – a propensity to experience anger, and (b) angry reaction (T-Anger/R; 4 items) – a disposition to express anger when provoked; (3) anger-in (AX/In; 8 items) – the suppression of angry feelings; (4) anger-out (AX/Out; 8 items) – the outward expression of anger; (5) anger control (AX/Con; 8 items) – the ability to control anger expression; and (6) anger expression (AX/EX; anger-in plus anger-out minus anger control plus a constant of 16 to ensure a positive score) – an index of the frequency of anger expression, regardless of direction. The scale has good reliability and validity, and norms are available for two groups of UK forensic psychology service outpatients, those referred for anger and non-anger problems (McMurran et al., 2000).

Buss-Durkee Hostility Inventory – Dutch Adaptation. (BDHI-D; Lange, Dehghani, & De Beurs, 1995; Lange, Pahlich et al., 1995). The BDHI-D is a 35-item (true/false) questionnaire derived from the original 66-item Buss-Durkee Hostility Inventory (BDHI; Buss & Durkee, 1957). Like the original BDHI, the BDHI-D measures aggression. Investigation of the psychometric properties of the BDHI-D indicated that a two-factor solution was a better fit than the original seven scales, confirming other analyses of BDHI data (Bushman, Cooper, & Lemke, 1991), the two factors being overt aggression (aggressive behaviour) and covert aggression (hostile attitude), and this version shows good reliability and validity.

Behaviour rating. A monitoring form for anger, aggression and violence was inserted into each patient's daily ward record to be completed by nurses. Incidents to be logged were dated, described briefly, and coded. Codes were: (1) non-directed anger, i.e., appears angry but is not directing the anger at anyone; (2) non-physical aggression, i.e., anger directed at one or more people, verbally or non-verbally, without threats of violence; (3) physical aggression against objects, i.e., misusing objects without directly threatening anyone with them; (4) physical aggression against people, i.e., threats without physical contact; and (5) physical violence against people, i.e., actual physical assault. Regular checks were made with nurses to ensure that incidents were not missed from the log. A weekly ward behaviour rating was calculated by summing the scores of all logged incidents.

Self-monitoring. Participants were asked to log each anger experience, rating their anger intensity on a scale of 1 (mild) to 10 (extreme), and their behaviour on a scale of 0 to 5, where 0 was no aggression or violence, 1 was verbal aggression, 2 was physical aggression against objects, and 3, 4, and 5 were levels of physical aggression against people, ranging from pushing and shoving (3), punching or kicking (4), and using a weapon or an object as a weapon (5). A weekly anger index was calculated by adding the total anger intensity

ratings for each incident recorded, and a weekly self-monitored behaviour rating was the sum of all behaviour ratings.

Procedure

All four patients participated in the same group treatment programme. ‘‘Controlling angry aggression’’ consists of 15 two-and-a-half hour sessions, which in this case were held once a week over a 4 month period. The content of these sessions is listed briefly in Table 1, and the intervention is described in full in a facilitator’s manual, which is available upon request from the first author. The sessions were structured, interactive, and repetitive, to provide optimum learning conditions. Between-session assignments were given to participants to assist with generalization of learning.

Four staff members were involved in programme delivery, with this pilot doubling as a staff training event. The first six sessions were facilitated as a demonstration by a qualified clinical psychologist, and all subsequent sessions were facilitated by staff in training – a qualified nurse, a health care assistant, and an assistant psychologist – and observed by the clinical psychologist.

Psychometric tests (STAXI and BDHI-D) were administered before and after treatment.

Table 1. ‘‘Controlling angry aggression’’ sessions

1.	<i>Introduction to ‘‘Controlling angry aggression’’</i> Introduce participants, leaders, and aims, methods and structure of programme.
2.	<i>Enhancing motivation to change</i> Investigate costs and benefits of aggression and violence.
3.	<i>The personal scientist</i> How to SEE – study, experiment, and evaluate. Applies this to anger, aggression and violence. Introduces self-monitoring.
4.	<i>Action planning</i> Introduces a solution focus to problems through action planning.
5.	<i>Controlling anger triggers and anger arousal</i> Introduces stress reduction, escape procedures, and relaxation.
6.	<i>Controlling hostile thoughts</i> How to identify hostile thoughts and replace them with calming thoughts.
7.	<i>Stop, calm down, and think!</i> Interpersonal problem-solving skills training.
8. & 9.	<i>Negotiation skills</i> Social skills training.
10. & 11.	<i>Controlling anger through self-instruction</i> Introduces positive self-talk.
12. & 13.	<i>Planning for the future</i> Looks at future support for change, e.g., professional help, lifestyle changes, enlisting the co-operation of significant others.
14.	<i>‘‘Controlling angry aggression’’ – review</i> Participants draw together what they have learned.
15.	<i>‘‘Controlling angry aggression’’ – conclusion</i> Feedback from tutors and participants; retesting; conclusion.

Behaviour ratings by nurses began 2 weeks before the start of treatment, to allow time to sort out any practical problems with these ratings rather than to establish a baseline. Participant self-monitoring began after session three of ‘‘Controlling angry aggression’’, by which time all participants had been made fully aware of the need for this information and so were likely to provide complete and accurate returns. Self-monitoring data were not required after the final session, but participants continued to provide this voluntarily. Post-intervention information was thus available for 4 weeks after the conclusion of treatment, after which two of the four patients elected to repeat the group treatment programme. This continued voluntary involvement in the treatment process is indicative of the level of participant satisfaction with ‘‘Controlling angry aggression’’.

Results

STAXI scores before and after the intervention for each patient are presented in Table 2, alongside percentile scores for U.S. male prison inmates (Spielberger, 1988). The preferred direction of change is a decrease on all scales except anger control, which should increase. Patient A showed the preferred change profile without exception. Patient B showed changes in the preferred direction on all scales except state anger. Patient C showed the preferred change profile with the exception of angry reaction, where there was no change. In all three cases, the pre-intervention profile more closely matched the normative scores of referrals for anger problems, and the post-intervention scores more closely resembled those for non-anger referrals (McMurran et al., 2000). Patient D showed non-preferred increases in state anger,

Table 2. STAXI scores

Scale	Time	Patient A	Patient B	Patient C	Patient D
S-Anger	Pre	21 (85)*	20 (80)	26 (90)	11 (45)
	Post	10 (35)	30 (95)	15 (65)	14 (65)
T-Anger	Pre	24 (65)	25 (70)	33 (90)	15 (20)
	Post	11 (5)	16 (25)	22 (60)	6 (2)
T-Anger/T	Pre	9 (75)	12 (90)	15 (98)	7 (55)
	Post	5 (35)	7 (55)	9 (75)	7 (55)
T-Anger/R	Pre	9 (55)	8 (45)	10 (65)	5 (10)
	Post	4 (5)	7 (30)	10 (65)	6 (15)
AX/In	Pre	16 (40)	24 (90)	27 (95)	15 (35)
	Post	10 (5)	14 (25)	14 (25)	20 (75)
AX/Out	Pre	21 (85)	24 (90)	27 (95)	15 (50)
	Post	12 (20)	19 (75)	16 (60)	18 (70)
AX/Con	Pre	15	10	12	25
	Post	24	28	21	30
AX/EX	Pre	38	54	58	21
	Post	14	21	25	24

* Percentiles for U.S. male prison inmates in parentheses (Spielberger, 1988).

Table 3. BDHI-D scores

Scale	Time	Patient A	Patient B	Patient C	Patient D
Overt aggression	Pre	15	16	15	11
	Post	13	13	14	14
Covert aggression	Pre	17	16	18	15
	Post	5	12	11	6

Secure psychiatric patients' scores (Robinson & Collins, 1998): 0–6 Very low; 7–8 Low; 9–10 Average; 11–13 High; 14–16 Very high.

angry reaction, anger in, anger out, and anger expression, and no change on angry temperament, although trait anger and anger control changed in the preferred direction.

BDHI-D scores pre- and post-intervention are presented in Table 3, the preferred direction of change on both scales being that scores should decrease. Quintile scores on the BDHI-D for U.K. high security forensic psychiatric patients (Robinson & Collins, 1998) are noted in Table 3. Patients A, B, and C show changes in the preferred direction on both aggression scales, whereas Patient D shows an increase in overt aggression and a decrease in covert aggression.

Self-monitoring of anger and aggression, and ward behaviour ratings of aggression are presented for each patient in Figures 1–4, with B1-2 being “baseline” scores, and P11-4 being post-intervention scores. No change in behaviour is evident over time for any patient, with staff and patient ratings concurring. Self-monitored anger scores vary markedly over time, and do not covary with behaviour measures.

Discussion

Psychometric tests of anger and aggression showed marked improvement for Patients A, B, and C. The increase in STAXI state anger for Patient B may be explained by an evident increase in angry feelings arising from concurrent bereavement counselling. For all three patients, self-monitoring and ward ratings of aggressive behaviour concur, which supports the validity of self-monitoring. Aggressive behaviour is low at the start, as one might expect in such a highly controlled environment, allowing little scope for improvement. Aggression remains low throughout. However, whilst aggressive behaviour starts low and remains low, feelings of anger rise and fall from week to week, with these variations explained by events in the individual's everyday life. Since aggressive behaviour does not covary with the overall anger index, it is clear that these patients are capable of controlling anger under the present circumstances. This may be because of constant external control over their behaviour in the form of staff supervision, an absence of disinhibitors such as alcohol and drugs, and fewer “real life” provocations to anger. It is important, nonetheless, to highlight the fact that angry aggression is under control, thus enhancing individuals' self-efficacy. Overall, the improved psychometric test scores and the steady non-aggressive behaviour patterns of these three patients allow cautious confidence that “Controlling angry aggression” has something to contribute to the treatment of angry aggressive patients. These conclusions are supported by patients' assessments of “Controlling angry aggression”, with each agreeing that he had learned effective control strategies. At the time of writing, 5 months after the end of treat-

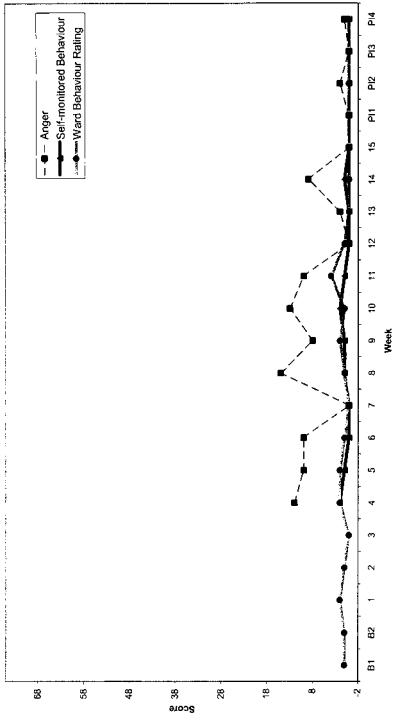


Figure 1. Patient A anger and aggression monitoring

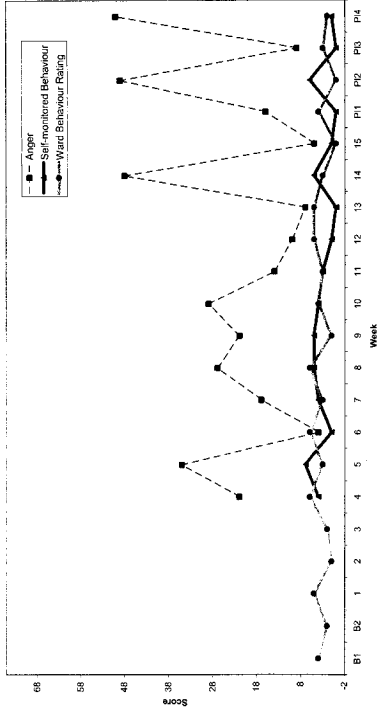


Figure 2. Patient B anger and aggression monitoring

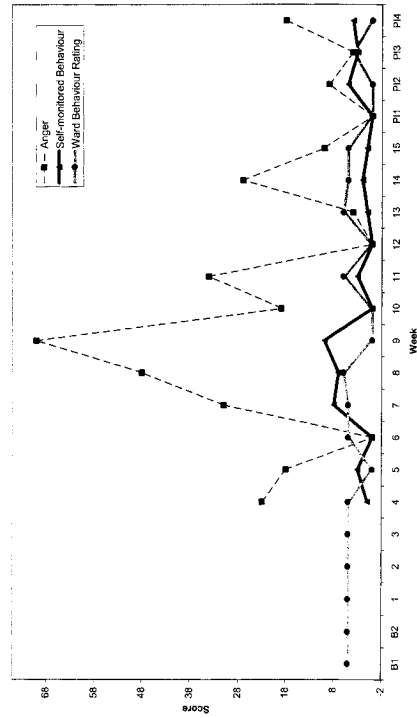


Figure 3. Patient C anger and aggression monitoring

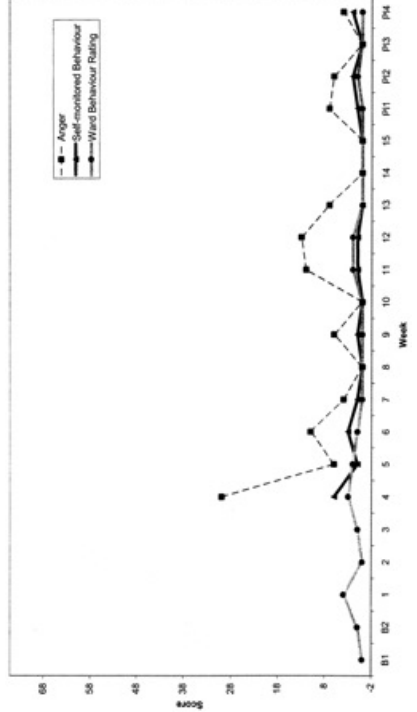


Figure 4. Patient D anger and aggression monitoring

ment, participants are showing no anger or aggression problems, although the one participant who has been discharged has returned to drug use.

Unlike the others, Patient D cannot be said to have improved on the measures used here and this requires explanation. Patient D was selected for “Controlling angry aggression” for different reasons from the others. His problem was thought to be an inability to express his anger and there was a belief that his offence may have been an explosive and misdirected expression of anger. It was considered that he might benefit from some parts of the treatment programme, for instance learning that anger is a normal emotion that is best expressed assertively, that action can be taken to avoid or cope with anger triggers, relaxation, and social problem-solving. With hindsight, this hypothesis seems incorrect. His initial STAXI scores are low on both state anger and trait anger, even compared with non-anger referrals to forensic psychologist (McMurran et al., 2000), and his initial BDHI-D scores are lower than those of the other patients. Rather than representing an inability to admit to or express anger, it seems that Patient D may simply not be angry. This is supported by the fact that his behaviour is placid, although this is no different from the three other patients and, as already mentioned, may be explained by circumstances. As for the others, Patient D’s self-monitored anger over the course of this intervention rose and fell, but it was apparent in practice that he struggled to identify angry feelings so that he could participate in the group programme, and it may be that his need to please renders the validity of his self-reported anger questionable. The conclusion that “Controlling angry aggression” was not the right intervention for Patient D seems unavoidable, which serves to remind us of the need for rigorous selection of patients for treatment programmes. Overall, however, “Controlling angry aggression” shows promise with those personality disordered offenders who are accurately targeted, and a more rigorous experimental design is the way forward in testing this initial promising result.

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